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# The Influence of Financial, Service, Operations and Human Resources Aspects on Company Performance Using the Balanced Scorecard Method at PT. Adhya Tirta Batam

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**Article Info**

**Keywords:**
Company performance through the aspects of Finance, Service, Operations and Human Resources.

**ABSTRACT**

The Directorate General of Human Settlements, Ministry of PUPR who took over the function of the Drinking Water Supply System Development Support Agency (BPPSPAM) as a regulator or organizer of the Drinking Water Supply System (SPAM) throughout the territory of the Republic of Indonesia has implemented the *Balanced Scorecard as* a Performance Measurement Tool covering Financial, Service, Operations and Human Resources aspects of all PDAMs and other private drinking water companies that obtained concessions from the Government to meet the requirements of quality, quantity and continuity of drinking water supply system services to the community. The object of research is at PT Adhya Tirta Batam (ATB), the data studied is secondary data from financial statements. The data is analyzed by multiple regression analysis using the SPSS program. As a result, the research proves that all independent variables together have a significant effect on variable Y. The simultaneous test results show that the sig column. 0.000 < 0.005 level of significant (a). Partial test results show that the aspects of finance, service, operations and human resources partially have a significant effect on company performance, with sig. 0.000 < t table 0.05. The Adjusted R Square result obtained in this study is 0.895, which means that the ability of financial, service, operation and HR variables to explain the effect of company performance results is 89.5%, while the remaining 10.5% can be explained by other variables outside of this study.



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## INTRODUCTION

Public sector organizations are directly related to the provision of services and goods to meet the wants and needs of the community. In this case, the community is a *customer* who must be served properly so that in order to meet customer satisfaction, it is very necessary to instill a *mindset* (*mind set*) towards the managers of public service organizations on how to increase customer (community) satisfaction. Because increasing *income* (*income*) without being

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balanced with customer satisfaction (community) cannot be categorized as a successful public organization.

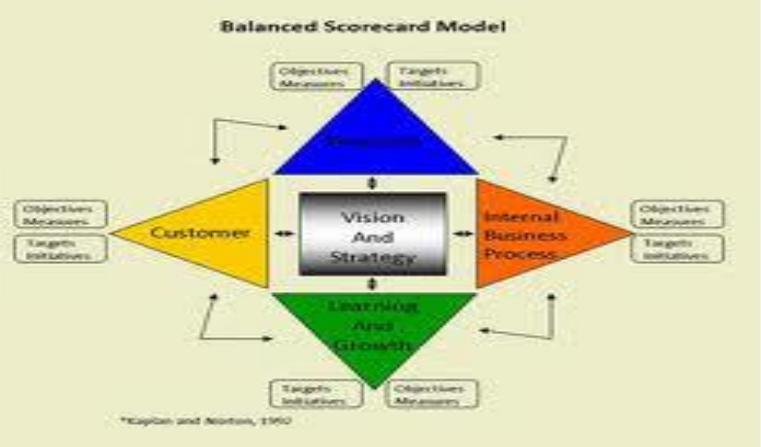
According to Mahmudi (2015) in measuring the performance of public sector companies, so that it is not based on financial aspects alone, it must also be based on non-financial aspects using the Balanced Scorecard, which places profit not as the main performance measure, but includes service performance.

The performance of public organizations should be viewed broadly by identifying their success in meeting the needs of society. The approach to performance measurement can be modified to make it feasible to assess the true performance of public accountability. Currently, the Director General of Cipta Karya, Ministry of PUPR takes over the function of BPPSPAM in accordance with Presidential Regulation No. 82/2020, which fosters all Drinking Water Companies (PDAMs) throughout Indonesia / PERPAMSI (2023) consisting of 226 Perumda AM, 177 PDAMs, 20 Perseroda and 14 BLUD/UPTD.

To ensure that all Perpamsi members can plan, organize and evaluate the company's strategy by using standardized performance measurements based on KEPMENDAGRI No. 47 of 1999 and the Indicators of the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM) using the *Balanced Scorecard* that has been designed by Kaplan and Norton (1996) states that: "The *Balanced Scorecard provides executives with a comprehensive framework that translates a company's strategic objectives into a coherent set of performance measures*".

