

Performance measurement analysis using the performance Prism and objective matrix: a case study of KPUD Tani Wilis

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ABSTRACT

Performance is one the critical aspect in every company or business that needs to be considered. However, a common issue encountered is that companies often fail to accurately assess their business performance. Inaccurate performance measurements result in a lack of continuous improvement in productivity and instead negatively impact the overall performance quality, thereby influencing revenue growth. This research focuses on key performance indicators (KPIs) that deviate from the standards set by KPUD 'Tani Wilis'. Consequently, alternative performance measurement approaches, such as identifying indicators using the performance Prism and evaluating performance through the objective matrix, are necessary. The results indicate that 68% of the indicators across various dimensions are in good condition, while 32% are below standard, with the required threshold set at 75% for good performance. The primary challenges identified include maintaining service quality for customers and ensuring supply delivery accuracy. The proposed solutions involve implementing robust control and monitoring systems focused on customer service quality, with dedicated supervisors or quality control experts overseeing the process.



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1. Introduction

In practice, cooperatives often face challenges and performance decline during periods of dynamic economic changes. These issues can arise from insufficient attention to business strategies that are inadequately evaluated and adjusted. A business model in a company is always established based on strategies and approaches aimed at creating value or profit for customers, while simultaneously generating revenue schemes for the company to cover operational costs and achieve success (Oktriani, 2020). A business model serves as a tool or concept that helps explain how a business operates, including the management practices applied and executed within a company. A business model is also utilized to help business operators effectively explain operational activities to business partners and stakeholders. Additionally, a business model can be used as an analytical tool to measure company performance, plan strategic objectives, facilitate communication among partners, and drive innovation. Identifying a business model requires several approaches to ensure alignment with the company's vision and to produce more targeted outcomes. Ideally, the company should thoroughly identify and assess its business model to achieve optimal success. The concept of a business model also evolves with changes in external conditions, necessitating adjustments for business sustainability. Consequently, companies must shift focus from solely maximizing profits to exploring alternative strategies (Poerwanto et al., 2021). In business, there are strategic approaches that must be employed to achieve substantial profits. In practice, there are several indicators of success in implementing these business strategies within a company, such as financial performance.

customer needs. product or service quality. innovation. creativity. employee commitment and other aspects (Eko Purwanto. 2020).

Performance Prism

The performance prism is a performance measurement method that operates on a concept similar to a prism. featuring five perspectives shaped by a three-dimensional triangular prism framework. The use of the performance prism method begins with identifying the level of stakeholder satisfaction and contribution to the company's strategy. The advantage of this method lies in the identification of key performance indicators (KPIs) at the strategy. process. and capability levels. These KPIs are derived directly from the needs and demands of stakeholders. ensuring alignment with the company's objectives (Mollah & Erywardana. 2019). The performance prism method can also provide a realistic overview. making the key success factors of a business more clearly visible. The utilization of key performance indicators (KPIs) as benchmarks in performance measurement serves as a quantification of the efficiency and effectiveness of a production process (Nasution et al.. 2021). The performance prism method has a conceptual framework based on five dimensions of perspective. These include:

1. Stakeholder Satisfaction – identifying the key stakeholders of the organization and understanding their needs.
2. Stakeholder Contribution – determining the contributions required from stakeholders to support the organization.
3. Strategies – defining the appropriate strategies to meet stakeholder demands and achieve their satisfaction.
4. Processes – identifying the critical processes that need to be implemented and improved to support these strategies.
5. Capabilities – assessing the organization's capabilities to execute and enhance these processes effectively.

These frameworks always used as the main concept to analyse and identify the key performance indicator on business (Mamdouh & Ahrouch. 2022). The objective of identifying key performance indicators (KPIs) using the performance prism method is to determine the relevant KPIs for a business. In the era of Industry 4.0. KPIs are utilized as tools for controlling and guiding a company's objectives. They serve as management tools that distinguish useful information from less critical data. offer transparent insights into the company's condition. and provide alternatives to address or enhance underperforming processes. Additionally. KPIs can be employed as risk analysis tools by identifying delays in processes and operational failures within the company. Therefore. KPIs must undergo dynamic adjustments to replace outdated objectives that no longer align with the company's current situation (Rodrigues et al.. 2021).

