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The Performance of the Tirta Mangutama Clean Water Public Company Badung, Bali, Indonesia

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ABSTRACT

This study aims to analyze the performance of the Tirta Mangutama Regional Public Water Company in terms of the relationship between the addition of workers to maximize profit and the impact of the Covid-19 pandemic. This study was designed with concurrent embedded research, with a quantitative approach, and validated qualitatively. The results of the study found that there was no positive relationship between the addition of workers with maximum profit and the impact of the Covid-19 pandemic was found to be negative on the company's performance in 2020. In the Tri Wulan II performance report it was found that the company's condition was healthy (score 3.32), but some aspects, such as return on equity of 0.49 percent, operating expense ratio of 0.98 percent, customer growth of 0.27 percent, domestic water consumption is less than 20 m³/month, non-revenue water 42.61 percent, water meter turnover is less than 5 percent, and the ratio of education and training costs for human resources is in the 2.5 percent category, meaningless good. Based on the results of the study, it is recommended that the Regional Water Company Tirta Mangutama pay more attention to the low score following the provisions of the Ministry of Public Works and Public Housing.

KEYWORDS: *marginal productivity, balanced scorecard, public regulation, clean water*

INTRODUCTION

The clean water company, Water Clean Tirta Mangutama, has existed since the Dutch era 1932, known as the state clean water company, using water sourced from the Riang Gede spring, Tabanan. At the time of independence 1945, this company was managed by the Department of Public Works and Electricity of the Province of Bali. In the framework of the Colombo Plan 1971, the Australian government provided financial assistance to develop a house connection distribution pipe and ten wells with a total capacity of 425 liters per second. Based on the Decree of the Directorate of Sanitary Engineering Number 93/KPTS/1975 dated October 21, 1975, this state clean water company changed its name to the Badung Regional Clean Water Company, but not long ago with Regional Regulation Number 5, 1976 it became the Regional Clean Water Company of Badung Regency. Forty-three years later based on Regional Regulation Number 7, in 2019 the Regional Clean Water Company of Badung Regency changed to the Regional Public Company for Tirta Mangutama Clean Water (Apsari et al., 2017).

To meet the supply of clean water in the Nusa Dua and Kuta areas, which are the centers of tourist areas in Bali, on 15 May 1991 a joint venture was held between the Badung Water Company and the private sector by establishing a business entity in the form of a limited liability company, namely PT Tirta Artha Buana Mulia. The efforts made by PT Tirta Artha Buana Mulia began with the construction of a water treatment plant for the Yeh Ayung I River with a capacity of 600 liters per second, the construction of a booster installation (booster) in Benoa Bay with a capacity of 300 liters per second, transmission pipelines on the By-Pass Nusa route. Dua and the Office of the Clean Water Company PT Tirta Artha Buana Mulia. This cooperation ended in 2012 and all assets belonged to Perumda Tirta Mangutama Badung. Sandra (a member of Commission III, Thursday, November 8, 2021) rated the results of this collaboration as a success (Apsari et al., 2017).

As an entity, which started operating from 1932 to 2021, it can be ascertained that an entity already has the characteristics of cost and income behavior so it is attractive for academics to conduct research. Wiratama and Sintaasih in their research conclude that leadership, training, and work discipline have a positive effect on performance. Apsari in his research concludes that the factors of reliability, responsiveness, assurance, and empathy have a positive and significant effect on customer satisfaction. Saraswati in her research concludes that the willingness of household customers to pay subscription fees is influenced by various factors such as the number of families, income, and other factors (Apsari et al., 2017); (Enggok & Anhar, 2022); (Wiratama & Sintaasih, 2013).

In contrast to previous studies, this study is intended to analyze the relationship between the addition of the number of workers (MPL) with the maximum profit that can be achieved. In addition, it is also to analyze the financial, service, operational, and human resource aspects of the company's performance after the Covid-19 pandemic, namely in the April to June 2021 period

based on the performance indicators of the Ministry of Public Works and Public Housing. From the research background, the main research problems are formulated, namely: 1). Is there a positive relationship between additional labor and the maximum profit achieved by the Regional Public Company for Clean Water Tirta Mangutama, Badung Regency? 2). How is the performance of the Tirta Mangutama Regional Public Water Company in Badung Regency in terms of financial, service, operational, and human resource aspects after the Covid-19 pandemic, especially in the period April to June 2021?