From the above statement, it can be seen that the Balanced Scorecard provides the organization's strategic objectives into a set of interconnected and balanced performance measures. The model is simple, elegant, and easy to understand, but it is much more difficult to implement and utilize as a measurement tool. The method combines expertise in measurement, strategy, and decision support to provide a holistic evaluation of a company's performance across multiple organizational dimensions. One tool that can be used within each perspective in the *balanced scorecard model* is the *scorecard* evaluation matrix to weigh alternatives against each other.

**Figure 1.1** Balanced Scorecard Model




Source: Kaplan & Norton 1996

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*The Balanced Scorecard* provides a framework for management to translate the organization's mission and strategy into goals and measures that can be viewed from four perspectives (Kaplan and Norton, 1996). The four perspectives are intended to explain the appearance of an organization from the following four points of view.

1. Financial Perspective, to answer the question: to achieve financial success, what kind of financial performance should the organization show to its owners?
2. Customer Perspective, to answer the question: how does the organization look to customers?
3. Internal Business Process (operational) perspective, to answer the question: to satisfy the organization's owners and customers, which business processes should be championed?
4. Learning and Growth Perspective (Human Resources / HRM), to answer the question: how the organization maintains the ability so that the organization continues to change and get better.

Basically, the development of the *Balanced Scorecard* in both the private and public sectors is intended to provide satisfaction for customers. The difference can be seen from the objectives and interested parties. The application of *Balanced Scorecard* in the business sector is intended to increase competition (*competitiveness*), while for the public sector emphasizes more on the value of mission and achievement (*mission, value, effectiveness*).

In research by Frinka, Sudjana, & Dwiatmanto, (2016) at PDAM Malang City shows that the overall results of the company's performance from four perspectives using a *balanced scorecard* tool. With this basis, the author wants to apply the elements of the *Balanced Scorecard* to assess the financial perspective, service perspective, operational perspective, and Human Resources (HR) perspective based on the vision, mission and core values outlined in the company's strategy and later after these non-financial aspects are measured, it is expected to make performance measurement at PT ATB better than it is now.

Performance measurement in drinking water companies (PDAMs) has been standardized based on KEPMENDAGRI No. 47 of 1999 and the Indicators of the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM). Based on the description above, this research was prepared with the title "The Effect of Financial, Service, Operations and Human Resources Aspects on Company Performance Using the Balanced Scorecard Method at PT Adhya Tirta Batam".

Based on the background of the problem above, the problems of the four perspectives of the balanced scorecard (Financial, Service, Operations and Human Resources Aspects) which are an inseparable unit based on KEPMENDAGRI No. 47 of 1999 and the Indicators of the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM) can be identified.

1. The need to maintain the value of financial aspects that are already very maximum.
2. The need to constantly maintain the value of service aspects by responding directly to complaints.

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3. The need to increase the value of the Operations aspect by reducing the level of water loss (Non Revenue Water).
4. The need to increase the value of HR aspects by increasing the cost of training to employee costs to at least 10% so as to increase the ability of employees to solve problems without repetition.
5. The need to update the business plan to ensure that the four-year plan is implemented and the model remains relevant to the dynamic development characteristics of Batam Island.
6. The need to analyze the measurement of return on equity.

The author tries to formulate the problem in the form of several questions that will be the basis of discussion, so that this discussion will be more systematic and easy to understand. The problems that will be discussed in this study are: Whether the financial aspects which include ROE, Operating Ratio, Cash ratio, effectiveness of collection, solvency, ratio of profit to earning assets, ratio of profit to sales, ratio of long-term debt to Equity, ratio of operating profit before depreciation costs to installments of principal and interest due and the period of collection of receivables have reached the level of healthy performance in accordance with the Health Measurement Analysis based on BPPSPAM Indicators and KEPMENDAGRI No. 47 of 1999.

Whether the service aspects which include aspects of technical service coverage, customer growth, complaint resolution rate, customer water quality, domestic water consumption, service convenience, water meter lighting and new connection speed have reached a healthy level in accordance with the Performance Measurement Analysis based on KEPMENDAGRI No. 47 of 1999 and Indicators of the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM).

Whether the Operations aspect which includes aspects of production efficiency, water loss rate, service operating hours, customer connection water pressure, water meter replacement, distribution water quality and water continuity has reached a healthy level in accordance with the Performance Measurement Analysis based on KEPMENDAGRI No. 47 of 1999 and Indicators of the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM).