Analytical Hierarchy Process

Analytical Hierarchy Process (AHP) is a decision-making method used to determine the priority level of an indicator. In decision-making using AHP. criteria are structured hierarchically to establish priority levels. The validation of selection can be based on the consistency of the data collection tool. The higher the weight. the more valid the criterion becomes as a high-priority level (Iskandar & Sudiar. 2022). On some research. There is a scale used to construct a pairwise comparison matrix. based on Saaty's scale. for weighting criteria in the Analytical Hierarchy Process (AHP). This scale facilitates the comparison and ranking of criteria within the performance prism framework by indicating the levels of importance or priority (Akhrouf & Derghoum. 2023).

Objective Matrix

In performance measurement for companies. an objective assessment method is required. A popular method used is the Objective Matrix. This method is designed to measure productivity in a partial manner and to periodically monitor each critical performance indicator. The primary functions of the Objective Matrix are performance measurement. problem-solving related to performance issues. and monitoring for performance growth (Ningsih & Astuti. 2022). The use of the Objective Matrix begins with selecting the productivity criteria to be monitored or re-evaluated. followed by calculating the ratio by interpolating values within the matrix. Once these calculations are complete. the objectives to be structured can be identified. The next step involves selecting the assessment ratio and creating the

Objective Matrix. The formation and structure of the Objective Matrix can be represented as a scoring table directly linked to key performance indicators (KPIs) or objectives the company aims to achieve. by establishing maximum and minimum target achievement levels (Putra & Mursid, 2021). The Objective Matrix can then be complemented with a Traffic Light System to simplify performance assessment. The Traffic Light Systems method is used to facilitate performance measurement or policy-making by helping to visualize the company's achieved targets through colored indicators.

The primary objective of this research is to identify key performance indicators (KPIs) using the Performance Prism method and then to measure performance in order to prioritize improvements for indicators that are below standard. The results of this analysis will serve as recommendations for improving poorly performing indicators. This method is chosen due to its detailed and comprehensive nature, which is considered more relevant compared to the increasingly less pertinent Balanced Scorecard method. The performance measurement approach will focus on the five dimensions of the Performance Prism, which are often overlooked by cooperatives organization. By utilizing this method, it is hoped that organization will be able to address existing issues and enhance their performance.

2. Methods

Data Collection

In the data collection process, instruments or tools are used to gather the necessary research data through questionnaires assessing stakeholder importance and the significance of key performance indicators (KPIs) for each stakeholder. Additionally, interviews and documentation are conducted with cooperative organization. In the cooperative, no in-depth performance measurement has ever been conducted. Therefore, the selected KPIs are solely based on the decisions of stakeholders who oversee the performance areas of the cooperative that frequently encounter issues. The KPIs are selected through discussions with relevant stakeholders to identify and prioritize the specific areas to be measured for performance. The selected respondents also focused only on top-management in cooperatives. These KPIs are also chosen with constraints based on the dimensions within the Performance Prism framework, ensuring that the measured KPIs are relevant to the cooperative's actual conditions. Using Saaty's scale, 25 KPIs are identified based on stakeholder assessments. Subsequently, data collection includes performance measurement records detailing the maximum and minimum thresholds for each indicator, which are used for evaluation with the Objective Matrix.

Table 1 Targeted respondents

Stakeholder	Job Position	Job Description	Work Experience	KPI's Dimension
Abi Ratwanto	Head of General Administration and Managerial	Manage the main administrations task	7 Years	General Manager & Regulator
Zaenal Shakibi	Head of Livestock's Food Production	Manage the supply chain food production	12 Years	Supplier
Teguh Hariyanto	Head of Milk Production	Manage the quality control of the milk production	10-12 Years	Employee
Pujarsih	Head of Sales and Marketing	Manage the business strategies for marketing and sales	7 Years	Customer

Relevant stakeholders validate the selection of KPIs based on the outcomes of joint consolidation efforts and by referencing prior journal research on KPI determination in cooperatives, particularly those cooperatives focused on savings and loans. These references are utilized due to the similarity in performance systems between the researched cooperatives and the one being evaluated.

