

DESIGNING A STRATEGY MAP BASED ON BALANCE SCORECARD IN PERUMDA TIRTA SILAU PIASA ASAHAN DISTRICT

Gita Putri Desiana Daulay¹, Abdul Rahim Matondang², Nazaruddin³

^{1,2,3}

Master Management Program, Post Graduate School, Universitas Sumatera Utara

Email Correspondence: gitaputri33@gmail.com

Abstract

Research conducted at Perumda Tirta Silaupiasa, Asahan Regency aimed at designing a strategy map based on a balanced scorecard, because the company was still unable to achieve targets and align with the company's vision and mission. This research uses descriptive qualitative methods. Primary data was collected through interviews and secondary data was obtained through company documents and related literature. The results of research at Perumda Tirta Silaupiasa, Asahan Regency, the vision and mission are effective, but they still do not include the values adhered to by the company. SWOT analysis which shows the company's strengths, weaknesses, opportunities and threats produces 13 strategic targets which are classified into four balanced scorecard perspectives, namely, 3 strategic targets from a financial perspective, 6 strategic targets from a customer perspective, 2 strategic targets from an internal business process perspective and 2 strategic targets strategy on a learning and growth perspective. Then, the strategy targets are displayed in the form of a strategy map.

Keywords: SWOT Analysis, Perspective, Strategy Map

1. INTRODUCTION

The Regional Drinking Water Company (PDAM) is a Regional Drinking Water Enterprise (BUMD) which operates in the field of providing clean water for the community. PDAM as the organizer of the Drinking Water Supply System (SPAM), according to regulations, has duties and functions to fulfill quality, quantity and continuity (3K) in community water services. The Balance Scorecard is a performance measurement method that assesses both financial and non-financial aspects. The Balanced Scorecard was first developed in 1990 by Robert Kaplan and David Norton. BSC as a modern performance assessment tool can be used as an alternative method for businesses that still use traditional performance measurements that only focus on financial performance (Riwu et al, 2021). Because BSC has several advantages, namely, comprehensive, measurable and balanced. The Balanced Scorecard measures performance from four perspectives, namely, financial perspective, customer perspective, internal business perspective and learning and growth perspective.

The performance assessment system carried out by PDAM uses the Balance Scorecard method which is implemented based on the Technical Guidelines for PDAM Performance Assessment which are stipulated in the Decree of the Head of BPPSPAM Number 002/KPTS/kG/IV/2010 concerning Performance Assessment of Services for the Implementation of Drinking Water Supply System Development at Regional Drinking Water Companies. There are 18 performance assessment indicators in the 4 aspects evaluated. Each aspect is given weight, namely, the financial aspect is 25%, the customer aspect is 25%, the operational aspect is 35%, and the human resources aspect is 15%. And the results of the BUMD Drinking Water performance assessment from these 4 aspects consist of 3 categories, namely:

1. Healthy Performance, with a performance value of more than 2.8 (>2.8)
2. Unhealthy Performance, with a performance value of 2.2 to 2.8 (2.2-2.8)
3. Sick Performance, with a performance score of less than 2.2 (<2.2)

PDAM Tirta Silaupiasa, Asahan Regency or which is now the Regional Public Company (Perumda) Tirta Silaupiasa is really needed to meet the clean water needs of the people in Asahan Regency. Therefore, Perumda Tirta Silaupiasa is required to have healthy performance. However, in recent years the performance assessment results of Perumda Tirta Silaupiasa have been in an unhealthy condition.

DESIGNING A STRATEGY MAP BASED ON BALANCE SCORECARD IN PERUMDA TIRTA SILAU PIASA ASAHAN DISTRICT

Gita Putri Desiana Daulay, A. Rahim Matondang, Nazaruddin

Perumda Tirta Silaupiasa Performance Table

Year	Performance Value	Category
2019	2.38	Unwell
2020	2.43	Unwell
2021	2.34	Unwell

Source: BUMD Drinking Water Performance Book 2022

The overall performance value of Perumda Tirta Silaupiasa is still categorized as unhealthy and the value will decrease further in 2021. According to BPPSPAM, to reach the Healthy category, the total performance value must be more than 2.8 (>2.8). There are several values in the assessment indicators from a financial and non-financial perspective which are factors causing the performance assessment of Perumda Tirta Silaupiasa to be in the Unhealthy category. The following is one of the causal factors from a financial perspective.



