



Design of Balance Scorecard-Based Key Performance Indicators Based on Organizational Vision in the Coal Mining Industry

Violita Indar Pramuthia¹, Winda Nur Cahyo²

^{1,2} Master of Industrial Engineering, Islamic University of Indonesia, Yogyakarta, Indonesia

ABSTRACT: Facing the challenges of global competition and the dynamics of the mining industry, accurate performance measurement is crucial to ensure the sustainability and efficiency of a company's operations. A coal mining organization in Central Kalimantan does not yet have an integrated performance measurement system and relies solely on monthly production figures as a performance benchmark. This study aims to design Key Performance Indicators (KPIs) based on the Balanced Scorecard (BSC) approach, considering four main perspectives: financial, customer, internal business processes, and learning and growth. The study was conducted using a case study approach, data collection through questionnaires, interviews, and field observations, as well as analysis using the SMART approach and cut-off points. The results show that designing KPIs based on the BSC can provide a more comprehensive and strategic measurement tool for managing and evaluating company performance. The financial and customer perspectives are the main emphasis, given the importance of operational efficiency and customer satisfaction in supporting company competitiveness. In conclusion, the implementation of Balanced Scorecard-based KPIs can help PT Rimau Tangguh Perkasa improve transparency, accountability, and the effectiveness of the company's overall business and operational strategies.

KEYWORDS: Balanced Scorecard, Key Performance Indicator (KPI), SMART Analysis, Mining Industry.

INTRODUCTION

The mining industry is a strategic sector in national economic development, yet it also faces significant challenges in terms of efficiency, safety, and sustainability. As a coal mining organization operating in Central Kalimantan, it plays a crucial role in national energy supply and regional economic growth. Amidst the pressures of global competition, commodity price dynamics, and stringent government regulations, operations are required to be not only productive but also efficient and aligned with long-term strategic objectives. However, in practice, the organization lacks a comprehensive and integrated performance measurement system. To date, company performance measurement has been limited to quantitative aspects such as monthly coal production. While these indicators are important, this approach is considered inadequate to reflect the organization's overall performance. The lack of formal benchmarks in finance, customer service, human resource development, or internal process innovation makes it difficult for the company to conduct objective and strategic performance evaluations. These limitations also impact the decision-making process, which is often based solely on intuition or is reactive to field conditions.

Based on internal data for 2023–2024, total coal production was recorded at 4.1 million tons. However, the deviation from the operational cost target reached 18%, indicating inefficiencies in budget and resource management. Furthermore, the annual customer satisfaction survey only scored 72 out of 100, indicating gaps in service, delivery, and product quality consistency. Field observations also revealed disparities between work units in understanding their contribution to the overall success of the organization. The absence of a structured and directed measurement system led to each unit working based on its own orientation, without recognizing the connection to the organization's strategic objectives. The lack of integration between individual targets and the organizational vision creates conditions prone to conflicts of interest, inconsistent performance reporting, and weak accountability. In the long term, this situation will not only result in decreased productivity but also threaten the company's competitiveness in the face of uncertain global energy markets.

To address these issues, organizations require a comprehensive, strategic performance measurement system that is integrated with the vision and direction of business growth. One approach that has proven effective is the Balanced Scorecard (BSC). This approach was developed by Kaplan and Norton as a method for measuring organizational performance not only from a financial perspective, but also from a customer perspective, internal business processes, and learning and growth. By using the BSC, companies can balance short-term financial indicators with non-financial factors that drive long-term success. In implementing the

Balanced Scorecard, Key Performance Indicators (KPIs) are a crucial element as a concrete representation of the strategic goals to be achieved. KPIs enable companies to measure the extent to which each process, work unit, or individual contributes to the success of the company's strategy. Selecting and designing appropriate KPIs will provide clarity of direction, increase accountability, and support an objective, data-driven evaluation process.

The problem formulation in this study is designed to answer three main questions, namely: (1) how to design a Balanced Scorecard-based performance measurement system that suits the characteristics of organizations in the mining industry? (2) what are the relevant key performance indicators for each BSC perspective? and (3) how can KPI visualization be designed to support effective decision-making? These three questions form the basis for the entire performance management system design process that will be discussed in this study. The purpose of this study is to design a Balanced Scorecard-based Key Performance Indicator (KPI) system that is aligned with the organization's vision, mission, and strategy. This study also aims to identify relevant and measurable KPIs for each perspective in the BSC. By designing structured KPIs, companies are expected to improve their strategic management processes, increase operational efficiency, and strengthen accountability between work units. This study is expected to be a real contribution to the development of performance measurement systems in the mining sector, especially in Indonesia, while expanding the use of the Balanced Scorecard approach in the context of heavy and capital-intensive industries.

METHOD

This research method explains the detailed research framework flow and its explanation. This section explains the methods used for the research to achieve the objectives of the problem formulation. This method covers the discussion of the research object and subject, research scope, population and sample, variables and operational definitions, research instruments, data collection, data analysis, and research procedures.