This study aims to 1) determine the positive relationship between additional labor and the maximum profit achieved by the Regional Public Company for Clean Water Tirta Mangutama, Badung Regency. 2) Knowing the performance of the Tirta Mangutama Regional Public Water Company in Badung Regency in terms of financial, service, operational, and human resource aspects after the Covid-19 pandemic, especially in the period April to June 2021.

Thus, the benefits of this research are 1). To be able to provide recommendations to policymakers related to the Regional Public Company for Clean Water Tirta Mangutama, Badung Regency. 2). To be able to contribute to the development of microeconomics, managerial economics, and strategic management.

THEORETICAL REVIEW

Based on the main research problems, as formulated above, this research will examine the dimensions of the firm theory proposed by Salvatore, Raharja and Manurung, the dimensions of the balanced scorecard theory proposed by Kaplan and Norton, and dimensions of regulation as regulated in Regional Regulation no. 7, of 2019 concerning the Regional Public Company for Clean Water Tirta Mangutama (Widigdo, 2013); (Maipita, 2020); (Kaplan & Norton, 2001); (Kaplan, 2009).

Dimensions of Company Theory

Salvatore said that the purpose of a company is to organize various resources and produce goods and services for sale. Besides that, it is also intended to save on transaction costs, save sales taxes, avoid price controls, implement government regulations, and other things so that goods and services produced can meet the needs of the community at a lower cost (Widigdo, 2013). Companies can be divided into sole proprietorships, partnerships, and companies owned by shareholders. According to Salvatore, companies of this type produce more than 80 percent of the world's goods and services and the rest are produced by governments and various non-profit organizations, such as universities, hospitals, museums, and foundations. Companies that are established do not necessarily grow to be infinitely large because of the limited ability of management to control and operate the company effectively when the company gets bigger. At a certain point, the company can overcome various internal weaknesses by establishing several divisions. However, the increased communication traffic created, coupled with the increasing distance between top management and operations in each division, created diseconomies of scale and ultimately limited the company's growth. The purpose and objective of the company being established are to maximize profits, both in the short and long term. However, not a few companies sacrifice short-term profits to increase long-term profits. For example, spending on research and development, purchasing new equipment, and increasing promotions often result in short-term sacrifices but can lead to greater profits in the future. Profit is a signal from consumers who want more industrial output. High profits are an incentive for companies to increase output and at the same time invite more companies to enter the industry. In addition, profit also means a reward for an efficient company. Conversely, low profits are a signal that consumers want fewer products and services. Thus, profit is an important concept for increasing efficiency and can serve as an instrument for relocating resources as well as a driving force for economic development (Widigdo, 2013); (Maipita, 2020); (Kaplan & Norton, 2001); (Kaplan, 2009).

In increasing production to achieve maximum profit, labor is needed (Raharja and Manurung, 2008). The demand for labor in equilibrium is the amount of labor required by the firm to achieve maximum profit. In a perfectly competitive market, the company's position is a price taker, where the price set by the market is marginal revenue or marginal revenue, abbreviated as MR. To achieve maximum profit conditions, the company must equate MR with marginal cost, abbreviated as MC, so that MR = MC.

MR is the additional revenue of the company as a result of additional sales in one unit while MC is the additional costs incurred by the company as a result of additional labor (abbreviated L) in one-unit L. The equation that describes the labor demand function, in general, can be written as follows.

$$D_L = \frac{L}{(W/P)} \leq 0$$

If real wages fall, the demand for labor increases and vice versa. From this equation, it can be explained that the number of workers who provide maximum profit is achieved when the real wage (W/P) is equal to the marginal productivity of labor (MPL).

Dimension Balanced Scorecard

Kaplan and Norton say that the balanced scorecard is a set of measures that gives top managers a quick but comprehensive view of the business. The balanced scorecard includes financial measures that inform the results of actions taken with operational measures on customer satisfaction, internal processes, innovation activities, and organizational improvement. The balanced scorecard is analogous to the buttons and indicators on an airplane that can handle complex tasks and detailed information about aspects of flight. For example, information on fuel, airspeed, altitude, direction, destination, and other indicators that summarize the current and expected environment. Likewise, the complexity of managing organizations today also requires top management to be able to see the performance in several areas simultaneously (Kaplan & Norton, 2001); (Kaplan, 2009).