Table 2 Identified key performance indicator

Stakeholder	Stakeholder Satisfaction	Stakeholder Contribution	Strategies	Processes	Capabilities
General Manager	Return on Assets (KPI 1 SS)	Investment Growth Rate (KPI 1 SC)	Revenue Growth Rate (KPI 1 SG)	Services Quality Ratio (KPI 1 PC)	Management Review (KPI 1 CB)
Employee	Employee Satisfaction (KPI 2 SS)	Employee Loyalty Ratio (KPI 2 SC)	Services Improvement (KPI 2 SG)	Professional Recruitment Process (KPI 2 PC)	Employee Potential Rate (KPI 2 CB)
Customer	Customer Satisfaction (KPI 3 SS)	Customer's Feedback (KPI 3 SC)	Resolved Complaints (KPI 3 SG)	Maintaining Service Quality (KPI 3 PC)	Customer Loyalty Ratio (KPI 3 CB)
Supplier	Supplier Satisfaction (KPI 4 SS)	Supply Delivery Accuracy Ratio (KPI 4 SC)	Supplier Rights Fulfilment (KPI 4 SG)	Operational Quality Improvement (KPI 4 PC)	Supply Availability Ratio (KPI 4 CB)
Regulator	Employee Acceptance Ratio (KPI 5 SS)	Implemented Ideas or Concepts (KPI 5 SC)	Government Collaboration (KPI 5 SG)	Environment Development Ratio (KPI 5 PC)	Policy Guidance (KPI 5 CB)

From these key performance indicators, the maximum and minimum thresholds can be set for performance measurement record sheet. This approach enables the cooperatives organization to more effectively assess performance and identify areas requiring improvement.

Data Analysis

Key Performance Indicator Weighting

This study involves several stages of data processing that require analysis. The first step is conducted by assigning priority weights to each key performance indicator (KPI) based on Saaty's scale questionnaire results.

The process involves the following steps:

1. Structuring the data: The questionnaire results are calculated using the pairwise comparison matrix. The values in each column are summed, repeating this step for each column in the matrix.
2. Matrix normalization: Each value in a column is divided by the total sum of that column's values.
3. Calculating normalized matrix values: The normalized matrix values are calculated by dividing the total normalized sum by the number of criteria (n).
4. Determining priority values: Priority values are determined using the formula:

$$\text{Priority Value} = \frac{\text{Sum of criterion values per row}}{n \text{ (number of criteria)}} \tag{1}$$

5. Calculating the eigenvalue (EV): The eigenvalue is calculated using the formula:

$$\text{Eigenvalue} = \text{Sum of Pairwise Comparison Column} \times \text{Priority Value} \tag{2}$$

6. Finding Lambda Max (λ_{max}): This is done by summing all the eigenvalues (EV).
7. Consistency analysis: The consistency of the questionnaire responses is checked by calculating the Consistency Ratio (CR) using the following formulas:

Consistency Index (CI):

$$\text{Consistency Index} = \frac{\lambda_{\text{max}} - n}{n - 1} \tag{3}$$

Consistency Ratio (CR):

$$\text{Consistency Ratio} = \frac{\text{Consistency Index}}{\text{Random Consistency Index}} \tag{4}$$

Table 3 Random consistency index

		Random Consistency Index														
Matrix Size (N)	Random Index	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		0	0	0.8	0.9	1.12	1.24	1.32	1.40	1.45	1.49	1.51	1.48	1.56	1.57	1.59

The questionnaire is considered consistent if the consistency ratio is less than 0.1. If the consistency ratio exceeds this threshold the questionnaire needs revision. Finally, the data is organized into a hierarchical structure using the Analytical Hierarchy Process (AHP) based on the priority weights. The higher the weight, the more significant it is for decision-makers (Syach Putra & Al amin, 2022).

Performance Measurement

At this stage, after determining the minimum and maximum target standards for each key performance indicator (KPI) that the cooperative organization aims to achieve, a scoring system will be implemented using the Objective Matrix and Traffic Light Systems. Next, class intervals will be established for KPI achievement values. These intervals are used to categorize KPIs and determine whether they fall within the threshold for good performance. Then, the class interval would be determined by this formulation:

$$\Delta X_{L-H} = \frac{Y_H - Y_L}{X_H - X_L} \tag{5}$$

Explanation:

- ΔX_{L-H} : Interval between the high and low levels
- Y_H : Value at the high level
- Y_L : Value at the low level
- X_H : High level
- X_L : Low level

Once the class intervals are established, performance scoring is assigned based on the following criteria.