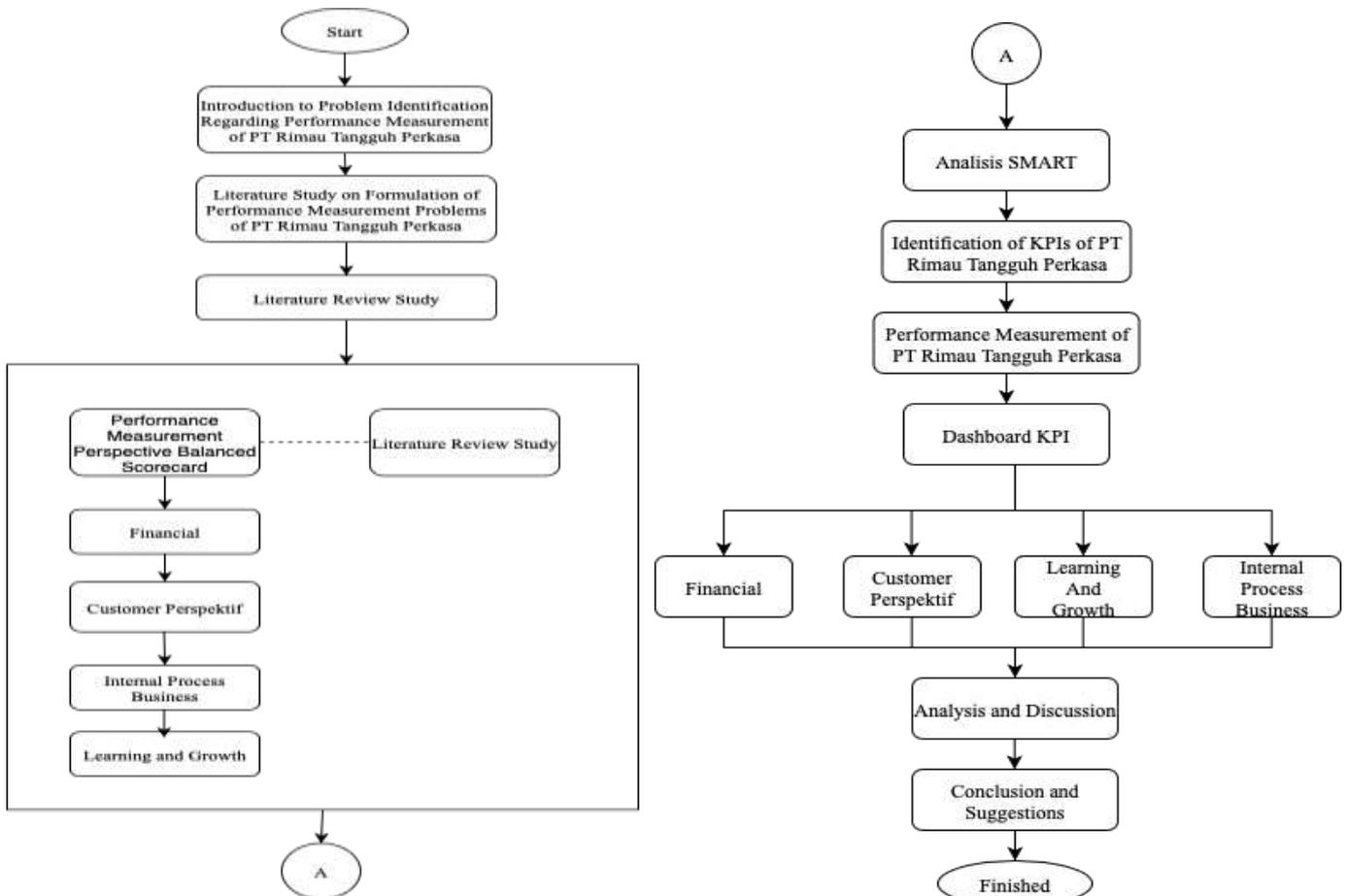


Figure 1. Research Flow

The following are the research steps which can be seen in the flow diagram with the following details.

At this stage, the data collected includes:

- PT. Rimau Tangguh Perkasa Sales Data: This data provides an overview of the company's sales performance. This information serves as the primary basis for analyzing the company's current sales performance.
- Operational and Strategic Data: This data includes information on the company's ongoing operational activities and strategies. With operational and strategic data, research can identify any gaps between the designed strategy and its implementation on the ground.
- Literature on the Balanced Scorecard and KPIs: Literature discussing the Balanced Scorecard (BSC) and Key Performance Indicators (KPIs) is crucial as a theoretical reference. The Balanced Scorecard is a commonly used method for measuring company performance across four key perspectives: financial, customer, internal business processes, and learning and growth. This literature also provides information on how to develop effective KPIs to monitor and improve company performance.
- At the process stage, several steps are taken to implement the Balanced Scorecard and KPI in the context of, Analysis of Problems related to Company Performance Measurement, Implementation of the Four BSC Perspectives, Compiling a
- Determining KPIs for Each BSC Perspective, Identifying Factors Affecting Performance Based on SMART Analysis.
- The output of this research is expected to include, Recommendations and Performance Improvement Strategies Based on Balanced Scorecard and SMART Analysis, Visual KPI Dashboard for Performance Monitoring.