Whether the HR aspects which include aspects of the ratio of the number of employees / 1,000 customers, the ratio of employee training / competency improvement, training costs to employee costs, long-term plans, organizational plans and job descriptions, standard operating procedures and the Company's Work Plan and Budget (RKAP) have reached a healthy level in accordance with the Performance Analysis based on KEPMENDAGRI No. 47 of 1999 and Indicators of the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM).

The purpose of this research is to prove the problems that have been formulated previously, namely the extent to which the Effect of Financial, Service, Operations and Human Resources Aspects on Company Performance Using the Balanced Scorecard Method at PT

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Adhya Tirta Batam by answering the five crucial problems above in depth and thoroughly by means of:

a. Proving that financial aspects significantly affect the performance and health of PT Adhya Tirta Batam.
b. Proving that the Service aspect has a significant effect on the performance and health of PT Adhya Tirta Batam.
c. Proving that the Operations aspect has a significant effect on the performance and health of PT Adhya Tirta Batam.
d. Proving that HR aspects significantly affect the performance and health of PT Adhya Tirta Batam.
e. Proving that the aspects of Finance, service, Operations and HR aspects together have a significant effect on the performance and health of PT Adhya Tirta Batam.

The purpose of this study was to determine the effect of financial aspects, services, operations and human resources on company performance using the Balanced Scorecard method at PT Adhya Tirta Batam.

## METHODS

Research on the performance of drinking water companies in PT Adhya Tirta Batam (PT. ATB) using the Balanced Scorecard method is descriptive research as described by Rukajat (2018) as follows: "Descriptive research is a study that explains the situation and condition of realistic data. What is done is not a stylized explanation, but a real explanation based on realistic data quantitatively and qualitatively. The outline of its implementation is as follows: (1) Collecting realistic data in detail; (2) making specific identification according to the situation and conditions; (3) making comparisons and evaluations; and finally (4) stating the results professionally in conclusion."

To collect and prepare for data processing, the author uses the following research method mechanisms: (1) Research Design and Type, (2) Data Collection Techniques, (3) Data Sources, (4) Variable Operationalization, (5) Classical Assumption Test, and (6) Hypothesis Testing.

### Research Design and Type

This dissertation was designed using scientific research methods with the following steps: (a) theoretical framework, (b) hypothetical, (c) research method with research instruments, (d) conducting the research itself by collecting data, (e) analyzing and interpreting data, and (f) conclusion.

### Data Collection Techniques

As mentioned above, in this research the author used a combination of library research and field research. Library research is a very rich "gold mine" for scientific research, where information and empirical data have been collected there through scientific and academic procedures. About the steps in the scientific research method with library research, Mirzaqon. T, and Purwoko (2017) explain as follows:

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"Tracing existing literature and reviewing it diligently is an indispensable literature review in doing research. With this survey, researchers explore theories that have developed in the field of science concerned, looking for research methods and techniques, either in collecting data or in analyzing data."

***Library* Research.**

To complement the secondary data, the author conducts library research by reading, collecting data and studying existing literature, in the form of books and regulations as references both directly and indirectly related to the objects discussed, diktats, articles in various print media, internet media and other data sources related to financial aspects, customer aspects, operational aspects and HR aspects, performance and company health through the application of the *Balanced Scorecard* and BPPSPAM indicators and Decree of the Minister of Home Affairs No. 47 of 1999 to drinking water companies in Indonesia.

***Field Research***

In order to obtain secondary data at PT Adhya Tirta Batam (PT ATB), the author conducted research on the financial statements in 2020, 2021 and 2022 both audited by the Public Accounting Firm "Price Waterhouse Cooper", as well as financial statements issued by the management of PT ATB and examined the criteria set by BPPSPAM and the Decree of the Minister of Home Affairs No. 47 of 1999.

**Data Source**

The type of data used in this research is secondary data in the form of documentation derived or obtained by others, in this case the management of PT Adhya Tirta Batam (PT. ATB), in the form of financial statement data related to the research. The secondary data sources were obtained from the management, as well as through literature studies relevant to the problems in the study. Secondary data used in the form of audited financial statements and company performance reports, business plans, company profiles, regulations related to Drinking Water Companies, magazines, bulletins, Financial Models, statistical reports and annual reports to shareholders for the 2020, 2021 and 2022 fiscal year periods.