The balanced scorecard links performance measures, which include measures of customer perspective, internal perspective, innovation and learning perspective, and financial perspective measures. The balanced scorecard minimizes information overload by limiting the number of measures used. Companies rarely suffer from having too little size. The balanced scorecard forces managers to focus on some of the most critical measures. Several companies that have adopted the balanced scorecard show that the concept has met several managerial needs, such as simplifying reports, being more customer-oriented, shortening response times, improving service quality, emphasizing teamwork, reducing new product launch times, and managing for a longer time (Kaplan & Norton, 2001); (Kaplan, 2009).

Dimensions of Company Regulations.

The Tirta Mangutama Regional Public Clean Water Company is a regionally owned company (BUMD) that was formed to provide public benefit services in the form of providing quality clean water to meet the needs of the community following the conditions, characteristics, and potential of the region based on good corporate governance. Companies are mandated to be able to carry out the main tasks and functions of planning, development, maintenance, development of cooperation, supervision, and control related to the provision of quality clean water. In carrying out these main tasks and functions, regional regulations regulate principal matters, namely the source of capital, company organs (power of capital owners, supervisory board, and directors), and good corporate governance (Apsari et al., 2017).

The company's sources of capital consist of regional capital participation, loans, grants, and/or other legal sources. Regional capital participation can be sourced from the APBD and conversion from loans which are the limits of regional coverage for regional losses. Capital originating from loans can be sourced from the region, and other sources following the provisions of the legislation. Grants can be sourced from the central government, regional governments, other regional-owned enterprises, and other sources following the provisions of the legislation. Other sources of capital include reserve capitalization and asset revaluation gains. The sources of capital as described above must be carried out following the applicable laws and regulations. The management of the company is called the company organ. The company's organs consist of the power of the owner of the capital, the supervisory board, and the board of directors. Everyone in the management of BUMD in one area is prohibited from having family relations up to the third degree based on a straight line up, down, or sideways, including relationships arising from the marriage. Further provisions regarding company organs are regulated in the regent's regulation.

The power of attorney for the capital owner has the authority to make decisions in the company. This authority can be delegated to regional apparatus officials in deciding changes to the articles of association, transfer of fixed assets, cooperation, investment, and financing, including the formation of subsidiaries and equity participation. Regional government capital participation comes from reserve capitalization capital, asset revaluation gains, and share premiums, appointment, and dismissal of supervisory boards and directors, income from supervisory boards and directors, determination of the amount of use of profits, ratification of annual reports, mergers, separations, consolidations, acquisitions and dissolution of the company and asset collateral amounting to more than 50% of the total net worth of the company in one or more transactions. The executor of the authority can be given incentives that come from the results of the management of separated regional assets. The delegation of authority and the provision of incentives shall be carried out following the provisions of the laws and regulations.

The supervisory board is appointed and dismissed by the Proxy of the Capital Owner. The appointment of members of the supervisory board is determined by the decision of the regent. Members of the supervisory board consist of independent elements and other elements following the provisions of the legislation. The number of members of the supervisory board is at most equal to the number of directors based on the principles of efficiency and effectiveness of company decisions, supervision, and financing. The term of office of the supervisory board is four years and may be reappointed for one more term.

The Board of Directors is appointed and dismissed by the Proxy of the Capital Owner. The number of members of the board of directors is determined by the Proxy of the Capital Owner. The number of members of the board of directors is at least one person and a maximum of five people based on the principles of efficiency and effectiveness in managing the company. The president director is appointed by one of the members of the board of directors for a term of five years and can only be reappointed for one term of office unless otherwise stipulated following the provisions of the legislation. If a member of the board of directors has special expertise and excellent performance, he may be appointed for a third term of office. The selection process for members

of the board of directors is carried out through selection. The selection is referred to through the fit and proper test phase which is carried out by a team or professional institution appointed by the Proxy of the Capital Owner. Further provisions regarding the appointment and selection are regulated in a regent's regulation.

