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BALANCED SCORECARD AS A BASIS FOR FORMULATING PERFORMANCE IMPROVEMENT POLICIES IN A CONSTRUCTION COMPANY (CASE STUDY: PT XYZ)

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Abstract:

Construction service companies play an important role in supporting infrastructure development in Indonesia. PT XYZ experienced a decline in its assets during the 2020–2025 period, indicating the need for a comprehensive performance evaluation to support performance improvement. This study aims to analyze the company's performance using the Balanced Scorecard approach and to develop a Strategy Map, Key Performance Indicators (KPIs), and strategic policy recommendations. A mixed-methods approach was employed using primary data collected through interviews, questionnaires, and observations, as well as secondary data obtained from company reports and relevant literature. The findings indicate that the customer and internal business process perspectives demonstrate good performance, whereas the financial and learning and growth perspectives still require improvement. Based on these findings, a Strategy Map, KPIs, and strategic policy recommendations were developed to support the sustainable improvement of PT XYZ's performance.

Keywords: Balanced Scorecard; Construction Company; Company Performance; Key Performance Indicators; Strategy Map

INTRODUCTION

PT XYZ is a construction services and heavy-equipment provider located in Bekasi City with experience in undertaking various infrastructure projects, including toll-road construction, landfill and integrated waste-processing facility management, and other construction projects. Despite having adequate experience and human resources, over the past five years the company has experienced a decline in assets, indicating deterioration in financial performance. This condition requires attention because assets, revenue, and profit are important indicators for assessing the effectiveness of company performance (Nurhaliza and Harmain, 2022), while financial statements provide a basis for decision-making by various stakeholders (Hastiwi et al., 2022).

The Balanced Scorecard (BSC) is a performance-measurement method that evaluates an organization from the financial, customer, internal business process, and learning and growth perspectives. However, most studies of construction companies still focus on performance measurement and have not developed the results into implementable strategies. Therefore, this study aims to measure the performance of PT XYZ using the Balanced Scorecard while also developing a Strategy Map, strategic objectives, Key Performance Indicators (KPIs), and policy recommendations based on cause-and-effect relationships among the Balanced Scorecard perspectives as a basis for sustainably improving company performance.

This study uses a mixed-methods approach, combining quantitative and qualitative analyses in the form of a case study at PT XYZ in Bekasi. The quantitative approach is used to analyze company performance from the financial perspective, while the qualitative approach is used to



identify problems and formulate performance-improvement recommendations based on the Balanced Scorecard perspectives. The study was conducted for approximately two months.

The data consist of primary and secondary data. Primary data were obtained through interviews with management and questionnaires distributed to PT XYZ employees, while secondary data were obtained from company reports and literature studies. Sampling was conducted using purposive sampling.

The data were used to obtain results for each Balanced Scorecard perspective. The financial perspective used primary data from interviews with the finance manager and president director and secondary data from the company's financial reports. The customer perspective used interviews with the president director and general manager to obtain primary information related to Customer Retention and Customer Acquisition. The internal business process perspective used interviews with the project director and general manager as primary data. The learning and growth perspective used interviews with the general manager and the president director as primary data.

Performance analysis was conducted using the Balanced Scorecard approach through four perspectives: financial, customer, internal business process, and learning and growth. The analysis results were used as the basis for developing the Strategy Map, Key Performance Indicators (KPIs), and policy recommendations to improve company performance. Figure 1 presents the research flowchart and the stages undertaken in this study.