**Variable Operationalization**

The classification established for the basis of identification of the variables is as follows:

1. The *dependent* variable. The *dependent* variable is the variable that is influenced or that becomes the result of the independent variable. The *dependent* variable in this study is company performance.
2. *Independent* variables (*independent*). Independent variables are variables that affect or cause the *dependent variable*. The free or *independent* variables in this paper are:
   a.X1: Financial Aspects
   b.X2: Service Aspects
   c.X3: Operational Aspects
   d.X4: HR Aspects

**Classical Assumption Test**

The use of multiple regression statistical tools requires classical assumption testing. If the classical assumptions are not met, it will cause bias in the research results. The classical

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assumptions that need to be tested include data normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. The results will be used to determine whether or not the use of linear regression is biased.

Multicollinearity test, shows that the independent variables have a direct relationship (correlated) perfectly, usually multicollinearity occurs in *time series* data and between samples (*cross sectional)*. The combination of the two is known as *pooling the data*. The consequence of multicollinearity will cause the regression coefficient to be small and the standard error of regression to be large so that the individual test becomes insignificant. The characteristic of multicollinearity is high R and many F tests are not significant. In testing the use of SPSS, according to Ghozali, I. (2016) how to detect multicollinearity, namely: (1) by using the variance inflation factor (VIF). If it is greater than 10, the variable has a multicollinearity problem with other independent variables, (2) by using an eugen value close to zero, (3) by using a condition index value exceeding 15, and really feeling serious if the index exceeds 30. Perfect multicollinearity is an extreme disease. There is usually no exact relationship between the X variables, especially in data covering economic time series. If multicollinearity is high, one may obtain a high $R^2$ but none or very few coefficients are significant. The multicollinearity test is known from the VIF value for each predictor. The requirement to be said to be free from multicollinearity is if the predictor VIF value does not exceed a value of 10. While in our test value the VIF value does not exceed 10 so it is concluded that the model is not exposed to multicollinearity problems. The calculated VIF value is around the value of 1 or lower than 10 so it is concluded that there is no multicollinearity. Multicollinearity test can also be known from the intercorrelation matrix with Pearson correlation or regressing between independent variables in turn (Ghozali, 2016).

Autocorrelation test, shows that there is a correlation between the errors of the previous period, where in classical assumptions this should not occur. Autocorrelation between error terms can occur due to certain factors, namely: (1) observation data starts from a sluggish situation, so that the next observation data that increases is clearly influenced by the previous data, (2) does not include independent variables, (3) the model form is not correct. Manual approaches include the *Cochcrane-Orcutt* method, the *Hildreth-Lu method*, the *Durbin method*, *the Theil-Nagar method,* and methods based on *Durbin-Watson statistics*. The problem is that autocorrelation is only relevant if the data used is *time series* data, while for *cross-section data it is* not necessary.

Heteroscedasticity test, shows that the variance of each error is heterogeneous, which means it violates the classical assumption which requires that the variance of the error must be homogeneous. Heteroscedasticity occurs if there is no similarity in the standard deviation of the dependent variable value on each independent variable. If Heteroscedasticity occurs, it will cause the variance of the regression coefficient to be minimum and the confidence interval to narrow so that the statistical significance test results are no longer valid. Heteroskedasticity is an important assumption of multiple linear regression analysis, namely that the disturbances (error terms) that appear in the population regression function are homoscedastic, that is, the disturbances have the same variance. The problem of

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heteroscedasticity tends to arise in studies that use cross-sectional data, because these data collect data that represent various measures. Heteroscedasticity causes the coefficient estimates and results to be overestimated or misleading, leading to incorrect conclusions.

According to Imam Gozali (2016) there is another way to detect the presence or absence of Heteroscedasticity, namely by looking at the plot graph between the predicted values of the dependent variables and their residuals. With the basic assumptions, namely:

1. If there is a certain pattern, such as points that form a certain regular pattern, this identifies heteroscedasticity.
2. If there is no clear pattern, the dots spread above and below the number 0 (zero) on the Y axis, this indicates no heteroscedasticity.

The way to overcome the problem of heteroscedasticity is to transform the variables in the regression model being interpreted. These methods are (1) transforming in the form of dividing the original regression model by one of the independent variables used in this model, (2) performing a log transformation.