1. Score 10: Performance is achieved with excellent satisfaction.
2. Score 9-8: Performance is achieved satisfactorily.
3. Score 7-6: Performance is achieved effectively.
4. Score 5-4: Performance meets the standard.
5. Score 3: Performance is average (meets basic standards).
6. Score 2-1: Performance is poor.
7. Score 0: Performance is unacceptable/very poor results.

Based on this formula, the target achievement interval can be determined, which will set the target achievement levels for key performance indicators (Putera et al., 2022).

Scoring and Labelling Indicator

After scoring is completed, the actual score and performance values of the cooperative organization will be obtained. The scoring results are then evaluated using the Traffic Light System to identify which key performance indicators require priority improvement. This method indicates the cooperative's performance at a certain level, represented by three color indicators: red, yellow, and green. The meaning of the Traffic Light System indicators is as follows:

1. Red : The score level falls within the 0-3 interval, indicating poor performance.
2. Yellow : The score level is within the 4-7 interval, meaning the cooperative's performance is adequate or within the standard.
3. Green : The score level ranges from 8-10, indicating maximum performance.

These indicators are assigned based on performance measurement results compared against the maximum and minimum thresholds established by the cooperative organization (Ningsih & Astuti, 2022).

3. Results and Discussion

Analytical Hierarchy Process Structure

From the questionnaire distribution, consistent results were obtained across stakeholders, as the consistency level was below 10%. This indicates that the responses were consistent and that the weight allocation for each criterion was appropriately distributed.

Table 4 Consistency Ratio on Each Questionnaire

Questionnaire	Stakeholder Satisfaction				
	General Manager	Employee	Customer	Supplier	Regulator
Consistency Ratio	0.09	0.06	0.09	0.04	0.01

Indicator Weighting

From the questionnaire distribution results, key performance indicators were weighted by each responsible stakeholder. These results were then used to create a pairwise comparison matrix to compare the key performance indicators across different stakeholders. The weighting use pairwise comparison matrix. The weighting of indicators using the pairwise comparison matrix resulted in the following indicator weights:

Table 5 Indicator weighting results on stakeholder satisfaction

KPIs	Stakeholder Satisfaction				
	Return on Assets	Employee Satisfaction	Customer Satisfaction	Supplier Satisfaction	Employee Acceptance ratio
Weight	0.063	0.009	0.092	0.009	0.021

Table 6 Indicator weighting results on stakeholder contribution

KPIs	Stakeholder Contribution				
	Investment Growth Rate	Employee Loyalty Ratio	Customer's Feedback	Supply Delivery Accuracy Ratio	Employee Acceptance ratio
Weight	0.036	0.007	0.030	0.048	0.024

Table 7 Indicator weighting results on strategies

KPIs	Strategies				
	Revenue Growth Rate	Services Improvement	Resolved Complaints	Supplier Rights Fulfillment	Government Collaboration
Weight	0.069	0.028	0.023	0.035	0.031

Table 8 Indicator weighting results on processes

KPIs	Processes				
	Services Quality Ratio	Professional Recruitment Process	Maintaining Service Quality	Operational Quality Improvement	Environment Development Ratio
Weight	0.015	0.007	0.211	0.011	0.012

Table 9 Indicator weighting results on capabilities

KPIs	Capabilities				
	Management Review	Employee Potential Rate	Customer Loyalty Ratio	Supply Availability Ratio	Policy Guidance
Weight	0.030	0.051	0.034	0.038	0.067

From the weighting results, the key performance indicator with the highest weight is service quality maintenance, while the indicator with the lowest weight is the professional recruitment process. The results will then be used to create an Analytical Hierarchy Process (AHP) chart, which will display the structure of key performance indicators (KPIs) and their respective weights. From the AHP chart, it will

be possible to identify which KPIs require consideration for decision-making regarding improvement evaluations. This will enable the cooperative to effectively focus on and prioritize KPIs that need urgent improvement. thereby enhancing both internal and external performance quality.

