

Research Article

Analysis of Employee Performance Measurement Using the Balanced Scorecard to Determine Key Performance Indicators at PT. Z

Sulkhan, Alek

Universitas Buddhi Dharma Tangerang, Indonesia
Corresponding Author, Email: sulkhan.sulkhan@ubd.ac.id

Abstract

Employee performance assessment is an important element in supporting the achievement of a company's strategic goals. This study aims to analyze employee performance measurement using the Balanced Scorecard (BSC) method as a basis for determining Key Performance Indicators (KPIs) at PT. Z. The BSC approach involves four main perspectives: financial, customer, internal business processes, and learning and growth. The research method used is quantitative descriptive with a survey technique using a questionnaire for 40 employees and 30 respondents for customers. The results show that BSC-based performance measurement provides a comprehensive picture that can help management in setting more focused, measurable, and strategic KPIs. The implication of this study is the need for companies to integrate the BSC into their performance management systems to improve overall organizational effectiveness.

Keywords: Balanced Scorecard, Key Performance Indicator, Employee Performance, Performance Management, PT. Z.

INTRODUCTION

In today's increasingly competitive era of global business, companies are required to continually improve operational efficiency and effectiveness in order to achieve sustainable competitive advantage.



One of the main determinants of organizational success is employee performance. The optimal performance of each individual within the organization serves as the foundation for achieving the company's strategic objectives. Employee performance refers to the outcomes achieved by workers when carrying out tasks in accordance with certain standards relevant to their respective positions (Zaharuddin et al., 2024). Therefore, companies must have a performance measurement system that is reliable, objective, and comprehensive.

To date, many organizations still rely solely on traditional financial metrics such as profit, sales, and costs as the primary benchmarks for evaluating performance. However, this approach is considered inadequate for reflecting the organization's overall performance, especially in the context of rapid change and high innovation demands. Financial measures tend to be retrospective and fail to capture essential non-financial dimensions such as customer satisfaction, process efficiency, and human resource development. This is where the importance of a more holistic strategic management approach comes in—one example being the implementation of the Balanced Scorecard (BSC).

The BSC, introduced by Kaplan and Norton in the early 1990s, is a performance measurement framework that focuses not only on financial indicators but also on non-financial indicators through four main perspectives: (1) financial perspective, (2) customer perspective, (3) internal business process perspective, and (4) learning and growth perspective. This approach helps organizations link long-term strategies with day-to-day operational actions, while fostering continuous improvement and competitive advantage.

Moreover, the application of the BSC can also serve as a foundation for developing Key Performance Indicators (KPIs)—quantitative indicators used to measure the achievement of strategic objectives in a more specific and measurable way. By formulating KPIs based on the BSC perspectives, companies can more easily monitor progress, evaluate performance, and establish appropriate policies. Accurate and relevant KPI determination will greatly influence the overall effectiveness of the performance management system.

PT. Z, a manufacturing company currently undergoing a transformation toward a modern management system, is facing challenges in formulating performance indicators that accurately represent employees' real contributions to the company's

strategy. The existing performance assessment system, which remains general and unintegrated, has led to a lack of clear direction for employees in achieving the company's targets (Hersusetiyati et al., 2024).

This study aims to analyze PT. Z's employee performance based on the four BSC perspectives, identify key indicators that can be used as KPIs, and provide recommendations for a systematic and integrated performance measurement strategy aligned with organizational needs. Thus, the results of this study are expected to make a tangible contribution to improving the quality of PT. Z's performance management system.

LITERATURE REVIEW

According to Kaplan (2009), the Balanced Scorecard (BSC) is a performance management system that combines both financial and non-financial measures. The four main perspectives of the BSC (Afshar & Hussain Shah, 2025) are:

1. Financial: profitability, ROI, and cost efficiency.
2. Customer: customer satisfaction, loyalty, and acquisition.
3. Internal Business Processes: process efficiency, innovation, and product quality.
4. Learning and Growth: employee training, job satisfaction, and technological capability.

Key Performance Indicators (KPIs) are quantitative metrics used to evaluate the success of an individual, team, or organization in achieving targets. The functions of this system are to facilitate employee performance assessment, save time in analyzing performance evaluation results, and simplify the employee evaluation process (Handayani & Supriyono, 2025). KPIs should be specific, measurable, relevant, achievable, and time-bound (SMART).