1. Balance Scorecard

The Balanced Scorecard is an instrumentation system for business actors to control the company's organization in order to translate the company's vision and mission into a strategic measurement framework against a set of parameters (Putra & Adhitya Putra, 2019). Each comprehensive perspective, so that it can improve the company's work capabilities to create sustainable competitive advantage. In today's competitive conditions, the Balanced Scorecard contains four perspectives, namely the Balanced Scorecard Perspective, Financial Perspective, Customer Perspective, Internal Business Process

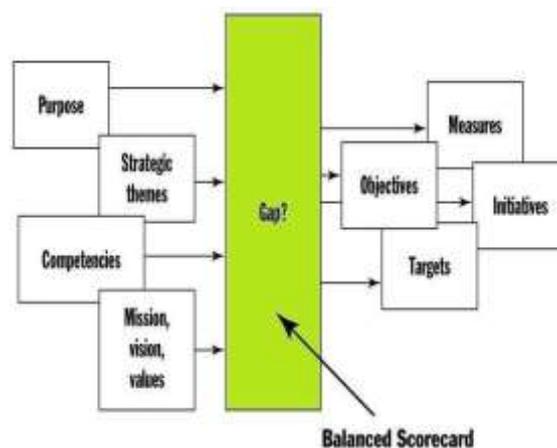


Figure 2 gap balance scorecard

Perspective and Growth and Development Perspective.

The balanced scorecard consists of two words: "Balanced" and "scorecard." "Scorecard" is defined as a scorecard used to plan future scores. "Balanced" means balanced, measuring executive performance in a balanced manner across various dimensions: short-term and long-term financial and non-financial, internal and external. The Balanced Scorecard typically refers to gap analysis, which compares strategic targets with actual results. This allows organizations to identify gaps or weaknesses and then determine steps to achieve their goals. Therefore, gaps in the balanced scorecard are a crucial tool for ensuring that established strategies are effectively implemented and produce sustainable performance.

2. Key Performance Indicator (KPI)

A Key Performance Indicator (KPI) is a variable used to quantitatively express the effectiveness and efficiency of a process or operation based on organizational targets and objectives. It serves as a tool for assessing the success of achieving organizational goals, which are manifested in specific metrics. KPIs are quantitative indicators used to assess the level of success of an activity or process in achieving strategic objectives. KPIs must meet the SMART criteria: Specific, Measurable, Achievable, Relevant, and Time-bound. Effective KPIs serve as management control tools that drive improvement and data-driven decision-making. KPI values can be obtained through various approaches, some of which are qualitative, which subjectively measure performance based on the experience or abilities of an expert or individual. The next is qualitative, which relies on structured and systematic calculations (Arlina et al., 2019). In this study, the calculations will be adjusted to standard performance, as shown in the following table

Table 1 Performance Standards

Indicator system	Performance indicators
<40	<i>Poor</i>
40-50	<i>Marginal</i>
50-70	<i>Average</i>
70-90	<i>Good</i>
>90	<i>Excellent</i>

(Source: performance measurement and improvement trienekens)

Based on the Performance Indicator Standards table, it can be explained that performance assessments are divided into five main categories based on system indicator values. If the score obtained is less than 40, then the performance falls into the Poor category, indicating very low performance and requires significant improvement. If the score is in the 40–50 range, the performance is categorized as Marginal, meaning performance is still below standard and only slightly better than the Poor category. Furthermore, for a score of 50–70, performance falls into the Average category, indicating that performance has sufficiently met minimum standards, although there is still room for improvement. In the 70–90 range, performance is considered Good, meaning the system or individual is performing well as expected. Finally, if the score is above 90, performance falls into the Excellent category, reflecting an optimal level of performance, exceeding standards, and demonstrating very satisfactory achievement. With this standard, performance can be measured more objectively and its quality level can be easily mapped.

3. SMART

SMART refers to an acronym developed around key characteristics related to important objectives, thus being very helpful in writing objectives that can be used as capital in evaluating the quality of proposed and implemented programs. According to Iverson (2003: 12), SMART can be seen as a program vision that stands for specific, measurable, achievable, realistic, and time-bound. Key Performance Indicators are indicators that show the value or quality of an industrial process, business, or organizational performance (Saraswati et al., 2017).

1. Specific, Specific means that the goal is concrete, detailed, focused and well-defined. The program states specific results, or precise goals. Measurable,
2. Measurable means being able to measure whether the goal has been achieved or not (numbers, quantities, and comparisons). The goal being measurable means that the measurement source has been identified and can be used to carry out progress actions towards the goal..
3. A Achievable, Achievable concerns the question of whether the goals set can be met and achieved, the goals must be achievable. If the goals are too far in the future, care must be taken to maintain motivation to achieve them.
4. Realistic, Realistic means having the resources to complete it. Achieving objectives requires resources such as: staffing, expertise, money, equipment, etc. Most goals are achievable but may require a change in priorities to make them happen.
5. Time bound means setting a time limit for achieving a goal. The time limit needs to be both achievable and realistic.

4. Data Processing Methods

The data processing method in this study was carried out through systematic stages to ensure that the final result is a Key Performance Indicator (KPI) design based on the Balanced Scorecard (BSC). For quantitative data from questionnaires, interviews, and observations with experts, the researcher used a weighted scoring technique based on two main criteria: importance and measurability. After that, a cut-off point method was used to determine which indicators passed the selection. Meanwhile, qualitative data from interviews and observations were analyzed using thematic analysis, which grouped statements and information into themes that correspond to the BSC dimensions.

RESULT AND ANALYSIS

1. Vision and mission of the organization.

The organization's vision is to continuously strive to become a leading and trusted coal mining company in Indonesia. While the organization's mission is to provide and give equal opportunities for everyone to develop their potential in the spirit of togetherness, optimize the best business added value for customers while maintaining environmental sustainability, implement good corporate governance in all business lines, carry out corporate social responsibility consistently.