In managing the company, the Proxy for Capital Owners, the supervisory board, and the board of directors hold meetings for the development of the company's business. The meeting consists of an annual meeting, a meeting for approval of the company's budget work plan, and an extraordinary meeting. The management of the company is carried out following the principles of good corporate governance, namely the principles of transparency, accountability, responsibility, independence, and fairness. The application of the principles of good corporate governance is intended to achieve the company's goals, namely optimizing the value of the company so that the company has strong competitiveness, both nationally and internationally.

Framework of Thinking

Based on the dimensions of the theory of the company, the theory of the balanced scorecard, and the dimensions of Perda No. 7, of 2019 concerning the Regional Public Company for Clean Water Tirta Mangutama, the following framework can be drawn up. As an entity, the company is required to be able to increase its value of the company through its ability to generate profits, both in the short and long term. However, in achieving the company's goals and objectives, the company must pay attention to the provisions in regional regulations, company theory, and the balanced scorecard concept. The interaction and integration of the regulatory dimensions, company theory, and the balanced scorecard concept can be incorporated into a labor balance model at maximum profit conditions.

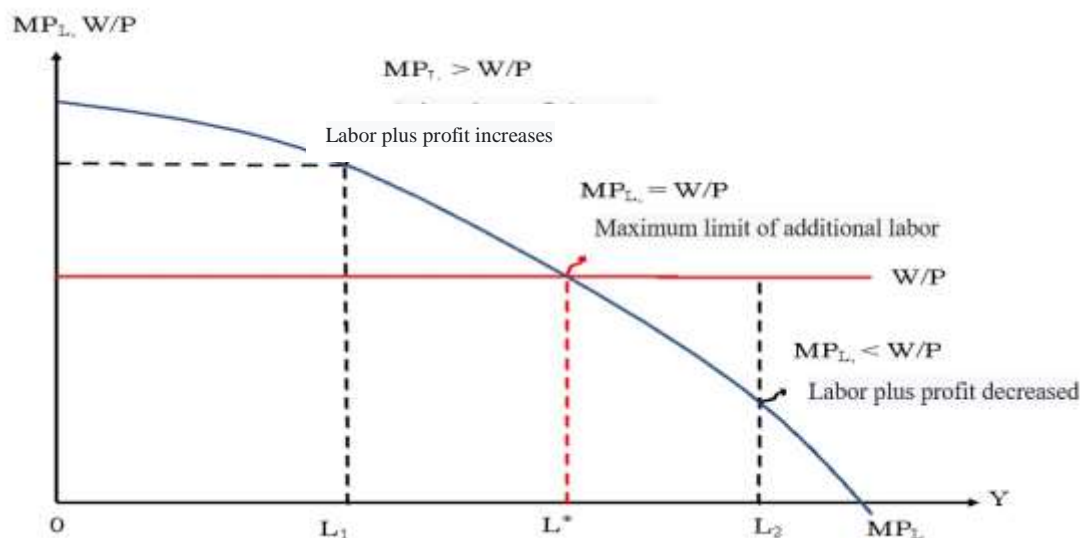


Chart 1. Labor Balance on Condition Maximum Profit
 Source: (Eldridge, 1930); (Raharja & Manurung, 2008).

RESEARCH METHODS

This study uses a concurrent embedded approach which is a combination of quantitative research and qualitative research in the same study but is predominantly quantitative. A qualitative approach is used only to validate the results of quantitative research (Green et al., 2007). The quantitative approach uses the marginal productivity of labor formula proposed by Raharja and Manurung and the balanced scorecard formula introduced by the Agency for the Improvement of Clean Water Supply System Implementation, Ministry of Public Works, and Public Housing (Raharja & Manurung, 2008).

Quantitative and Qualitative Data

Quantitative data comes from financial reports from 2016 to 2021. Quantitative data consists of total revenue, total costs, and net profit. Specifically, the balanced scorecard data was taken from the second-quarter report, from April to June 2021. On the other

hand, qualitative data were collected using the linear snowball model, exponential non-discriminative snowball model, and exponential discriminative snowball model. This method is used to find key informants who are hidden, not easily accessible, but understand the substance of the research properly and correctly. The essence of qualitative data is the meaning that can be extracted from a perspective, experience, and case, both concerning the behavior of individuals, groups, and communities proposed by informants related to the substance of the research (Bungin, 2008).