Source: BUMD Drinking Water Performance Book 2022

Image of Perumda Tirta Silaupiasa Operating Ratios

The graph above shows that the operating ratio condition of Perumda Tirta Silaupiasa is not good and continues to decline in value. In 2019 the operating ratio percentage value was 1.29, then in 2020 the operating ratio decreased to 1.25 and in 2021 the operating ratio percentage value decreased again to 1.20. The decreasing value of the operating ratio until 2021 shows that management has not been able to control operational costs which are less efficient, because operational expenses exceed the company's income. The performance targets that must be achieved by Perumda Tirta Silaupiasa have not been achieved and are optimal. Therefore, a strategy map using the balanced scorecard method is needed as a visual form of targets that must be met by all Perumda Tirta Silaupiasa management so that they are easier to understand. Based on the phenomenon and description above, researchers are interested in designing a strategy map for Perumda Tirta Silaupiasa, Asahan Regency using the Balanced Scorecard method because strategy and performance must be integrated in achieving company goals.

2. IMPLEMENTATION METHOD

Form of Research

This type of research is based on methods, namely descriptive research that is qualitative in nature. Descriptive research is a type of research that aims to describe the facts and characteristics of an object or population in a systematic, accurate and factual manner (Sinulingga, 2021).

Research sites

The company that will be the location for this research activity is the Tirta Silaupiasa Regional Public Company (Perumda), Asahan Regency.

Data collection technique

Data collection can be done in various ways and from various sources. The data collection techniques used in this research are:

1. Primary Data Collection

Primary data collection is data collection by directly coming to the research location to look for complete data and related to the problem being studied. The method used to collect primary data is interviews. An interview is a question and answer process to obtain information for research purposes. In this research, interviews were conducted with the Head of Sub-Division at Perumda Tirta Silaupiasa, Asahan Regency.

2. Secondary Data Collection

Secondary data is data that is already available and does not require collecting data directly from the source, so there is no need to conduct interviews and distribute questionnaires for data collection. The method used to obtain secondary data is as follows:

a. Documentation

Documentation is collecting data in the form of written documents. The documents in question are the Company's financial and performance reports, regulations, laws, research results and other materials related to the problem under study.

b. Literature Study

Literature study, namely, collecting data obtained from books, scientific essays, writings related to research.

Data analysis technique

According to Miles and Huberman (1994) in Morissan (2019), the qualitative data analysis process consists of three stages, namely:

a. Data reduction

Data reduction is the process of selecting or selecting important data, simplifying the data, providing a general picture of the phenomenon being studied, and changing this general picture into a data display.

b. Data Display

Data displays or data displays can be in the form of matrices, graphs, charts or temporary conclusion sentences. Data views provide a new way to organize data in a display that is easier to read.

c. Drawing Conclusions and Verification

Drawing conclusions is the third element of qualitative analysis. Drawing conclusions is the activity of reviewing the results of data analysis and assessing the implications of the meaning that emerges regarding the research question. Verification is related to drawing conclusions, namely the activity of reviewing data as much as necessary to verify the temporary conclusions that emerge (Morissan, 2019).

3. RESULTS AND DISCUSSION

Analysis of the Vision and Mission of the Regional Public Company (Perumda) Tirta Silaupiasa, Asahan Regency

Vision Analysis

Perumda Tirta Silaupiasa Asahan Regency has the following vision: "Useful for the Community and Regional Government" In analyzing the vision, according to Niven (2003: 117), there are several elements in an effective vision statement, namely as follows:

1. The vision must be stated attractively, simply and easily remembered.

The vision statement of Perumda Tirta Silaupiasa is simply stated in an interesting, simple and easy to remember way. The vision of Perumda Tirta Silaupiasa is simple and very easy to remember because it only consists of six short, concise and clear words. Perumda Tirta

DESIGNING A STRATEGY MAP BASED ON BALANCE SCORECARD IN PERUMDA TIRTA SILAU PIASA ASAHAN DISTRICT

Gita Putri Desiana Daulay, A. Rahim Matondang, Nazaruddin

Silaupiasa's vision is also quite interesting because it contains the company's goal, namely to become a company that is useful for the community and the Regional Government.