2. Organizational Objectives

Developing the coal mining sector and expanding the business into shipping, trading, and energy (including small-scale coal-fired power plants) so that it can contribute to increasing operational efficiency, paying attention to environmental and social aspects.

3. SMART Analysis

SMART is an acronym used as a guide in setting effective and measurable goals. This method helps ensure that the goals created can be achieved clearly and systematically. The following is a complete explanation of each element in SMART. In an effort to achieve the strategic goals of mining companies, the SMART approach (Specific, Measurable, Achievable, Relevant, Time-bound) is used, as shown in Table 4.8, to ensure that each formulated strategy is focused, measurable, realistic, relevant to the company's vision, and has a clear deadline. Specifically, the company targets improving mining operational efficiency to achieve industry-leading standards in accordance with SOPs. Furthermore, the company is committed to building harmonious working relationships with the surrounding community and creating decent jobs for local and regional workers as part of its corporate social responsibility. From a measurable perspective, the company targets an increase in mining production from 197,000 tons to 645,000 tons per year. Furthermore, local workforce satisfaction is measured through a survey, with a minimum target of 80%. The implementation of training programs, increased productivity, stakeholder support, and strengthening of the customer relationship management system are key indicators for measuring the strategy's achievement. The success of this strategy is marked by a reduction in the number of damaged heavy equipment by at least 15%, as well as an increase in the effectiveness of training programs and communication with the surrounding community. In terms of achievability, the strategy adopted takes into account the company's current conditions and resources, including technology, finance, and human resources. Training for the local workforce and community support are crucial factors in supporting the strategy's success.

The strategy is also designed to be relevant to the company's vision and mission, namely to become a leading mining company in Indonesia. Therefore, increasing production and operational efficiency, as well as local community empowerment programs are positioned as important steps in line with the company's long-term goals, including achieving ISO 14001 environmental certification. Meanwhile, for timebound, the success of achieving this target is also relevant to the company's revenue growth strategy and is evaluated on an annual basis (time-bound).

4. Balanced scorecard

• *financial perspective*

The following is the financial perspective of the Balanced Scorecard at PT Rimau Tangguh Perkasa Central Kalimantan for 2023 and 2024. In the Balanced Scorecard approach, the financial perspective focuses on measuring organizational performance in terms of profits and the economic value generated.



Table 2. Financial Persepective

Performance indicators	Unit	Weight (%)	Target		Realization		Achievement		value	
			2023	2024	2023	2024	2023	2024	2023	2024
Increase company revenue	Million (Rp)	10	180.000	811.875	30.168	189.724	16,76	23,37%	1,68	2,34
Increase company profits	Million (Rp)	10	5.543	441.369	5.831	83.544	106.19	18.93%	10.52	1.89
Reduce company operational costs	Million (Rp)	10	169.056	305.555	23.423	91.002	13,86	29,78	1.39	2.98

The financial indicators in Table 4.10 reflect a balanced and proportional approach to three key financial aspects: increasing company revenue, increasing company profits, and reducing annual operating costs. The primary reason for giving equal weighting is because these three indicators play complementary and equally important roles in assessing the company's overall financial performance. A 10% weighting is assigned to each financial performance indicator equally because all three revenue, profit, and cost efficiency play an equally important role in assessing the company's overall financial performance. Revenue indicates the ability to generate income, profit reflects profitability, and cost reduction indicates operational efficiency. This balanced weighting reflects management's holistic and fair approach to the three key aspects of company finance. Data processing to determine achievement is done by dividing the actual results by the target and then multiplying by 100. The final score is obtained by multiplying the weight by the achievement and then dividing by 100. One example is the Customer Satisfaction Index (CSI) achievement.

$$\begin{aligned} \text{Achievement} &= (\text{Realization} / \text{Target}) \times 100 \\ &= (30.168 / 180.00) \times 100 \\ &= 16.76 \end{aligned}$$

$$\begin{aligned} \text{Value} &= (\text{Weight} \times \text{Achievement}) / 100 \\ &= (10 \times 16.76) / 100 \\ &= 1.68 \end{aligned}$$

Achievement shows how much realization is compared to the target in the form of realization, while the value is obtained from the achievement multiplied by the weight, then divided by 100 to make the scale in accordance with the assessment system. This calculation is done for each performance indicator, then the results are added up to get the total value, for the next process which is the same and applies to all indicators contained in PT Rimau Tangguh Perkasa.

- **Customer persepective**

The following is a customer perspective from the Balanced Scorecard at PT Rimau Tangguh Perkasa Central Kalimantan for 2023 and 2024. In the Balanced Scorecard approach, the customer perspective aims to assess customer satisfaction, loyalty and clearer offerings of the company's products or services at PT Rimau Tangguh Perkasa.