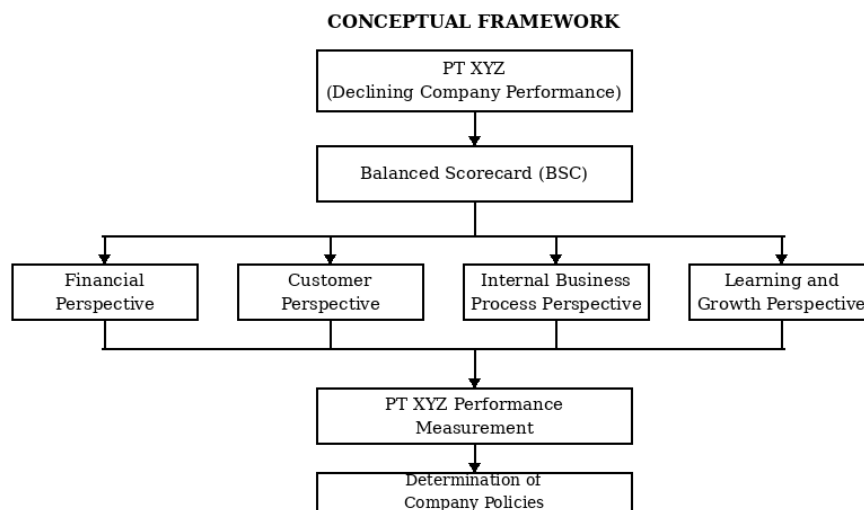


Figure 1. Conceptual Framework

As shown in Figure 1, the study began by identifying the problems occurring at PT XYZ, followed by a literature review and formulation of the research objectives. Primary and secondary data were then collected and analyzed using the Balanced Scorecard approach through four perspectives: financial, customer, internal business process, and learning and growth. The results were used as the basis for developing the Strategy Map, establishing strategic objectives, formulating Key Performance Indicators (KPIs), simulating performance measurement, and developing policy recommendations for performance improvement. The final stage was the formulation of conclusions based on the analysis results.

RESULTS AND DISCUSSION

Overview and Existing Conditions of PT XYZ

Table 2. Net Income, Net Worth, Total Assets, Sales, and Income of PT XYZ



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Year	Net Income	Net Worth	Total Assets	Sales	Income
2020	Rp 19,060,199,607	Rp 20,496,704,813	Rp 102,598,258,694	Rp 72,984,446,359	Rp 5,034,417,589
2021	Rp 14,420,928,909	Rp 9,286,074,441	Rp 91,798,271,242	Rp 22,677,416,685	Rp 5,116,317,617
2022	Rp 15,767,739,300	Rp 10,248,556,799	Rp 84,887,164,628	Rp 62,315,732,536	Rp 962,482,358
2023	Rp 2,288,332,771	Rp 3,288,332,771	Rp 8,725,799,805	Rp 18,680,267,517	Rp 2,615,237,452
2024	Rp 839,485,897	Rp 1,839,485,897	Rp 6,108,346,346	Rp 6,852,946,096	Rp 959,412,453
2025	Rp -	Rp -	Rp 5,268,860,449	Rp -	Rp -

PT XYZ is a construction services and heavy-equipment provider located in Bekasi City with experience in undertaking various infrastructure projects for government institutions, state-owned enterprises, and the private sector. Based on observations, interviews, and a review of company documents, PT XYZ's financial condition during 2020–2025 (Table 2) fluctuated, with a declining trend in total assets and net worth, indicating the need for performance improvement. The decline in total assets and net worth or net income occurred because external factors caused PT XYZ's expenditures to exceed its inflows, thereby weakening the company's financial performance. In addition, the global pandemic during 2020–2023 reduced PT XYZ's revenue. This is consistent with Lahya et al. (2025), who state that a decline in company assets may occur for various reasons, including reductions or disposals of assets that no longer support the company's strategy. Depreciation and amortization may also reduce the value of company assets (Lahya et al., 2025). Depreciation is the systematic reduction in the value of tangible fixed assets due to use over their useful lives, whereas amortization is the decline in the value of intangible assets as they are utilized. In addition, impairment loss may reduce the value of fixed assets when they are no longer able to provide future economic benefits. Under such conditions, the company must adjust the carrying amount of the asset to reflect its fair value, with the reduction recognized as a loss that decreases total assets. Therefore, asset impairment can also be viewed as part of an effort to improve efficiency and establish a healthier financial structure in the future (Marselina et al., 2024).

Table 3. Work Contracts and Contract Owners for Projects Completed by PT XYZ During the Specified Period

No.	Contract	Year	Contract Owner	Location	Field
1	Waste Transportation Services Zone 1	2018-2019-2020	Pekanbaru City Environmental and Sanitation Office	Riau	Cleaning Services
2	Waste Transportation Services Zone 1	2021	Pekanbaru City Environmental and Sanitation Office	Riau	Cleaning Services
3	Waste Transportation Services Zone 1	2022	Pekanbaru City Environmental and Sanitation Office	Riau	Cleaning Services
4	Well Pad Preparation Services and Other Works on the SMO CS WUR-EW Package 3 Project - PT Nindya Karya	2022	PHR, PT Vadhana Internasional	Riau	Land Preparation, Earthworks, Landscaping
5	Well Pad Preparation Services and Other Works	2023	PHR, PT Vadhana Internasional, PT Petronesia Benimel, PT Nindya Karya, PT PGAS Solution	Riau	Land Preparation, Earthworks, Landscaping
6	Well Pad Preparation Services and Other Works	2024	PHR, PT Vadhana Internasional, PT Petronesia Benimel, PT Nindya Karya, PT PGAS Solution	Riau	Land Preparation, Earthworks, Landscaping