2. An effective vision statement contains both external and internal elements.
Perumda Tirta Silaupiasa's vision statement is sufficient to explain its external and internal elements. The external elements referred to are the community and regional government contained in the vision statement. As for the internal elements, it is still lacking, but it is also sufficient to explain that the internal goal is to become a company that is useful for external parties.
3. An effective vision statement must include all parties with an interest in the progress of the organization.
In Perumda Tirta Silaupiasa's vision statement, it is explained that the Company wants to be a company that is useful for the community and local government. In achieving its goals, Perumda Tirta Silaupiasa means including all interested parties, namely employees who manage the internal affairs of Perumda Tirta Silaupiasa.
4. An effective vision must be consistent with the mission and values of the organization.
Based on supporting documents presented by Perumda Tirta Silaupiasa, Perumda Tirta Silaupiasa's vision is in line with its missions. There are several missions of Perumda Tirta Silaupiasa which more or less contain the goals that Perumda Tirta Silaupiasa wants to achieve in its vision statement. However, Perumda Tirta Silaupiasa has not yet included the values adhered to by its company. Therefore, it can be said that Perumda Tirta Silaupiasa's vision statement is not consistent or not in line with its values.
5. An effective vision must be able to determine when the organization achieves its expected goals.
6. Based on the documents presented by Perumda Tirta Silaupiasa, it has not been explained when the organization will achieve its expected goals, nor in terms of time or information.
7. An effective vision statement must be able to be implemented in reality.
In the vision statement of Perumda Tirta Silaupiasa with the reality that is currently being implemented, Perumda Tirta Silaupiasa has proven that it is implementing what is stated in its vision statement, namely by continuing to focus on distributing clean water to the community in various areas of Asahan district.
The vision statement must be able to motivate all individuals involved in the organization.

In Perumda Tirta Silaupiasa's vision statement, which is useful for the community and local government, this has motivated employees and also leaders in distributing clean water to various areas in Asahan Regency.

Mission Analysis

Perumda Tirta Silaupiasa currently has the following mission.

1. Independent in company management
2. Providing excellent service effectively and efficiently
3. Providing affordable drinking water for the community that meets health standards of continuity, quantity and quality
4. Develop professional employee capacity by implementing appropriate technology

In evaluating missions, according to Niven (2003: 103), there are characteristics that become a reference for an effective mission statement, namely as follows:

1. The mission must reflect the targets to be achieved and be stated clearly. In the mission statement of Perumda Tirta Silaupiasa, it is sufficient to reflect the objectives or targets want to achieved by companies, such as statementwants to provide excellent service and provide affordable drinking water for the community, the statement said
It is quite clearly stated by Perumda Tirta Silaupiasa in its mission statement.

2. Even though the mission is stated clearly and simply, it must be able to expand the organization's options. Perumda Tirta Silaupiasa's mission statement simply broadens the scope of what the organization wants to do, or in other words does not limit itself to the organization. As one of the mission statements states, Perumda Tirta Silaupiasa wants to develop the capacity of professional employees by implementing appropriate technology.
3. The mission must inspire change in the organization, encourage organizational progress, stimulate change and growth in a positive direction. With a mission statement consisting of these four points, v Tirta Silaupiasa simply makes his mission statement inspiring and encouraging positive change and growth.
4. The mission must be designed for the long term, and become the basis for current and future organizational decision making. In Perumda Tirta Silaupiasa's mission statement, which contains four points, it is not included in what year the mission is to be achieved. However, as is known, mission statements are formed for quite a long term. Because the mission statement contains company goals that will be achieved in the future.
5. The mission must be stated in language that is easily understood by all readers and also communicative in conveying the organization's goals.

The mission statement of Perumda Tirta Silaupiasa is stated in Indonesian, and the language can also be understood clearly. The mission statement of Perumda Tirta Silaupiasa is also quite communicative with the readers so that the aims and objectives to be conveyed are adequately conveyed by the readers. The mission statement of Perumda Tirta Silaupiasa also contains several goals that the Company wants to achieve.

SWOT analysis

When drafting a company strategy map, things that must be taken into account are the internal and external conditions related to the company. This is clearly illustrated when carrying out a SWOT analysis as a first step in determining the right strategic targets for the company. The following is a SWOT analysis of Perumda Tirta Silaupiasa, Asahan Regency based on the results of interviews with 4 company heads and company performance reports.