The relationship between BSC and KPIs is that the BSC provides the conceptual framework, while KPIs are the operational form of performance indicators derived from the perspectives in the BSC. Implementing the BSC in a company requires a systematic and comprehensive approach to achieve success (Subhan, 2024). KPIs are measurable performance indicators that effectively represent strategic objectives, starting from strategic goals in the learning and growth perspective and progressing toward strategic goals in the financial perspective (Hadidjija, 2025).

METHOD

This research is descriptive quantitative in nature. The population consists of all permanent employees at PT. Z. A total of 40 respondents from various divisions were selected using purposive sampling. Data collection techniques included: a Likert scale-based questionnaire (1–5) to measure perceptions of each BSC indicator, and documentation studies from the company's performance reports.

Data analysis techniques involved calculating the average score for each BSC indicator, conducting quadrant analysis for KPI priority mapping, and validating results through data triangulation from documentation. The measurement scale and research instruments were based on each employee's opinions and perceptions, using a 5-point interval Likert scale.

Thus, PT. Z's performance was obtained as follows:

1. The questionnaire measurement scale on customer satisfaction, internal business, and growth & development, as shown in Table 1. below:

Table 1. Questionnaire Measurement Scale

Scale	Category
5	Very good / Strongly agree
4 – 4,9	Good / Agree
3 – 3,9	Fair / Neutral
2 – 2,9	Not good / Disagree
1 – 1,9	Very bad / Strongly disagree

Source: Processing from various sources

2. The financial performance measurement scale is shown in the table below:

Table 2. Financial Measurement Scale

Scale	Category	Likert Scale
1. Efficiency		
< 100%	Very efficient	5
100% - 110%	Efficient	4
110% - 120%	Quite efficient	3
120% - 130%	Inefficient	2
> 130%	Very inefficient	1

2. Effectiveness		
> 95%	Very effective	5
80% - 95%	Effective	4
65% - 80%	Somewhat effective	3
50% - 65%	Ineffective	2
> 50%	Very ineffective	1
3. Economical		
< 80%	Very economical	5
80% - 85%	Economical	4
85% - 90%	Quite economical	3
90% - 95%	Not economical	2
> 95 %	Very uneconomical	1

Source: Processing from various sources

RESULT AND DISCUSSION

Financial Perspective

To assess the economy, efficiency, and effectiveness of financial performance, the value-for-money formula is used. The calculation of efficiency, economy, and effectiveness is as follows:

1. Economical

$$\text{Economical} = \frac{\text{Realization of operational expenses}}{\text{Operational budget}} \times 100\%$$

$$\text{Economical} = \frac{\text{Rp. 763.555.645}}{\text{Rp. 900.000.000}} \times 100\%$$

$$\text{Economical} = 84,84 \%$$

From the calculation results using the Likert scale, the economic value obtained was 84.84%, meaning that PT. Z is categorized as economical.

2. Effectiveness

$$\text{Effectiveness} = \frac{\text{Realization of business income}}{\text{Business income budget}} \times 100\%$$

$$\text{Effectiveness} = \frac{\text{Rp. 880.890.999}}{\text{Rp. 1.000.000.000}} \times 100\%$$

$$\text{Effectiveness} = 88,08 \%$$

The effectiveness value obtained was 88.08%, so it can be said that PT. Z's finances are effective.

3. Efficiency

$$\text{Efficiency} = \frac{\text{Realization of operational expenses}}{\text{Realization of business income}} \times 100\%$$

$$\text{Efficiency} = \frac{\text{Rp. 763.555.645}}{\text{Rp. 880.890.999}} \times 100\%$$

$$\text{Efficiency} = 86,68 \%$$

From the results of the efficiency calculation, a value of 86.68% was obtained, which means that the use of finance is efficient at PT. Z. From the above calculations, the economy, effectiveness, and efficiency of PT. Z's performance assessment using value for money calculations can be seen in the financial perspective performance value table as follows:

Table 3. Financial Perspective Performance Values

No	Financial Perspective Benchmark	Mark	Category
1	Economical	4	Good
2	Effectiveness	4	Good
3	Efficiency	5	Very good
Average		4,33	Good

Source: Secondary Data from PT. Z

Customer satisfaction perspective

Based on the discussion of each variable, the overall customer satisfaction level is 4.03, as presented in the following table:

Table 4. Customer Satisfaction Perspective Level Values

No	Customer Satisfaction Perspective Variables	Average value	Category
1	Physical Appearance	3,98	Quite
2	Reliability	4,05	Good
3	Responsiveness	3,85	Quite
4	Assurance	4,28	Good
5	Empathy	3,97	Quite
Total		4,03	Good

Source: Processed research questionnaire

Overall, based on the respondents' answers, the lowest average score was found in the responsiveness variable. Therefore, this should receive special attention from PT. Z's management to provide company facilities as one way to improve responsiveness to customers.