In general, PT XYZ continued to gain the trust required to execute various construction projects during 2020–2025 (Table 3). This indicates that the company was still able to maintain the confidence of service users through the continuous execution of projects. The contract history shows the development of the company's business activities from cleaning services to well-pad preparation and supporting construction work for the oil and gas sector. This development indicates that the company not only maintained its existing business lines but also diversified its activities to expand market share and increase opportunities to secure projects. Experience in handling projects across various fields constitutes important capital for strengthening competitiveness and the company's position in the construction-services industry. Nevertheless, the company still faces challenges in

expanding opportunities to obtain new projects and requires a more comprehensive and integrated performance-evaluation system (Sulasno et al., 2024). Therefore, this study applies the Balanced Scorecard to evaluate company performance based on four perspectives and develops a Strategy Map, strategic objectives, Key Performance Indicators (KPIs), and strategic recommendations as a basis for improving performance.

Strategy Map

After the vision and mission of PT XYZ were identified, a Strategy Map was developed as the basis for Balanced Scorecard implementation. The Strategy Map places the learning and growth perspective as the foundation that drives improvements in internal business processes, customer satisfaction, and financial performance. In addition to illustrating the relationships among strategic objectives, the Strategy Map serves as the basis for developing Key Performance Indicators (KPIs) and strategic recommendations. The resulting Strategy Map is presented in Figure 2.

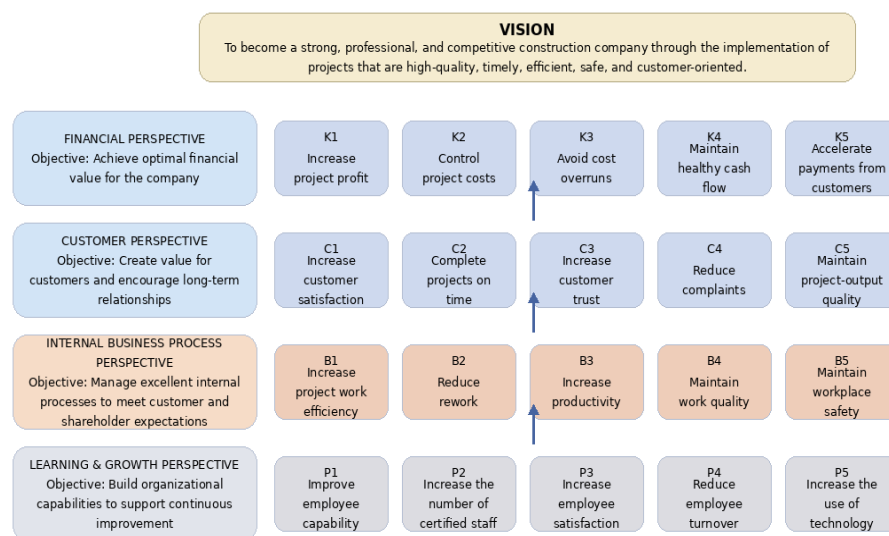


Figure 2. Visualization of the Relationships among Key Performance Indicators (KPIs), Performance Target Setting, and Strategic Policy Formulation in the Strategy Map

Figure 2 illustrates the cause-and-effect relationships among the Balanced Scorecard perspectives at PT XYZ. The learning and growth perspective serves as the foundation for improving the effectiveness of internal business processes, which in turn enhances service quality and customer satisfaction. Improvements in these three perspectives subsequently contribute to financial performance through increased profitability, cost efficiency, and better cash-flow management. Thus, the Strategy Map indicates that PT XYZ's financial performance is the result of the interconnection among all Balanced Scorecard perspectives.

Establishment of Strategic Objectives and Key Performance Indicators (KPIs)

After the Strategy Map was developed, strategic objectives and Key Performance Indicators (KPIs) were established for each Balanced Scorecard perspective based on PT XYZ's vision and mission, interview results, and the literature review. The KPIs were formulated according to SMART principles and grouped into Lead KPIs and Lag KPIs to measure the achievement of strategic objectives. The strategic objectives for each perspective are presented in Figure 3.