Strengths:

1. Have a number of employees appropriate to the workload

Table of Ratio of Number of Employees/1000 Customers

Year	Number of Employees	Number of Customers	Number of Peps/1000 Ratio plg
2019	144	26,203	5.50
2020	149	27,675	5.38
2021	153	28,571	5.36

PDAM or Perumda employee ratio is the ratio between the number of employees and the number of customers. The ideal calculation is the ratio of the number of employees to 1000 customers. The ideal ratio is 4 – 6 meaning that 1 customer will serve 250 – 160 customers. Based on data on the ratio of the number of employees per 1000 customers at Perumda Tirta Silaupiasa in table 4.1 above, it shows that the ratio is above 5 which means it is ideal for the company. The reason the employee ratio parameter is one of the institutional parameters is because the addition of new types of business will affect existing institutions. PDAMs or Perumda that have ideal employee ratios receive maximum marks because they have proven that they manage human resources in accordance with business needs.

DESIGNING A STRATEGY MAP BASED ON BALANCE SCORECARD IN PERUMDA TIRTA SILAU PIASA ASAHAN DISTRICT

Gita Putri Desiana Daulay, A. Rahim Matondang, Nazaruddin

2. Service operating hours average 20 hours/day

Service level is one of the parameters because the number of hours of drinking water service also provides an overview of PDAM operational performance. The higher the number of service hours (maximum 24 hours), the operational performance is considered good and service to customers is maximized. The underlying reason is that Service Level (number of service hours) is one of the technical parameters because PDAMs that have been able to serve their customers optimally are expected to be able to manage domestic wastewater services without the risk of declining drinking water services. Perumda Tirta Silaupiasa carries out its services with an average time of 20 hours. This is categorized as good because it is almost close to 24 hours of maximum service time.

3. Service that is alert in responding to customer complaints

Perumda Tirta Silaupiasa in serving customers, seeks to resolve customer complaints received.

Table 4.1 Complaint Resolution Rate of Perumda Tirta Silaupiasa, Asahan Regency

Year	Complaint Resolution Rate
2019	100%
2020	100%
2021	100%

Source: BUMD Drinking Water Performance Book 2022

The complaint resolution level indicator shows the extent to which complaints and grievances related to SPALD are resolved by BUMD within a period of 1 year. Table 4.2 above shows that the complaint resolution rate for Perumda Tirta Silaupiasa is 100%, which means that all complaints have been resolved.

Weakness

1. Ineffective billing

The data below shows that the effectiveness of billing customers is still ineffective.

Table of Collection Effectiveness of Perumda Tirta Silaupiasa, Asahan Regency

Year	Billing Effectiveness
2019	66.11%
2020	65.47%
2021	64.81%

Source: BUMD Drinking Water Performance Book 2022

Customer water bills have not been close to 100% since 2019, this has affected the company's revenue. The collection rate is a percentage calculation related to the number of accounts collected in the current month. The lower the collection percentage, the greater the value of PDAM's receivables and this will complicate the PDAM's financial condition, especially cash. The reason for using collection level parameters is because this performance assessment will greatly influence the company's cash condition in the short and long term. A collection rate of >90% means that 90% of the billing amount for the current period was successfully collected and increased the company's cash. The remaining 10% of the current month's bill is expected to be paid in the following month. The greater the collection percentage, the better the PDAM's cash condition. Good cash conditions indicate that PDAM management will not experience difficulties

with the addition of a new type of business, namely waste water management. The table above shows that the collection percentage is still below 70%, which means that collection is still not effective.

2. Revenue does not yet cover the company's operational costs

Table of Operational Ratios for Perumda Tirta Silaupiasa, Asahan Regency

Year	Total Operating Expenses (Rp 000)	Total Income (Rp 000)	Operating Ratio
2019	Rp. 27,730,680	Rp. 21,444,224	1.29
2020	Rp. 27,486,139	IDR 22,077,453	1.24
2021	Rp. 28,131,735	Rp. 23,537,374	1.20

Source: BUMD Drinking Water Performance Book 2022

The Operating Ratio is a benchmark for assessing efficiency in using funds and resources to carry out company operational activities. Because there are still many customers' water bills that have not been paid, the company cannot obtain maximum income. These bills are included in the company's operating expenses. Thus, the value of operating expenses exceeds the company's income.