Table 3. Customer Persepective

Performance indicators	unit	Weight (%)	Target		Realization		achievement		value	
			2023	2024	2023	2024	2023	2024	2023	2024
Improve clearer offers	%	10	100%	100%	65.38 %	100%	65.38	100%	6.54	10
Increase the number of royal customers	people	10	1 Buyer (PLTU)	2 Buyer (PLTU)	1 Buyer (PLTU)	2 Buyer (PLTU)	100%	100%	10	10
Reduce customer complaints	%	5	5%	5	0 (no compla ints)	0 (no complai nts)	100%	100%	5	5

The weighting of the customer perspective performance indicators in Table 4.11 is based on the importance of each indicator to the success of the company's long-term relationships with customers. The indicators "improving a clearer offering" and "increasing the number of loyal customers" are each given a weighting of 10%, as both directly impact satisfaction, loyalty, and potential business growth. A clear offering demonstrates the company's commitment to transparency and good communication, while the number of loyal customers reflects its success in building stable, long-term relationships. Meanwhile, the indicator "reducing customer complaints" is given a lower weighting, at 5%, due to its more reactive nature than the other two indicators. While important for maintaining customer image and satisfaction, this indicator is considered a risk control measure, not a primary driver of customer growth. Therefore, its lower weighting reflects its complementary role within the overall customer service strategy. These overall weightings indicate that the company emphasizes the importance of good communication and long-term relationships with customers as key to business sustainability.

- **Internal business process perspective**

The following is an internal business process perspective from the Balanced Scorecard at PT Rimau Tangguh Perkasa Central Kalimantan for 2023 and 2024. In the Balanced Scorecard approach, the internal business process perspective focuses on improving the quality of resources, simplifying operational processes and improving marketing more efficiently which can support the achievement of value for performance at PT Rimau Tangguh Perkasa.

Table 4. Internal Business Process Perspective

Performance indicators	unit	Weight (%)	Target		Realization		achievement		value	
			2023	2024	2023	2024	2023	2024	2023	2024
Increase the number of effective and efficient marketing	%	10	100%	100%	65% (Domestic PLN)	65% (Domestic PLN)	65%	100%	6.5	10
Improving the quality of resources and technology	people	5	4	4	2	4	50%	100%	2.5	5
Improve the monitoring system in business processes	%	5	6 SNI standard	6 SNI standard	6 SNI standard	6 SNI standard	100%	100%	5	5



The weighting of performance indicators within the internal business process perspective in Table 4.12 reflects the company's strategic priorities in ensuring operational sustainability and efficiency. Indicator weights within the internal business process perspective are assigned based on their priority level relative to achieving the company's operational objectives. The effective marketing indicator receives the highest weighting (10%) because it directly impacts market expansion and revenue growth. The human resources quality, technology, and monitoring system indicators each receive a weighting of 5%, as they support operational efficiency and sustainability. This weighting reflects the company's primary focus on market growth while maintaining internal quality and compliance with standards.

• **Growth and learning perspective**

The following is a growth and learning perspective from the Balanced Scorecard at PT Rimau Tangguh Perkasa Central Kalimantan for 2023 and 2024. In the Balanced Scorecard approach, the growth and learning perspective aims to develop HR capacity, performance management and organizational culture so that it can support long-term growth and innovation at PT Rimau Tangguh Perkasa.

Table 5. Growth and Learning Perspective

Performance indicators	Unit	Weight (%)	Target		Realization		Achievement		Value	
			2023	2024	2023	2024	2023	2024	2023	2024
Improve efficiency, fairness and effectiveness	%	10	100%	100%	90%	95%	90%	95%	9	9.5
Improve training for employees	activity	10	4	4	2	4	50%	100%	5	10
improve the performance management system	%	5	Implementation of 6 standards	Implementation of 6 SNI standards	6 Standards applied	6 Standards applied	100%	100%	5	5

The weighting of performance indicators within the internal business process perspective in Table 4.13 is based on each indicator's role in enhancing the company's long-term capabilities. Indicators within the growth and learning perspective are weighted based on their contribution to enhancing the company's capabilities. Efficiency and effectiveness, as well as employee training, are given the highest weighting (10% each) because they directly impact operational performance and human resource development. Meanwhile, the performance management system receives a lower weighting (5%) because its function is more as a supporting evaluation tool, rather than a primary driver. This weighting emphasizes the importance of efficiency and human resources as the company's top priorities.

5. Key performance indicator design results

The results of the key performance indicator questionnaire serve as a validation tool and refinement of the KPI design to ensure it aligns with organizational needs. Its function is to test the feasibility, relevance, and acceptability of KPIs so they are ready to be implemented as a performance measurement tool. The data processing methods used in this study were the cut-off point and balanced scorecard methods. The first step was to calculate the average score for each question in the table below.



Table 6. Key Performance Indicator Design Results

Persepektive	KPI	Measure	Respondents					Average
			1	2	3	4	5	
Financial	Increase company revenue	Percentage of revenue target achievement (Rp)	3	3	3	3	3	1,5
	Increase company profits	Percentage of net profit target achievement	3	2	3	2	3	1,3
	Reduce company operational costs	Percentage reduction in annual operating costs	2	2	3	2	2	1.1
Customer	Improve clearer offers	Percentage of sales realization from target (volume/tonnage)	3	3	2	3	3	1,4
	Increase the number of royal customers	Number of active fixed customers (PLN, export, etc.)	3	3	3	3	3	1,5
	Reduce customer complaints	Percentage of complaint reduction / number of resolved complaints	2	3	3	3	2	1.3
Internal Business Process	Increase the number of effective and efficient marketing	Percentage of marketing distribution realization according to plan	3	3	3	3	3	1,5
	Improving the quality of resources and technology	Number of participants in technology/work competency training	3	2	3	3	3	1,4
	Improve the monitoring system process in business processes	Number of SNI/SOP standards implemented and complied with	3	3	3	3	3	1,5
Learning and Growth	Improve efficiency, fairness and effectiveness	Percentage of work process efficiency (time, cost, quality)	3	3	3	3	3	1,5
	Improve training for employees	Number of training programs implemented as planned	2	2	3	2	3	1.2
	improve the performance management system	Number of KPI management monitored by the system (manual/IT)	3	3	3	2	2	1.3