Technical Analysis

The quantitative analysis technique used is the marginal productivity of labor analysis technique and the balanced scorecard analysis technique. The marginal productivity of labor analysis technique is carried out by determining the change in labor for each period and comparing it with the change in profit for each period. In this way, it will be known whether the change in the workforce has a positive relationship or not. The balanced scorecard analysis technique is carried out by evaluating the results of the calculation of financial, service, operational, and Human Resources aspects. The calculation results obtained are matched with the established standards. If the calculation results get a value of 1, it means that the performance is very bad, the value of 3 means enough, the value of 4 means good, and the value of 5 means that the performance is very good. The total overall score shows the company's overall performance (Eldridge, 1930); (Raharja & Manurung, 2008). Qualitative analysis techniques are carried out at each stage of the research, carried out by collecting, sorting, classifying, synthesizing, and looking for patterns, and the meanings contained in these patterns. The meanings and patterns obtained from the results of the analysis are used to validate the results of quantitative research (Moleong, 2006).

RESULTS AND DISCUSSION

Marginal Productivity of Labor (MPL)

Based on the data in Table 1, it can be explained as follows. In 2016 the number of workers or L was recorded at 361 people, the net profit generated (π) was 26 billion more; in 2017 the number of L was recorded at 352 people experienced a decrease in L recorded by 9 people, but the net profit increased by more than 21 billion; in 2018 the number of L was recorded at 337 people experienced a decrease in L recorded 15 people, but profits increased by more than 31 billion; in 2019 the number of L has recorded at 325 people experienced a decrease in L recorded 12 people, the profit decreased by more than 31 billion; in 2020*) the number of L was recorded at 337 people experienced an addition of L was recorded by 12 people, the profit decreased by more than 39 billion; and in 2021*) the number of L was recorded at 305 people experienced a decrease, L was recorded at 32 people, the profit increased by more than 15 billion.

Table 1. Additional Net Profit Per Unit Labor (L)

| No. | Years | L | ΔL | π | $\Delta \pi$ |
|-----|--------|-----|------------|-----------------|-----------------|
| 1. | 2016 | 361 | 0 | 26,895,789,899 | 0 |
| 2. | 2017 | 352 | -9 | 35,931,950,689 | 9,036,160,790 |
| 3. | 2018 | 337 | -15 | 57,352,943,355 | 21,420,992,666 |
| 4. | 2019 | 325 | -12 | 25,557,033,200 | -31,795,910,155 |
| 5. | 2020*) | 337 | 12 | -14,047,153,475 | -39,604,186,675 |
| 6. | 2021*) | 305 | -32 | 1,837,945,155 | 15,885,098,630 |

Source: Finance Department, Badung Regency

From the description of the relationship of additional profit per unit of labor, the following can be concluded. First, there is no positive relationship between MPL and net income. Second, before the COVID-19 pandemic, the company's net profit was in a good category. Third, during the Covid-19 pandemic, namely in 2020 the company's profit was negative by more than 14 billion. Fourth, after the Covid-19 pandemic, from January to October 2021, net profit reached more than 1.8 billion.

Balanced Scorecard

1) Financial Measurement

In principle, the assessment of the performance of the financial aspect is an assessment that includes the company's ability to create profits and streamline its operational activities. The financial aspect has three main indicators, namely profitability, liquidity, and solvency. The measurement results show that the weight of the assessment is 0.250, the target is 0.81, the performance achievement is 0.92, and the average performance value is 3.8. This means that the performance of the financial aspect is good. Things that need

to be considered in this aspect are return on equity and operating expense ratio. This is important because the performance achievement for this ratio is 2. It means that it is not good (Kaplan & Norton, 2001); (Kaplan, 2009).

2) Service Measurement

Assessment of the performance of the service aspect aims to measure several service perspectives that describe the level of the company's ability to meet the needs of its customers. These perspectives include quality, quantity, continuity, customer satisfaction, real service capabilities, and customer growth. Five indicators can represent the service perspective, namely technical service coverage, customer growth, level of complaint resolution capability, customer water quality, and domestic water consumption. The results of the measurement of the five indicators show that the weight of the assessment is 0.250, the target is 0.90, the performance achievement is 0.85, and the average performance value is 3.4. This means that the performance of the service aspect is quite good (Kaplan & Norton, 2001); (Kaplan, 2009).