Opportunities

1. Wide Service Coverage

Asahan Regency has 25 sub-districts and 204 sub-districts. In 2021 the population of Asahan Regency is 409,303 and Perumda Tirta Silaupiasa serves 22.90% of the total, namely 93,726. This shows that there are still many opportunities for Perumda to expand the scope of its services in Asahan.

Table of Service Coverage of Perumda Tirta Silaupiasa, Asahan Regency

Year	Underserved Population	Number of Population in the Region Service	Service Coverage
2019	112,971	467,225	24.18%
2020	123,197	409,260	30.10%
2021	93,726	409,303	22.90%

Source: BUMD Drinking Water Performance Book 2022

2. Abundant resources

The abundant natural resources in Asahan district make this a great opportunity for Perumda Tirta Silaupiasa to utilize the available natural resources. Asahan Regency has the Asahan River which is a great opportunity for companies to develop their business.

Threats

1. Unpredictable natural conditions

Natural disasters and bad weather such as floods cause the water that Perumda distributes to the community to become dirty. The water distributed by Perumda Tirta Silaupiasa comes from natural river resources in Asahan. According to the Asahan Regency Regional Disaster Management Agency, in 2022 there will be 81 natural flood disasters that will occur in Asahan. Rain accompanied by lightning disrupts Perumda's water distribution, because it depends on PLN, so if the PLN electricity network has problems it will stop water distribution activities. According to PTPN III Kebun Sei Dadap

DESIGNING A STRATEGY MAP BASED ON BALANCE SCORECARD IN PERUMDA TIRTA SILAU PIASA ASAHAN DISTRICT

Gita Putri Desiana Daulay, A. Rahim Matondang, Nazaruddin

Climatology Station records, in 2022 there will be 147 rainy days with a rainfall volume of 4,562 mm. Unexpected natural conditions can pose a threat to a company's business continuity.

2. There is a Drilled Well

Many people choose to use drilled wells because the water is cleaner and smoother, so this is a threat to Perumda Tirta Silaupiasa because its customers are switching to using drilled wells.

3. Customer growth is decreasing

The growth indicator in the number of customers shows the extent of the company's efforts to increase the development of its service coverage to the community per year. From the growth indicator in the number of customers, problems and challenges from the previous year can be identified to become the basis for planning for the following year to improve and develop the company's achievements.

Perumda Tirta Silaupiasa Customer Growth Table

Year	Number of Customers	Customer Growth
2019	26,203	41.55%
2020	27,675	7.99%
2021	28,571	3.24%

Source: BUMD Drinking Water Performance Book 2022

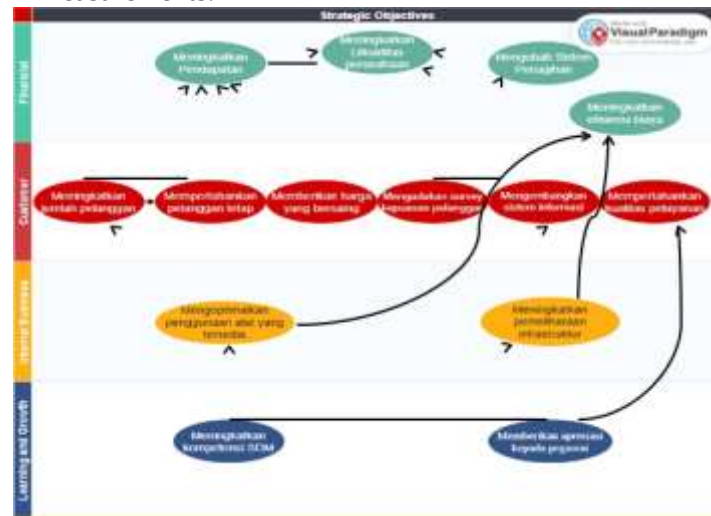
In recent years, Perumda Tirta Silaupiasa has experienced a significant decline in customer growth. In 2019 the percentage of customer growth reached 41.55%, in 2020 the percentage of customer growth fell to 7.99% and in 2021 customer growth fell again from the previous year, namely 3.24%. This is a threat to the company because customer growth is small compared to previous years.