Scoring and Labelling Key Performance Indicator

Scoring is performed by filling out the scoring table based on the observed performance results for each key performance indicator (KPI). The scoring is done by calculating the percentage criteria according to the cooperative's expectations and entering the values into the appropriate class interval clusters. on the scoring results. several key performance indicators were categorized into intervals corresponding to good performance. normal performance. and suboptimal performance.

Labelling of key performance indicators is carried out after performance measurement to help the cooperative identify which indicators require priority improvement and the extent of the necessary changes. Labelling using the Traffic Light System is based on the class interval thresholds established by the cooperative. This labelling process uses color indicators to represent the condition of each key performance indicator for each stakeholder

Table 10 Scoring key performance indicator General Manager

Stakeholder General Manager							
KPI NO.	1	2	3	4	5		
Performance	77	35	82.25	85	50	Performance Indicator	
Score Performance	10	100	100	100	85	Good Performance	
	9	85	75	75	65		
	8	70	60	60	50		
	7	61.25	52.5	52.5	46.25	43.75	Normal Performance
	6	52.5	45	45	42.5	37.50	
	5	43.75	37.5	37.5	38.75	31.25	
	4	35	30	30	35	25	
	3	26.25	22.5	22.5	31.25	18.75	Bad Performance
	2	17.5	15	15	27.5	12.50	
	1	8.75	7.5	7.5	23.75	6.25	
0	0	0	0	20	0		
Score Performance	8.467	4.6	9.294	10	8	Average Score : 8.072	
Weight	0.063	0.036	0.069	0.015	0.030		
Value	0.533	0.166	0.641	0.150	0.240	Total Performance : 1.730	

Table 11 Scoring key performance indicator Employee

Stakeholder Employee							
KPI NO.	1	2	3	4	5		
Performance	90	97	60	33	17	Performance Indicator	
Score Performance	10	100	100	100	100	Good Performance	
	9	85	85	70	66.67		87.5
	8	70	70	40	33.34		75
	7	65	62.5	37.50	29.16	65.63	Normal Performance
	6	60	55	35.00	25.00	56.25	
	5	55	47.5	32.50	20.83	46.88	
	4	50	40	30	16.67	37.50	
	3	45	32.5	27.50	12.50	28.13	Bad Performance
	2	40	25	25	8.33	18.75	
	1	35	17.5	22.50	4.17	9.38	
0	30	10	20	0	0		
Score Performance	9.3	10	8.667	8	1.813	Average Score : 7.6	
Weight	0.009	0.007	0.028	0.007	0.051		
Value	0.084	0.070	0.243	0.056	0.092	Total Performance : 0.545	

Table 12 Scoring Key Performance Indicator Customer

Stakeholder Customer							
KPI NO.	1	2	3	4	5		
Performance	91	60	20	40	83	Performance Indicator	
Score Performance	10	100	100	100	100	Good Performance	
	9	90	90	90	87.5		90
	8	80	80	80	75		80
	7	73.75	77.5	77.5	68.75	73.75	Normal Performance
	6	67.5	75	75	62.5	67.5	
	5	61.25	72.5	72.5	56.25	61.25	
	4	55	70	70	50	55	
	3	48.75	67.5	67.5	43.75	48.75	Bad Performance
	2	42.5	65	65	37.5	42.5	
	1	36.25	62.5	62.5	31.25	36.25	
0	30	60	60	25	30		
Score Performance	9.1	0.083	0.258	2.4	8.3	Average Score : 4	
Weight	0.092	0.030	0.023	0.211	0.034		
Value	0.837	0.002	0.006	0.506	0.282	Total Performance : 1.634	

Table 13 Scoring key performance indicator Supplier

Stakeholder Supplier							
KPI NO.	1	2	3	4	5		
Performance	90	64	80	50	95	Performance Indicator	
Score Performance	10	100	100	100	100	Good Performance	
	9	87.5	87.5	87.5	75		90
	8	75	75	75	50		80
	7	68.13	68.13	68.13	43.75	77.50	Normal Performance
	6	61.25	61.25	61.25	37.50	75	
	5	54.38	54.38	54.38	31.25	72.50	
	4	47.5	47.50	47.50	25	70	
	3	40.63	40.63	40.63	18.75	67.50	Bad Performance
	2	33.75	33.75	33.75	12.50	65	
	1	26.88	26.88	26.88	6.25	62.50	
0	20	20	20	0	60		
Score Performance	9.024	6.4	8.4	8.0	9.5	Average Score : 8.265	
Weight	0.009	0.048	0.035	0.011	0.038		
Value	0.081	0.307	0.294	0.088	0.361	Total Performance : 1.131	