**Hypothesis Test**

This study uses a model where the dependent variable is Company Performance and the independent variables are financial aspects, services, operations and human resources. The research model in the regression equation can be written as follows:

$Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \varepsilon$

Where:

Y : Company Performance
X1: Financial aspects
X2: Service Aspect
X3: Operation Aspect
X4: HR Aspects
β : Influence
α : Intercept
ε : Error Term

The testing stages in multiple regression to answer the proposed hypothesis are as follows: Data processing through the SPSS program, so that an answer will be found whether the hypothesis that has been proposed previously will be accepted or rejected, adjusted for the significance value obtained. The SPSS program will produce output in the form of model summary, anova, coefficient and so on, where the output is the source of hypothesis discussion.

The t-test, used to answer partial hypotheses or used to test regression coefficients individually, with the following conditions: H0: $\beta1 = 0$, which means that there is no influence between the independent variable and the dependent variable. Ha: $\beta1 \neq 0$, which means that there is an influence between the independent variables and the dependent variable individually. The next step is to determine the significance level (α), which is 5% with df = (n-k) to determine the t table value. A comparison with tcount is carried out to determine whether Ho is rejected or accepted, with the provisions: Ho is accepted if tcount < ttable. To facilitate

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and ensure the accuracy of the implementation of statistical tests, the SPSS program was used in this study.

F-test, used to answer the simultaneous hypothesis or used to determine the significance of all regression coefficients, with the following steps: Ho: $\beta 1 \neq \beta 2 = 0$, which means that there is no effect of the independent variable with the dependent variable simultaneously. Ftable value with a significance level ($\alpha$) of 5% and df = (n-k) (k-l) where n = number of samples, k = number of variables. Then a comparison is made with Fcount to determine whether Ho is accepted or rejected, with the provisions: Ho is accepted if Fhitung < Ftable and Ho is rejected if Fhitung > Ftable.

Discussion of the coefficient of determination, namely the ability of the independent variable to explain the dependent variable. The data used is adjusted r square because the independent variables are more than two. Prepare a multiple linear regression equation with the model, namely $Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$. The regression equation is formed from the constant and standardized beta results of the study, because the independent variables are more than two. Discussion of positive beta or negative beta, opportunities for other variables to influence the dependent variable, achievement of research variables and multiple regression images

## RESULTS AND DISCUSSION

The results of this study describe the performance of PT ATB from four Balance Scorecard perspectives that describe in a balanced manner in the perspectives of finance, service, operations and human resources.

### Classical Assumption Test

The classic assumption test is a pre-test or initial test of a device or instrument used in collecting data, the form of data, and the type of data that is further processed from an initial set of data that has been obtained, so that the conditions for obtaining unbiased data are met. In this study there is no multicollinearity problem because the VIF is not more than 10 and the Tollerance value is not less than 0.1. as shown in the table below:

**Table 3.1** VIF and Tollerance Results

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -1.156 | 1502 | | -.770 | .442 |
| | Total_ X1 | .254 | .018 | .322 | 14.026 | .000 |
| | Total_ X2 | .216 | .007 | .699 | 30.386 | .000 |
| | Total_ X3 | .355 | .015 | .574 | 24.119 | .000 |
| | Total_ X4 | .121 | .019 | .149 | 6.275 | .000 |

a. Dependent Variable: Total_Y

Source: SPSS output

There is no autocorrelation problem because the Durbin Watson value is close to the number in the no autocorrelation area or between 1.14 to 1.74. as shown in the table below:

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**Table 3.2** Durbin Watson Result

| Model | Durbin-Watson |
|---|---|
| 1 | **1.385** |

a. Predictors: (Constant), Financial Aspect (ak1), Service Aspect (AL1), Operation Aspect (AO) and HR Aspect (HR1)
b. Dependent Variable: Company Performance Outcome (KP1)

Source: SPSS output

To understand autocorrelation testing is to look at the Durbin Watson statistical table. The du and dl values are seen from the k=4 table at n>120 (describing x=4 variables and 200 data samples). The dl value = 1.59 and the du value = 1.76. Based on the formula above, the result of 4 - du = 1.385, while 4 - dl = 2.24. Furthermore, pay attention to the SPSS output, the resulting Durbin Watson value is in the no autocorrelation area.