The service aspect that needs attention is the growth of customers and domestic water consumption. The weight of the customer growth assessment is 0.050, the target is 0.05, the achievement is 0.05, and the performance value is 1 or 0.27. This means that customer growth is low or below 4 percent. Domestic water consumption shows an assessment weight of 0.050, a target of 0.15, an achievement of 0.10, and a performance value of 2. This means that domestic water consumption is low, which is in the range of 15 < 20 (m3/month) (Kaplan & Norton, 2001); (Kaplan, 2009).

3) Operational Measurement

Operational aspect performance assessment aims to measure the level of effectiveness of production and distribution, the amount of water loss, continuity of water service to customers, appreciation of measuring instruments for buying and selling transactions, products sold to customers, and average water pressure to customers. Operational aspect indicators include production utilization, non-revenue water, service operating hours, water pressure at customer connections, and water meter replacement. The measurement results show that the weight of the assessment is 0.350, the target is 1.21, the achievement is 1.08, and the average performance value is 3.0. This means that the performance achievement of the operational aspect is sufficient. Things that need attention are unbilled water and changing water meters. The results of the non-billed water measurement show that the assessment weight is 0.070, the target is 0.21, the achievement is 0.07, and the performance value is 1 or equivalent to a water leakage ratio of 42.61 percent. This means not good. The results of the measurement of the water meter change show that the weight of the assessment is 0.061, the target is 0.07, the achievement is 0.07, and the performance value is 1. This also means that it is not good (Raharja & Manurung, 2008).

Table 2. The Performance of Tirta Mangutama Clean Water According to PUPR Calculation, Quarter II April-June 2021

| Variable | Weight | Formula | Target | Work Value Realization | % |
|-------------------------------|--------|----------------------------|--------|------------------------|--------|
| Financial Aspect | | | | | |
| a. Profitability | | | | | |
| Return On Equity | 0,055 | Weight x Value = 0,055 x 2 | 0,11 | 0,11 | 100,00 |
| Operating Expense Ratio | 0,055 | Weight x Value = 0,055 x 2 | 0,11 | 0,11 | 100,00 |
| liquidity | | | | | |
| Cash Ratio | 0,055 | Weight x Value = 0,055 x 5 | 0,22 | 0,28 | 125,00 |
| Billing Effectiveness | 0,055 | Weight x Value = 0,055 x 5 | 0,22 | 0,28 | 125,00 |
| Solvability | 0,030 | Weight x Value = 0,033 x 5 | 0,15 | 0,15 | 100,00 |
| Amount | 0,250 | | 0,81 | 0,92 | 113,58 |
| Service Aspect | | | | | |
| Service Coverage | 0,050 | Weight x Value = 0,050 x 4 | 0,20 | 0,20 | 100,00 |
| Growth of Customer | 0,050 | Weight x Value = 0,050 x 1 | 0,05 | 0,05 | 100,00 |
| Ability of Handling | 0,025 | Weight x Value = 0,025 x 5 | 0,13 | 0,13 | 100,00 |
| Water Quality to Customer | 0,075 | Weight x Value = 0,075 x 5 | 0,38 | 0,38 | 100,00 |
| Water Consumption of Domestic | 0,050 | Weight x Value = 0,050 x 2 | 0,15 | 0,10 | 66,00 |
| Amount | 0,250 | | 0,90 | 0,85 | 94,66 |
| Operational Aspect | | | | | |
| Productivity of Utilization | 0,070 | Weight x Value = 0,070 x 4 | 0,21 | 0,28 | 133,33 |
| Unbilled water | 0,070 | Weight x Value = 0,070 x 1 | 0,21 | 0,07 | 33,33 |
| Service Operating Hours | 0,080 | Weight x Value = 0,080 x 5 | 0,40 | 0,40 | 100,00 |