Internal Business Perspective

Performance assessment in this perspective was carried out by distributing questionnaires to 40 respondents out of the 70 employees working at PT. Z. Based on the explanation of the distribution of respondents' answers for each variable, most respondents stated that they were fairly satisfied with the efforts of PT. Z's employees in supporting management objectives. The average employee satisfaction score at PT. Z was 3.93, as shown in the table below:

Table 5. Internal Business Perspective Level Values

No	Internal Business Perspective Variables	Average value	Category
1	Facilities and Infrastructure	3,86	Enough
2	Process	3,98	Enough
3	Job Satisfaction	3,94	Enough
Total		3,93	Enough

Source: Processed research questionnaire

From the internal business perspective performance results above, the facilities and infrastructure variable had the lowest score at 3.86%. This was followed by the process score at 3.98% and the job satisfaction score at 3.94%. Thus, the values for process and job satisfaction show only a slight difference.

Learning and Growth Perspective

Based on the explanation of each variable used as a benchmark in the learning and growth perspective, the overall performance assessment for this perspective can be seen in the following table:

Table 5. Growth and Development Perspective Level Values

No	Growth and Development Perspective	Average	Category
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Variables		value	
1	Motivation	4,15	Good
2	Opportunities for Self-Development	3,91	Enough
3	Innovation	4,03	Good
4	Workplace Atmosphere	4,05	Good
Total		4,03	Good

Source: Processed research questionnaire

From the performance assessment results for the learning and growth perspective, the motivation variable achieved the highest score at 4.15%, while the lowest score was for the opportunity for self-development variable at 3.91%. After averaging the four variables in the learning and growth perspective, a score of 4.03% was obtained, which is considered good.

Final Performance Assessment of PT. Z Using the BSC

Based on the performance assessments from the four perspectives above, the overall performance of PT. Z according to each perspective can be seen in the following table:

Table 6. Final Performance Values Based on Perspective

No	Perspective	Performance Value
1	Financial Perspective	4,33
2	Customer Satisfaction Perspective	4,03
3	Internal Business Perspective	3,93
4	Growth and Development Perspective	4,03
Average		4,08
Category		Good

Source: Processed research questionnaire

In Table 6 above, the financial perspective score for PT. Z's performance is 4.33, which indicates that the company's financial condition is good. In the customer satisfaction perspective, PT. Z's performance score is 4.03, also indicating good performance. Using the Likert scale, the internal business perspective received a score of 3.93, meaning the company's performance is considered fair. Finally, in the learning

and growth perspective, PT. Z's performance can be classified as good, as evidenced by a score of 4.03.

These calculations were obtained using the Likert scale measurement. Therefore, the average performance score across the four perspectives is 4.08, placing PT. Z in the "good" performance category. In the strategic plan performance evaluation program, PT. Z can be categorized as a company that performs well in executing its programs, as reflected in the "good" rating.

CONCLUSION

Based on the results of this study, the following conclusions can be drawn:

1. The method PT. Z has been using to measure its performance so far has focused only on observing annual profit increases or decreases, as reflected in the financial perspective receiving the highest score.
2. After applying performance measurement using the Balanced Scorecard (BSC) method, the final research result shows PT. Z's performance score at 4.08, which falls into the "good" category.

Based on the research findings, several issues were identified, and the researcher offers the following suggestions:

1. PT. Z should pay more attention to the company's physical aspects, such as cleanliness in the production area, comfort, and the available equipment. These factors significantly affect customer satisfaction in using PT. Z's products and, consequently, influence performance results.
2. The author recommends that the company's management, after obtaining performance results through the application of the BSC method, adopt the BSC as a standard method for measuring company performance.
3. It is also suggested that further training be provided to all PT. Z employees to enhance employee performance in the future.

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