There is no Heteroscedasticity problem because the data does not form a specific pattern. Take a look at the picture below:

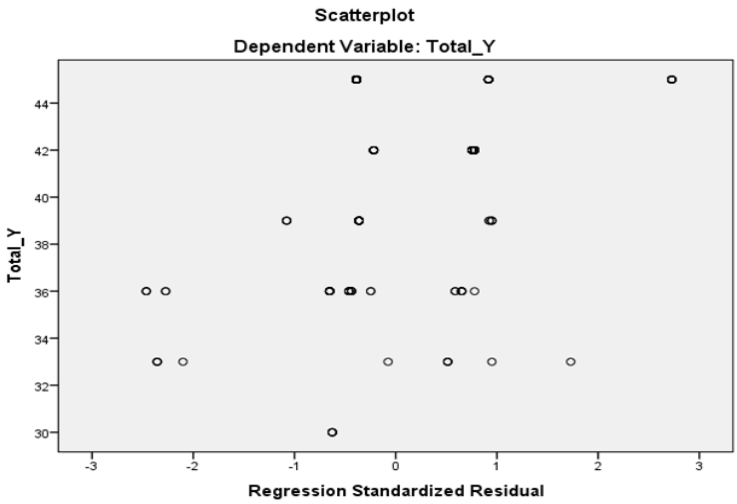


**Table 3.3** Pattern Result Dependent Variable: Company Performance Outcome (KP1)

Source: SPSS Output

## Hypothesis Test

The hypothesis test used is multiple regression analysis with a significance level of 5%, in order to obtain an overview of the effect of the independent variable on the dependent variable.

The hypothesis of this study is as follows:

H1 : There is an influence between financial aspects on company performance results
H2 : There is an influence between service aspects on company performance results
H3 : There is an influence between operating aspects on company performance results
H4 : There is an influence between HR aspects on company performance results
H5 : There is an influence between financial aspects, services, operations and human resources on company performance results.

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To prove this, the following data processing results are presented using the SPSS program:

**Table 3.4** Coefficient Output: X1, X2, X3 and X4 on Y

Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -1.156 | 1502 | | -.770 | .442 |
| | Total_ X1 | .254 | .018 | .322 | 14.026 | .000 |
| | Total_ X2 | .216 | .007 | .699 | 30.386 | .000 |
| | Total_ X3 | .355 | .015 | .574 | 24.119 | .000 |
| | Total_ X4 | .121 | .019 | .149 | 6.275 | .000 |

Dependent Variable: Total_Y

Source: SPSS Output

Based on this coefficient output, the partial hypothesis has been proven, the beta effect generated, and the formation of the regression equation. The proof of the first hypothesis / Ha1 in this study will be discussed as follows Ha1 is the effect of financial aspects (X1) on company performance (Y).

Coefficient table in the sig column. shows that the effect of financial aspects (x1) on company performance (Y) is significant, because sig 0.018 <0.05. the effect of financial aspects (x1) on company performance (Y) is significant, because sig 0.018 <0.05. Coefficient table in the sig column. shows that the effect of service aspects (x2) on company performance (Y) is significant, because sig 0.007 <0.05. the effect of service aspects (x2) on company performance (Y) is significant, because sig 0.007 <0.05. Coefficient table in the sig column. shows that the effect of the Operations aspect (x3) on company performance (Y) is significant, because sig 0.015 <0.05. the effect of the operations aspect (x3) on company performance (Y) is significant, because sig 0.015 <0.05. Coefficient table in the sig column. shows that the effect of HR aspects (x4) on company performance (Y) is significant, because sig - 0.019 <0.05. the effect of HR aspects (x4) on company performance (Y) is significant, because sig 0.019 <0.05.

The proof of the fifth hypothesis in this study is as follows: Ha5 is the effect of financial aspects (X1), services (x2), Operations (x3) and HR (x4) on the results of company performance (Y) is significant, because sig 0.000 <0.05 which means that financial aspects, services, operations and HR, together have a significant effect on company performance. The second way is to compare Fcount with Ftable. The Fhitung column is 1.502> Ftabel 1.350 which means that the variables of financial, service, operational and HR aspects together have a significant effect on company performance. The Ftabel 5 results can be seen in the F distribution table, in the Degrees numerator column in the 120th row and column. The conclusion is that financial, service, operational and HR aspects, together have a significant effect on company performance. Based on this proof, it can be concluded that the Fifth Hypothesis (Ha5).