SWOT Matrix

- Strengths-Opportunities
 1. Increase the number of customers
 2. Maintaining service quality
 3. Increasing HR competency
- Weakness-Opportunities
 1. Increase income
 2. Change the billing system
 3. Give appreciation to employees
- Strengths-Threats
 1. Optimize the use of available tools
 2. Maintaining regular customers
- Weakness-Threats
 1. Provide competitive prices
 2. Conduct customer satisfaction surveys
 3. Increase cost efficiency
 4. Improve infrastructure maintenance
 5. Developing information systems for customers

Strategy Map Design

From the SWOT Matrix, several proposed strategic targets can be obtained which can be put into the design of a strategy map to then be identified into four balanced scorecard perspectives and aligned with KPI measurements.



Source: Data from PDAM Tirta Silaupiasa which has been reprocessed

Image of Perumda Tirta Silaupiasa Strategy Map Design, Asahan Regency

Financial Perspective

The strategic goal from a financial perspective is to increase the company's liquidity. Company liquidity can be seen from the cash ratio and collection effectiveness. Then these values are compared with previous years. The steps taken to increase the company's liquidity are two strategies, namely a growth strategy and a productivity strategy.

a. Growth Strategy

The growth strategy is to increase the company's main income, namely income from customer water rates. This water increase can be done by increasing the number of customers and retaining old customers. The measurement used to see an increase in income is the Revenue Growth Rate. Growth rate is a parameter used to show the percentage growth of a certain variable over a certain period of time, in this case the variable whose growth is seen is company revenue. To calculate the Revenue Growth Rate, you need to subtract the value of the company's current income from the company's previous income, then divide it by the company's past income, which is then multiplied by 100% to get the percentage result.

b. Productivity Strategy

Strategy productivity Which can executed company is by increasing the effectiveness of billing and saving costs incurred by companies such as electricity and diesel consumption. To measure the effectiveness of billing, it can be done by dividing the number of billable accounts by the number of water sales. Measuring electricity consumption and fuel consumption, namely by measuring the amount of costs incurred per water pump used for electricity and diesel fuel consumption in Rupiah.

Table of Strategic Objectives in Financial Perspective

Strategic Objectives	Key Performance Indicators			
	Measurements	Formulas	Unit Type	Frequency
Increase income	Revenue Growth Rate	$(\text{Income Now} - \text{Previous Income}) / \text{Previous Income}$	%	Annual

DESIGNING A STRATEGY MAP BASED ON BALANCE SCORECARD IN PERUMDA TIRTA SILAU PIASA ASAHAN DISTRICT

Gita Putri Desiana Daulay, A. Rahim Matondang, Nazaruddin

Increaseeffectiveness billing	Billing Effectiveness	Collectible Accounts/Water Sales	%	Annual
Increasecost efficiency	Electricity Consumption	Amount Cost Electricity/Number of Water Pumps	Rp	Monthly
	Fuel Consumption	Total Solar Costs/Number of Water Pumps	Rp	Monthly

Customer Perspective

To achieve strategic targets from a financial perspective, namely increasing revenue, the way to do this is to achieve strategic targets from a customer perspective. The strategic targets from a customer perspective are to increase the number of customers, maintain service quality, retain regular customers, provide competitive prices, conduct customer satisfaction surveys and develop information systems.

Table of Strategic Objectives in Customer Perspective

Strategic Objectives	Key Performance Indicators			
	Measurements	Formulas	Unit Type	Frequency
Increasenumbe r of customers	Customer Growth	(Number of Customers This Year-Number CustomerPrevious Year)/Amount Customer YearPreviously	%	Annual
Maintainservice quality	Complaint Resolution Rate	Number of Complaints Handled Completely/Number of Complaints	%	Monthly
Maintainregular customer	Customer Loyalty Index	Score Based on results Evaluation withquestionnaire	-	6 months
Give Price Whichcompete	Average Rate Index	Rates Company/TariffCompetitors	%	Monthly
Conduct customer satisfaction surveys	Customer Satisfaction Index	Score Based on assessment results withquestionnaire	-	Annual
Developinformatio n Systems	System Contribution	Score Based on resultsevaluation with questionnaire	-	Annual

Internal Business Process Perspective

The internal process perspective describes the important processes carried out by the company in providing satisfaction to customers and supporting the goals of the financial perspective and customer perspective. The core processes identified and suggested as strategic

targets for Perumda Tirta Silaupiasa, Asahan Regency to become the focus of continuous improvement are:

1. Optimize the use of available tools
Perumda Tirta Silaupiasa has an installed capacity that is in excess of production capacity. This results in idle capacity or pumps, even though pumps that are not currently in use are considered reserves, preferably by increasing the number of customers, it is hoped that the use of the equipment will also be more optimal.
2. Improve infrastructure maintenance
Infrastructure maintenance is very important for cost efficiency and maintaining the quality of water distributed to customers. Infrastructure maintenance can be carried out in accordance with the SOPs that apply in the company.