Then, we perform calculations using the cut-off point formula to determine the level of need for a criterion. We use the following formula:

Calculation:

$$Cut\ Off\ Point = \frac{Max\ Score + Min\ Score}{2}$$

$$Cut\ Off\ Point = \frac{1,5 + 1,1}{2} = 1,3$$

Based on the Cut-Off Point calculation of 1.3, average values ≤ 1.3 will be removed or eliminated from the KPI indicator (shaded in red). The Cut-Off Point calculation then yields the selected KPI results, as shown in the table below. The Cut-Off Point calculation is the value limit or dividing point used to identify categories or decisions in a measurement or analysis. Its function is to assist decision-making in research, evaluation, and performance management. The selected KPI results are shown in the table below.



Table 7. Cut Off Point of KPI Results

Perspective	Key Performance Indicator
Financial	Increase company revenue
	Increase company profits
Customer	Improve clearer offers
	Increase the number of royal customers
	Reduce customer complaints
Internal Business Process	Increase the number of effective and efficient marketing
	Improving the quality of resources and technology
	Improve the monitoring system process in business processes
Learning and Growth	Improve efficiency, fairness and effectiveness
	improve the performance management system

Table 7 shows the 12 KPIs proposed to respondents. The results indicate that two KPIs with an average value of ≤ 1.3 were eliminated, leaving 10 KPIs selected. This allows the company to focus its strategy and resources on the most relevant KPIs for overall improvement.

6. **Balanced Scorecard Framework**

The Balanced Scorecard framework is a strategic performance management system used to translate an organization's vision, mission, and strategy into a series of strategic objectives, key performance indicators, targets, and initiatives across four perspectives: finance, customers, internal business processes, growth, and learning. The Balanced Scorecard framework is a strategic management tool for measuring and managing an organization's overall performance, encompassing its vision, mission, and strategy. This can be seen in the figure below.