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Table 14 Scoring key performance indicator Regulator

Stakeholder Regulator							
KPI NO.	1	2	3	4	5		
Performance	70	0	0	46.67	50	Performance Indicator	
Score Performance	10	70	100	100	100	Good Performance	
	9	45	75	75	73.34		75
	8	20	50	50	46.67		50
	7	18.75	46.25	46.88	40.84	43.75	Normal Performance
	6	17.5	42.50	43.75	35.00	37.50	
	5	16.25	38.75	40.63	29.17	31.25	
	4	15	35	37.5	23.34	25	
	3	13.75	31.25	34.38	17.50	18.75	Bad Performance
	2	12.5	27.50	31.25	11.67	12.50	
	1	11.25	23.75	28.13	5.84	6.25	
0	10	20	25	0	0		
Score Performance	10	0	0	8.27	8	Average Score : 5.254	
Weight	0.021	0.024	0.031	0.012	0.067		
Value	0.210	0.000	0.000	0.099	0.536	Total Performance : 0.845	

Improvement Recommendations

Based on the labelling results, the largest percentage falls into the green category at 68%, followed by the red category at 24%, and the smallest percentage is in the yellow category at 8%. This indicates that the cooperative's performance is generally normal or meets the established standards. However, many indicators have not yet achieved a green label, indicating that continuous improvement is needed.

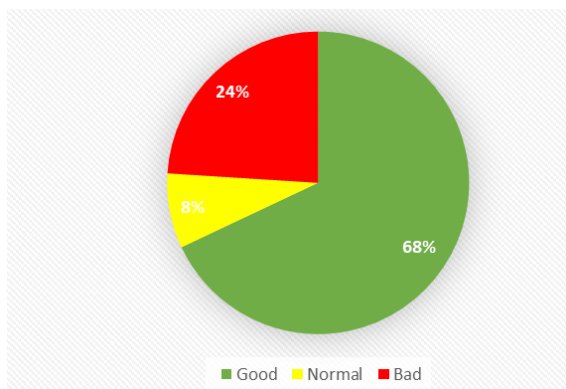


Fig. 2 Performance indicator percentages.

The performance measurement results indicate that many key performance indicators still require further improvement. Therefore, based on the evaluation of all 25 key performance indicators at the cooperative, recommendations for improvement are made for all indicators. This is because deficiencies have been identified in each indicator, necessitating further optimization.

Table 15 Green-labelled indicator

Stakeholder	KPI Code	KPI Description	Improvement Recommendations
General Manager	KPI 1 SS	Return On Assets	Expanding into new assets for the cooperatives (entering new business areas)
	KPI 1 SG	Revenue Growth Rate	Implement control measures in areas of cooperatives experiencing low revenue growth
	KPI 1 PC	Services Quality Ratio	Conduct training to enhance service quality and perform detailed evaluations through assessments
	KPI 1 CB	Management Review	Increase management oversight hand supervision, and develop specific evaluation criteria
Employee	KPI 2 SS	Employee Satisfaction	Conduct questionnaire review on employee satisfaction, assets employee recognition, and evaluate the work environment
	KPI 2 SC	Employee Loyalty Ratio	Evaluate issues faced by employees who decide to resign from the cooperative
	KPI 2 SG	Services Improvement	Provide human resources training on areas of improvement such as technology adaptation, marketing and production machinery operations
	KPI 2 PC	Professional Recruitment Process	Develop a more relevant recruitment SOP and adopt improved recruitment methods from other companies or cooperatives.
Customer	KPI 3 SS	Customer Satisfaction	Enhance service quality by aligning with customer characteristics and creating a positive impression through the cooperative's unique value of warm and familial service.
	KPI 3 CB	Customer Loyalty Ratio	Create a membership system for cooperative customers with beneficial rights.
Supplier	KPI 4 SS	Supplier Satisfaction	Offer high margins and order levels for supplies
	KPI 4 SG	Supplier Rights Fulfilment	Ensure supplier rights through compensation regulations, providing compensation in case of cooperative negligence.
	KPI 4 PC	Operational Quality Improvement	Implement improvements and detailed evaluations of SOPs in the supply chain process.
	KPI 4 CB	Supply Availability Ratio	Ensure transparency in monitoring supply providers regarding product availability.
Regulator	KPI 5 SS	Employee Acceptance Ratio	Regulate the restriction of hiring employees from outside the region and focus on local staff.
	KPI 5 PC	Environment Development Ratio	Design an environmental empowerment program in collaboration with the government.
	KPI 5 CB	Policy Guidance	Assign a government representative to a specialized division within the cooperative.