Table of Strategic Objectives from an Internal Business Process Perspective

Strategic Objectives	Key Performance Indicators			
	Measurements	Formulas	Unit Type	Frequency
Optimize the use of available tools	Production Efficiency	Production Capacity/Installed Capacity	%	Annual
Increase infrastructure maintenance	Maintenance Infrastructure	Score based on results review according to SOP	-	3 Monthly

Learning and Growth Perspective

The learning and growth perspective is the basis of the value creation process. The goal in this learning and growth perspective is to provide the infrastructure that allows the goals in the other three perspectives to be achieved. For this reason, Perumda Tirta Silaupiasa, Asahan Regency must improve employee competence and expertise and increase employee motivation and satisfaction through giving appreciation.

Strategic Objectives Table in Learning and Growth Perspective

Strategic Objectives	Key Performance Indicators			
	Measurements	Formulas	Unit Type	Frequency
Increase HR competency	Ratio of training/competency improvement	Amount of Training/Total Full Time Employees	Number of Hours	Annual
Give appreciation to employees	Employee Satisfaction Survey	Scores are based on questionnaire results	-	Annual

4. CONCLUSION

Based on the results of the analysis carried out in the previous chapter, it can be concluded that:

1. The Vision and Mission Statement of Perumda Tirta Silaupiasa, Asahan Regency is effective, but it still does not include the values adhered to by the company.
2. Based on the results of the SWOT analysis, the company's strategy is implemented in four balanced scorecard perspectives, namely:
 - a. Financial Perspective

DESIGNING A STRATEGY MAP BASED ON BALANCE SCORECARD IN PERUMDA TIRTA SILAU PIASA ASAHAN DISTRICT

Gita Putri Desiana Daulay, A. Rahim Matondang, Nazaruddin

The strategic target from a financial perspective is to increase the company's liquidity, with a strategy to increase revenue, increase billing effectiveness and increase cost efficiency.

b. Customer Perspective

The strategic targets from a customer perspective are to increase the number of customers, maintain service quality, retain regular customers, provide competitive prices, conduct customer satisfaction surveys and develop information systems.

c. Internal Business Process Perspective

The strategic goal in this perspective is to optimize the use of available tools and improve infrastructure maintenance

d. Learning and Growth Perspective

The strategic target of the growth and learning perspective is to increase employee competence and expertise, increase employee motivation and satisfaction through giving appreciation.

5. SUGGESTIONS

Based on the results of the analysis that has been carried out, several suggestions can be made by the company to create a Regional Public Company with healthy performance

1. In order for the strategy to be implemented well, proposals for implementing the strategy are given in the form of a strategy map which has been presented in the Analysis and Discussion Chapter
2. Companies should also include the values adhered to by the company along with the company's vision and mission.

REFERENCES

- Reference, S., Pada, S., Tinggi, S., Tasya, X., & Hartanti, D. (2023). Proposed Strategy Map Design Based on the Balanced Scorecard Concept. *Scientific Journal of Educational Vehicles*, 3, 502–516. <https://doi.org/10.5281/zenodo.7633267>
- Alharbi, F., Atkins, A., Stanier, C., & Al-Buti, H. A. (2016). Strategic Value of Cloud Computing in Healthcare Organizations Using the Balanced Scorecard Approach: A Case Study from a Saudi Hospital. *Procedia Computer Science*, 58, 332–339. <https://doi.org/10.1016/j.procs.2016.09.050>
- Arifyanto, A. Fakhri. (2015). Strategy Map and Balanced Scorecard Design PT. DPI. *BISMA Journal of Business and Management*, 7(2), 117-124.
- BPPSPAM. (2010). Technical Instructions for PDAM Performance Assessment. BUMD Drinking Water Performance Book 2022
- Clara Rasida, HS (2021). Balanced Scorecard Design to Achieve Strategic Targets of PDAM Hulu Sungai Utara, South Kalimantan. *Journal of Strategic Management and Business Simulation*, 40-54.
- D. Setyawan. (2018). Balanced Scorecard Approach for Performance Measurement at the Bondowoso District Health Service. *Research Journal*, 12(2), pp. 158169, 2018.
- Ekmekçi, YAD (2014). Implementing of Balanced Scorecard: Sample of Turkish Republic Ministry of Youth and Sport. *Procedia - Social and Behavioral Sciences*, 150, 754–761. <https://doi.org/10.1016/j.sbspro.2014.09.046>
- Godang Wardiman, I., & Lukman, S. (2023). Balanced Scorecard and Strategy Map Design in The Company (Case Study at PT. Astra Agro Lestari). *Quantitative Economics and Management Studies*, 4(2), 238–245. <https://doi.org/10.35877/454RI.qems1464>