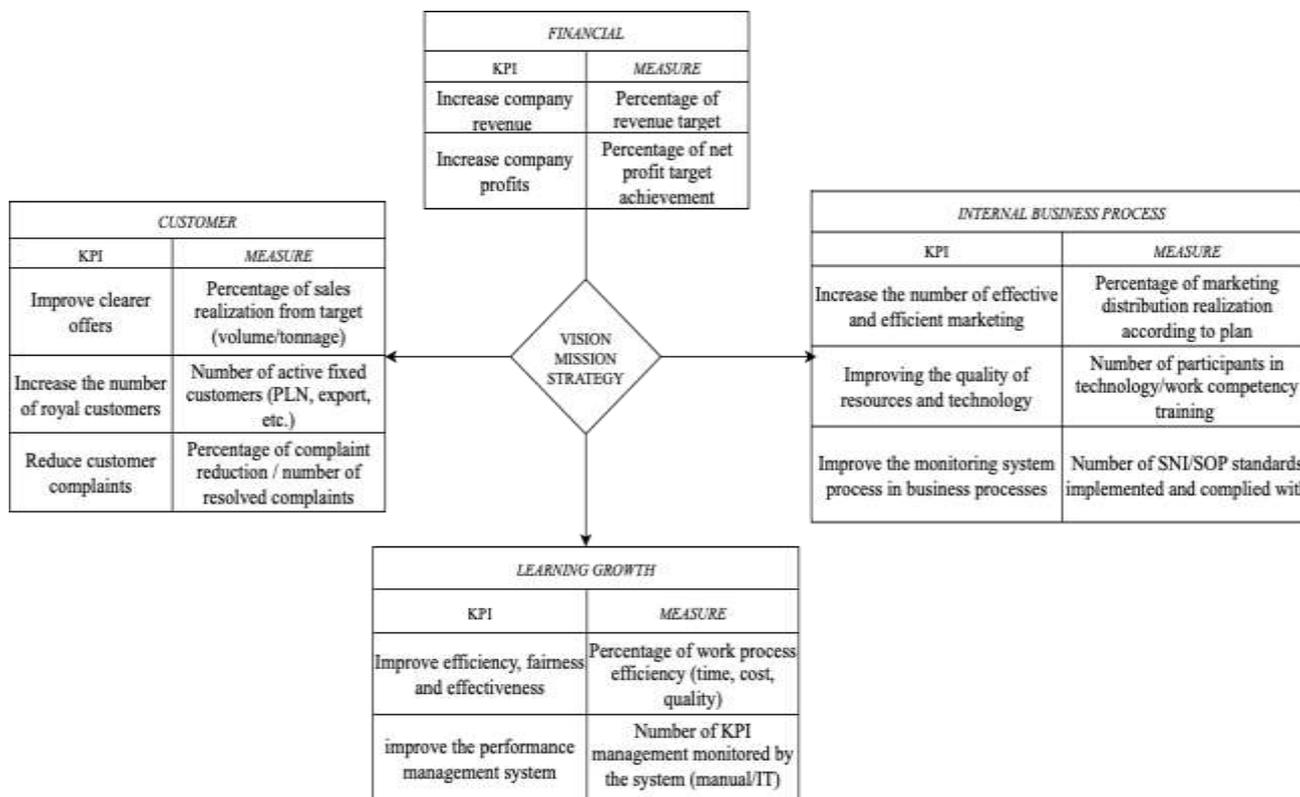


Figure 3. Balanced Scorecard Framework



Each box in the Balanced Scorecard framework has associated objectives, metrics, and targets. These boxes are connected by arrows, illustrating a cause and effect relationship between the objectives and metrics across the four perspectives. Achieving targets in one perspective should contribute to desired improvements in the next perspective. The image above represents the Balanced Scorecard (BSC) framework, used as a strategic management tool to translate an organization's vision and mission into measurable operational objectives. Developed by Kaplan and Norton, the Balanced Scorecard divides an organization's strategy into four main perspectives: financial, customer, internal business processes, and learning and growth. Each perspective has key performance indicators (KPIs) and success measures that serve as evaluation tools for strategy achievement.

At the center of the diagram are the organization's vision, mission, and strategy, which serve as the center of policy direction. All indicators within each perspective must support the achievement of these strategies. The first perspective is financial, which aims to measure the final results of all the organization's strategies. Performance indicators in this section include increasing the company's revenue and profits. The metrics used are the percentage of revenue and net profit targets achieved. This perspective serves as a benchmark for the financial success of overall strategic efforts.

The second perspective is customer, which focuses on customer satisfaction and loyalty as key to business sustainability. KPIs used include improving the clarity of offerings, increasing the number of repeat customers, and reducing customer complaints. Achievement measures in this perspective include the percentage of sales achieved against targets, the number of repeat active customers, and the level of customer complaint resolution. This emphasizes the importance of building strong relationships with customers. Next, the internal business process perspective focuses on improving and efficiencies in internal processes that support customer service and the achievement of financial targets. Key performance indicators (KPIs) in this perspective include increasing marketing effectiveness, improving the quality of human resources and technology, and enhancing the business process monitoring system. Measures include the percentage of marketing distribution achieved according to plan, the number of job training participants, and the number of consistently implemented operational standards (SNI/SOP). This perspective ensures that internal processes are running efficiently and effectively. The final perspective is learning and growth, which is the long-term foundation for the success of an organization's strategy. The primary focus of this perspective is on developing human resources and management systems that support strategy achievement. KPIs in this section include increasing efficiency, fairness, and effectiveness of work, as well as improving the performance management system. The metrics used are the percentage of work process efficiency and the number of KPIs systematically monitored, both manually and through information technology. This perspective forms the basis for innovation and continuous improvement within the organization.

Overall, the Balanced Scorecard framework in the figure demonstrates a causal relationship between perspectives: increased learning and growth will improve internal processes, which in turn will increase customer satisfaction, and ultimately, will impact the company's financial performance. In other words, a successful strategy is one that maintains a balance between internal development and external results in a measurable and sustainable manner.

7. Strategy Map

The balanced scorecard method consists of four perspectives: financial, customer, internal business process, and learning and growth. Through a strategy map, a company's vision and mission can be translated into more operational and interconnected goals, making them easier to understand for all parties within the organization. This map also helps clarify the path to achieving goals, for example, how investments in human resource development will improve the quality of internal processes, subsequently impact customer satisfaction, and ultimately deliver better financial results. Thus, a strategy map serves as a communication tool that aligns the organization's direction, serves as a guide for setting priorities, and serves as a basis for designing key performance indicators (KPIs). Its formulation is divided into several interrelated strategies, as explained and illustrated in the image below.