The proof of the Coefficient of determination, which is the ability of the independent variables to explain the dependent variable. To find out the ability of financial, service,

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operational and HR aspects variables, in explaining the company's performance variables, the SPSS output summary model is presented as follows:

**Table 3.5** Model Summary

| Model Summary[b] | | | | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Std.Error of the Estimate |
| 1 | .947[a] | .893 | .0895 | .16824 | 1.385 |

a. Predictors: (Constant), Total_X4,Total_X1,Total_X2,Total_X3
b. Dependent Variable: Total_Y
Source: SPSS Output

The summary model shows the Adjusted R Square coefficient of determination of 0.895 or 89.5%, which means that the ability of the financial, service, operational and HR aspects variables, in explaining the company performance variable (Y), is 89.5%. while the remaining 10.5% is explained by other variables outside of this research variable. The coefficient of determination uses adjusted r square, because the variables are more than two.

The test of the multiple regression equation in this study can be formed from the coefficient results in the standardized coefficient column because the independent variables are more than two). The regression equation formed is: Y = -1.156 + 254 X1 + 216.0 X2 + 355.0 X3 + 121.0 X4 + ε

**Discussion of Research Results**

The results of this study have answered the research objectives that have been expressed in the introductory chapter. However, there are several things that must be considered and require further discussion, namely:

a. Simultaneously financial aspects, services, operations and human resources have a significant effect on company performance
b. The Adjusted R Square coefficient of determination is 89.5%, which means that the ability of financial, service, operations and HR variables to explain the effect of company performance results is 89.5%, while the remaining 10.5% can be explained by other variables outside of this study.

The regression equation formed is Y = -1,156 + 254 X1 + 216.0 X2 + 355.0 X3 + 121.0 X4 + ε. If the condition of other variables remains, the effect of the independent variable on the dependent variable is constant at 1.156. If there is an increase in financial aspects by 1000, there will be an increase in company performance by 254.0 and vice versa. If there is an increase in service of 1000, there will be an increase in company performance of 216.0 and vice versa. If there is an increase in operations by 1000, there will be an increase in company performance of 355.0 and vice versa. Meanwhile, if there is an increase in HR aspects by 1000, there will be an increase in company performance of 121.0 and vice versa.

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## CONCLUSION

This study aims to determine the performance of PT Adhya Tirta Batam (PT.ATB) using the balanced scorecard approach. So far, the performance assessment of PT ATB has focused on financial, service, operation and human resources aspects. The conclusions obtained from this research are as follows: The performance of the financial perspective in this study is measured by 10 ratios which include ROE, Operating Ratio, Cash ratio, effectiveness of collection, solvency, ratio of profit to earning assets, ratio of profit to sales, ratio of long-term debt to Equity, ratio of operating profit before depreciation costs to principal and interest installments due and the period of collection of receivables. In general, the achievement of the company's financial performance in 2010 - 2012 has reached a very healthy level in accordance with the Performance Measurement Analysis based on KEPMENDAGRI No. 47 of 1999 and the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM). The performance of the service perspective in this study is measured by 8 ratios covering aspects of technical service coverage, customer growth, complaint resolution rate, customer water quality, domestic water consumption, service convenience, water meter lighting and new connection speed. In general, the performance achievement of the service perspective has reached a very healthy level in accordance with the Performance Measurement Analysis based on KEPMENDAGRI No. 47 of 1999 and the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM). The performance of the Operations perspective in this study is measured by 7 ratios covering aspects of production efficiency, water loss rate, service operating hours, customer connection water pressure, water meter replacement, distribution water quality and water continuity. In general, the performance achievement of the Operations perspective has reached a very healthy level in accordance with the Performance Measurement Analysis based on KEPMENDAGRI No. 47 of 1999 and the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM). The performance of the HR perspective in this study is measured by 7 ratios which include aspects of the ratio of the number of employees/1,000 customers, the ratio of employee training/competency improvement, training costs to employee costs, long-term plans, organizational plans and job descriptions, standard operating procedures and the Company's Work Plan and Budget (RKAP). In general, the performance achievement of the Operations perspective has reached a very healthy level in accordance with the Performance Measurement Analysis based on KEPMENDAGRI No. 47 of 1999 and the Supporting Agency for the Development of Drinking Water Supply Systems (BPPSPAM). The indicators used are measurements of the health level of PDAMs that are determined by measures made by the Water Supply System Development Support Agency (BPPSPAM). This indicator is the most adequate approach in order to assess the level of health for water companies such as those organized by ATB by assessing the Financial, Service, Operation and Human Resources aspects.

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