From the proposed improvement recommendations, there is one key performance indicator with the highest priority weight that is not yet optimal, even though it has received a green performance label. This indicator customer satisfaction level. The highest priority weight is given because customers are the main focus of the cooperative in improving its performance.

Table 16 Yellow-labelled indicator

Stakeholder	KPI Code	KPI Description	Improvement Recommendations
General Manager	KPI 1 SC	Investment Growth Rate	Manage capital by monitoring assets with profit potential, focusing on those that are most beneficial.
Supplier	KPI 4 SC	Supply Delivery Accuracy Ratio	Implement scheduling using material resource planning (MRP) and establish agreements with suppliers regarding compensation for delivery delays.

Based on the Table 16 for improvement recommendations on the key performance indicators with a yellow label, there is a key performance indicator with a high priority weight. making this indicator a focus for the cooperative's improvement efforts. Although the accuracy of supply deliveries meets the standard or is functioning normally. delays in delivery frequently occur due to external issues faced by the cooperative, such as crop failures and transportation disruptions.

Table 17 Red-labelled indicator

Stakeholder	KPI Code	Key Performance Indicator	Improvement Recommendations
Employee	KPI 2 CB	Employee Potential Rate	Track employee potential and provide training in skills relevant to the cooperative's needs.
Customer	KPI 3 SC	Customer's Feedback	Facilitate customer feedback through an online complaint platform based on a website.
	KPI 3 SG	Resolved Complaints	Collect and evaluate complaints through a specialized division created by the cooperative for quality control.
	KPI 3 PC	Maintaining Service Quality	Implement strict controlling measures, including regular evaluations and monitoring. The cooperative's unique value of familial culture should be integrated into the workplace for all employees.
Regulator	KPI 5 SC	Implemented Ideas or Concepts	Seek government involvement in the cooperative's programs.
	KPI 5 SG	Government Collaboration	Establish agreements between the government and the cooperative regarding the implemented programs.

Based on the results from the improvement recommendations Table 17 for the cooperative, several key performance indicators have received a red category label, indicating poor performance. One key performance indicator stands out as the highest priority among all indicators: maintaining service quality. This indicator highlights poor performance because the cooperative is deemed inconsistent in providing services to consumers, leading to unstable revenue generation. Therefore. strict controlling and monitoring are required for the parts of the cooperative that frequently interact with consumers.

4. Conclusion

From the identification of indicators across each stakeholder dimension, 25 key performance indicators were found. with one key performance indicator for each dimension of the performance Prism. These indicators were identified through discussions with sources and direct field observations. The identification of these key performance indicators was based on observations and evaluations conducted by sources, and a selection of issues or performance aspects of the cooperative that are frequently evaluated.

Performance measurement was conducted using three methods: the AHP method for weighting the performance of each stakeholder and key performance indicator. The highest weight was assigned to the customer dimension, specifically for the service quality maintenance indicator. While the lowest weight was given to the employee dimension, specifically for professional recruitment processes. The measurement process was followed by scoring using an objective matrix table to determine whether the performance of each key performance indicator met the optimal standards expected by the cooperative. It was found that 17 indicators were green, 2 indicators were yellow, and 6 indicators were red. Among the red indicators, the highest priority for improvement, where maintaining service quality is the main issue within the cooperative.

Several improvement recommendations were made based on performance measurement results and discussions with the cooperative. These include comprehensive improvements to all 25 key performance indicators, as the cooperative believes these indicators have not yet achieved optimal performance or 100% efficiency. The improvement efforts will focus on maintaining service quality, which has been deemed inconsistent year-to-year due to external issues faced by the cooperative. Recruitment or enhancement of human resources relevant to the cooperative's issues can help address the problems experienced.

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