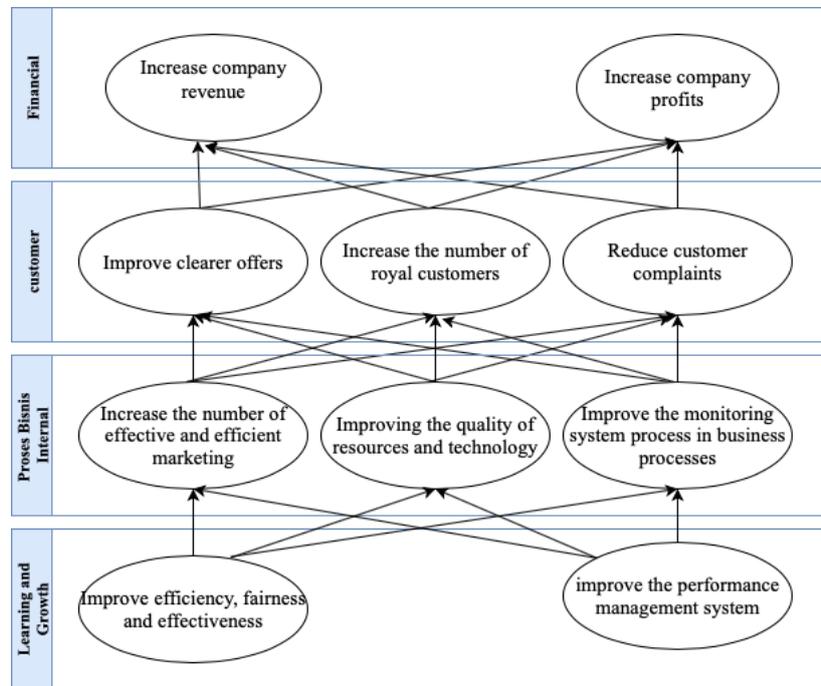


Figure 4. Strategy map

The image above is a strategy map from the Balanced Scorecard (BSC) framework, which illustrates the cause-and-effect relationships between strategic elements across four key perspectives: Financial, Customer, Internal Business Process, and Learning and Growth. This strategy map serves to demonstrate how an organization's strategy is implemented in a phased and integrated manner, from the foundation of human resource development to the achievement of financial goals. At the bottom layer is the Learning and Growth perspective, which serves as the foundation of the overall strategy. The image shows two primary focuses: "Improve efficiency, fairness, and effectiveness" and "Improve the performance management system." These two objectives illustrate the importance of improving human resource quality, fairness in work, and the performance management system for the organization to grow sustainably. Without competency development and supporting systems, an organization will not be able to optimally implement internal processes. This learning development impacts the Internal Business Process perspective. The three strategic objectives are "Increase the number of effective and efficient marketing personnel," "Improving the quality of resources and technology," and "Improve the process monitoring system in business processes." All three aim to increase operational efficiency, accuracy, and oversight in business process implementation. The strategy map demonstrates that the development of human resources and systems at the bottom directly supports improvements in these internal business processes.

Furthermore, improved internal processes will lead to increased customer value, reflected in the Customer perspective. Strategic objectives in this perspective include "Improve clearer offers," "Increase the number of loyal customers," and "Reduce customer complaints." All three demonstrate the organization's focus on improving service quality and customer relationships. The strategy map demonstrates a clear line connecting business process improvements directly to customer target achievement, as efficient internal processes and improved technology enable clearer, faster, and more satisfying service. Ultimately, all efforts from the three previous perspectives will lead to achieving the Financial perspective, namely "Increase company revenue" and "Increase company profits." The strategy map shows that increasing the number of loyal customers, reducing complaints, and improving the clarity of offerings will directly impact revenue growth. Meanwhile, operational efficiency and business process improvements will contribute to cost reduction and increased company profitability.

Thus, this strategy map comprehensively demonstrates the logical flow of an organization's strategy: starting with strengthening the internal foundation through learning and growth, followed by improving internal business processes,



then generating added value for customers, which ultimately delivers the expected financial results. This diagram helps all parties in the organization understand how their respective roles contribute to achieving the company's overall strategy.

CONCLUSION

The results of the performance measurement system design at PT Rimau Tangguh Perkasa demonstrate that the comprehensive implementation of the Balanced Scorecard (BSC) method has provided a systematic and measurable strategic framework for managing organizational performance. Previously, the company only assessed performance based on monthly coal production, without considering other non-financial aspects such as customer satisfaction, process efficiency, and human resource competency. Through BSC, companies can now measure performance through four main perspectives, namely:

1. The results of designing a performance measurement system using the Balanced Scorecard (BSC) approach at PT Rimau Tangguh Perkasa produced a systematic and comprehensive framework for measuring organizational performance from four perspectives: financial, customer, internal business processes, and learning and growth. In this study, 12 KPIs were designed, and through an evaluation process using the cut-off point method, 10 main KPIs were selected as key indicators. This KPI design was prepared based on the SMART principle (Specific, Measurable, Achievable, Relevant, Time-bound) to ensure the relevance and measurability of performance. This measurement system has successfully identified important indicators such as the achievement of revenue and net profit targets, marketing effectiveness, customer loyalty, business process monitoring systems, and work efficiency and human resource management. All of these indicators are aligned with the company's vision to become a superior and trusted coal mining company.
2. The Balanced Scorecard in this study serves not only as a performance measurement tool but also as a strategic tool for designing long-term solutions for the company. The strategy developed involves integrating production capacity improvement programs, developing a customer relationship management (CRM) system, digitizing the supervisory process, improving employee competency through training, and implementing a KPI-based monitoring system. This strategy is visualized in the form of a strategy map that shows the cause-and-effect relationship between the BSC perspectives. The Learning and Growth strategy underpins increased efficiency and HR training, which then impacts the quality of internal business processes, such as marketing and supervision. These good processes will increase customer satisfaction and loyalty, which ultimately contributes to increased company revenue and profits (financial perspective). Thus, the Balanced Scorecard has succeeded in providing a clear, measurable, and integrated strategic direction in order to improve and develop the management system at PT Rimau Tangguh Perkasa.

SUGGESTION

Based on the research results, there are several suggestions that can be given for the sustainability of the Balanced Scorecard implementation at PT Rimau Tangguh Perkasa as follows:

1. **Implementation of a Digital-Based System**
Companies are advised to immediately develop and implement an information technology-based KPI monitoring system (digital dashboard) so that performance monitoring and evaluation can be carried out in real time, quickly, and accurately.
2. **Periodic Evaluation of KPIs and Strategies**
Designed KPIs need to be evaluated periodically (at least every semester or year) to ensure that the indicators remain relevant to dynamic business conditions and changes in the company's strategic direction.
3. **Involvement of All Departments**
For the Balanced Scorecard implementation to be effective, it is necessary to conduct outreach and training for all relevant departments, as well as ensure the active involvement of management and operational staff in the data collection and performance evaluation process.
4. **Improving Human Resource Competencies**
The focus on the Learning and Growth perspective should not be limited to technical training, but should also include leadership development, project management, and the use of modern information systems to support work effectiveness.



5. Integration with the Company Work Plan (RKAP)
Performance indicators and strategies designed through the BSC should be integrated directly into the annual Company Work Plan and Budget (RKAP) to align with the company's policy direction.

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