- Hoesaini, IA (2018.). Designing Strategy Maps and Balanced Scorecards at PT Bahtera Abadi Gas Gresik Designing Strategy Maps and Balanced Scorecards at PT Bahtera Abadi Gas Gresik.
- Kaplan, S. Robert & David P. Norton. (1992). The Balanced Scorecard – Measures That Drive Performance. *Harvard Business Review* January – February, No. 1, 71-79
- Kaplan, RS, & DP Norton. (2004). *Strategy Maps: Converting Intangible Assets into Tangible Outcomes*. Boston: Harvard Business School Press.
- Kartalis, N., Velentzas, J., & Broni, G. (2013). Balance Scorecard and Performance Measurement in a Greek Industry. *Procedia Economics and Finance*, 5, 413–422. [https://doi.org/10.1016/s2212-5671\(13\)00049-x](https://doi.org/10.1016/s2212-5671(13)00049-x)
- Laila, N. Dillah & Dian, I. Burhany. (2020). Measuring the Performance of the Cimahi City Culture, Tourism, Youth and Sports Department Using a Balanced Scorecard Approach. *Indonesian Accounting Research Journal*, 1(1), 53-64.
- Li, C.H., Yang, W.G., & Shih, I.T. (2021). Exploration on the gap of single- and double-loop learning of balanced scorecard and organizational performance in a health organization. *Heliyon*, 7(12). <https://doi.org/10.1016/j.heliyon.2021.e08553>
- Mahsun, Mohamad. (2006). *Public Sector Performance Measurement*. Yogyakarta: BPFE. 24
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage Publications
- Morissan. (2019). *Qualitative research*. Jakarta: Kencana
- Muflihah, Y., & Hermanto, A. (2019). Application of Cascading Balance Scorecard in Making IT Strategy Maps (Case Study: Directorate of University Information Systems 17 August 1945 Surabaya). In *Informatics Journal* (Vol. 4, Issue 3).
- Nabilah, AFI, Prabowo, WA, & Kristiyanto, DY (2023). Recommendations for Performance Measurement Using Information Technology Balanced Scorecard and Strategy Maps. *JRST (Journal of Science and Technology Research)*, 7(1), 25. <https://doi.org/10.30595/jrst.v7i1.14543>
- Pertiwi, Giarti., Dian IB, & Ahmad S. (2021). Measuring the Performance of Government Agencies using the Balanced Scorecard Approach (Case Study of the Kantah Cimahi National Land Agency). *Indonesian Accounting Research Journal*, 2(1), 34-45.
- Parasuraman, LL Berry & VA Zeithaml. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, vol. 64, pp. 12-40.
- Riwu, SL, AW, & Kevin CB (2021). Hospital Performance Assessment Using the Balanced Scorecard Approach: Systematic Review. *Journal of Hospital Foundation Health Management*. Dr. Soetomo, 7(2), 267-283.
- Rosa, Ade Tutty R. (2016). Civil Service Higher Education Based on the Balanced Scorecard (BSC) & Strategy Maps Method (R & D Study at the Institute of Domestic Government (IPDN) Jatinangor, West Java Province). *Wahana Bhakti Praja Journal*, 6(1).
- Sinulingga, Sukaria. (2021). *Research Methods* 3rd Edition. Medan: USU Press.
- Yuwono, S., Sukarno, E, & Ichsan, M. (2002). *Practical Instructions for Preparing a Balanced Scorecard. Towards a Strategy-Focused Organization*. Jakarta: Elex Media Komputindo..