| Variable | Weight | Formula | Work Value | | |
|-------------------------------|--------|----------------------------|------------|-------------|--------|
| | | | Target | Realization | % |
| Water pressure in Customer | 0,065 | Weight x Value = 0,065 x 4 | 0,33 | 0,26 | 80,00 |
| Water Meter Change | 0,065 | Weight x Value = 0,050 x 2 | 0,15 | 0,10 | 66,00 |
| Amount | 0,350 | | 1,21 | 1,08 | 88,84 |
| HR Aspect | | | | | |
| Employee Ration per 1.000 | 0,070 | Weight x Value = 0,070 x 5 | 0,35 | 0,35 | 100,00 |
| Employee Training Ratio | 0,040 | Weight x Value = 0,040 x 2 | 0,04 | 0,08 | 200,00 |
| Ratio of Training To Expenses | 0,040 | Weight x Value = 0,040 x 5 | 0,04 | 0,04 | 100,00 |
| Amount | 0.150 | | 0.43 | 0,47 | 109,30 |
| Performance Value | 1.000 | | 3,35 | 3,32 | 98,96 |

Source: Quarter II 2021 Performance Report, Badung Regency

4) Human Resources Measurement

Assessment of the performance of the human resources aspect aims to measure the level of innovation and learning related to the management of the company. Assessment includes effectiveness, appreciation, increasing knowledge, skills, and work attitudes. The indicators used are the ratio of employees to customers, the ratio of employee training, and the ratio of training expenses to employee expenses. The measurement results show that the weight of the assessment is 0.150, the target is 0.43, the achievement is 0.47, and the average performance value is 2.66. This means that the performance achievement of the human resource aspect is not good. Things that need to be considered are the ratio of employee training and education and training to employee expenses. The results of the measurement of the employee training ratio show 0.040, the target is 0.04, the achievement is 0.08, and the performance value is 2. This means that it is not enough. The results of the measurement of the ratio of education and training to employee expenses show that the weight of the assessment is 0.040, the target is 0.04, the achievement is 0.04, and the performance value is 1. This means that it is not good (Raharja & Manurung, 2008).

Based on findings such as the number of workers there is no positive relationship with the company's ability to generate net profit, company losses that occurred in 2020, and water leakage reached 42.61 percent, Suyasa (Director of Perumda Tirta Mangutama on Thursday, November 8, 2021, in a meeting work with Commission III) explains as follows.

Regarding the workforce. "This company is not solely profit-oriented, but carries out a social mission that is adapted to the characteristics of each region." Regarding the company's losses. "Because during the COVID-19 pandemic our tourism was closed, many hotels were closed, our revenues drastically decreased while fixed costs such as network maintenance were difficult to suppress so we lost more than 14 billion." Against water leaks. "The pipes are old but haven't been replaced, it's still difficult to detect leaks and we were down until late at night, but still difficult to detect." (Raharja & Manurung, 2008).

From the results of the discussion based on company theory, balanced scorecard, regulation, and quantitative and qualitative analysis techniques, there are new things that can be found as follows. First, the concept of marginal productivity of labor as stated by Raharja and Manurung is not proven in this study. So, there is no relationship between the number of workers with the ability to generate net income. Second, Covid-19 is a new phenomenon in the health sector, but it can negatively affect the performance of the Tirta Mangutama Regional Public Company 2020 (Raharja & Manurung, 2008).

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the background description, research problems, research objectives, company theory studies, balanced scorecard concepts, regulatory studies, quantitative and qualitative analysis techniques, and discussion of research results, it can be concluded as follows.

- 1) There is no positive relationship between additional labor and the maximum profit achieved by the Tirta Mangutama Water Supply Company, Badung Regency.
- 2) Viewed from the financial, service, operational, and human resource aspects after the Covid-19 pandemic, especially for the April to June 2021 period, the performance of the Tirta Mangutama Clean Water Regional Public Company, Badung Regency is classified as healthy.
- 3) The Covid-19 pandemic has harmed the performance of Tirta Mangutama Regional Public Companies in the Badung Regency in 2020.



Recommendation

- 1) The competency factor of the number of employed workers needs to be considered. In addition, it also needs to be adjusted to the ability to generate a net profit.
- 2) The ability to generate the net profit of the company needs to be improved by increasing operational cost-efficiency.
- 3) Customer growth and domestic water consumption need to be increased and refer to the applicable standards.
- 4) Unbilled water and water meter changes need to be improved and referred to the applicable standards.
- 5) Leaks on broken pipes need to be detected as early as possible with adequate tools and can be followed up as soon as possible, to meet the volume of clean water needs of customers.

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