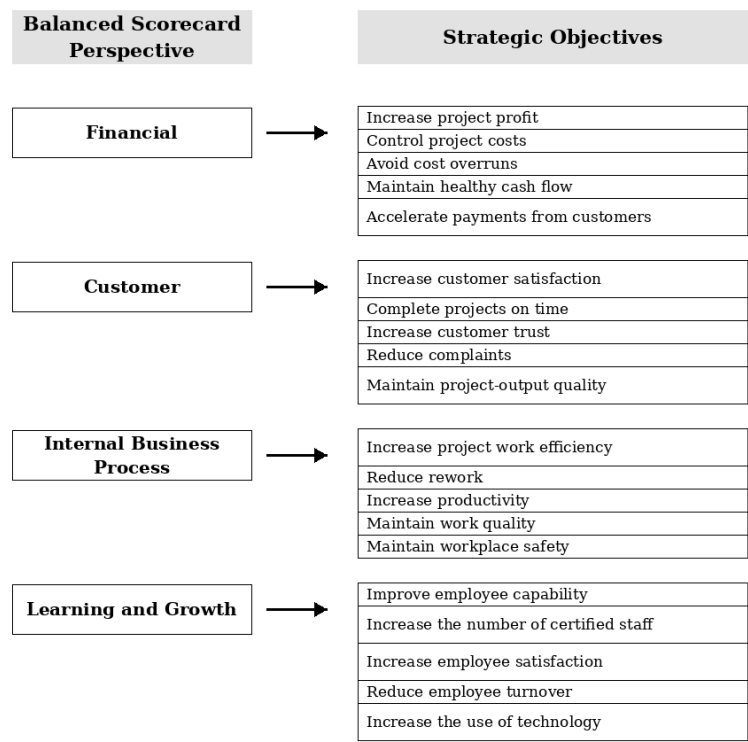


Figure 3. Strategic Objectives for Each Perspective

Financial Perspective Analysis

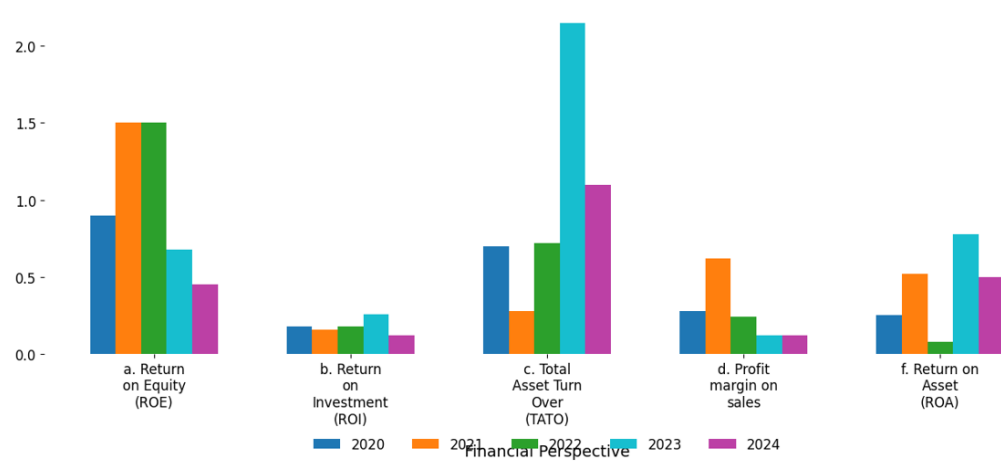


Figure 4. Financial Condition of PT XYZ

The financial perspective is used to evaluate the company's ability to improve profitability and manage financial resources. Based on Figure 4, PT XYZ's financial performance during 2020–2024 was relatively good despite fluctuations in several indicators. ROE and ROA tended to increase, indicating that the company became more effective in utilizing equity and assets to generate profit (Halian et al., 2020). Return on Assets (ROA) is a profitability ratio used to assess the effectiveness

of a company in using its assets to generate net income. An increase in ROA reflects more optimal asset utilization and indicates improved company performance (Yuningsih et al., 2023). Return on Equity (ROE), meanwhile, evaluates the company's ability to generate net income based on owners' equity. A higher ratio indicates more efficient use of equity and a stronger position for company owners (Mulyani & Susianto, 2021). TATO reached its highest value in 2023, indicating greater efficiency in utilizing assets to generate revenue. Conversely, Profit Margin on Sales (PMoS) and ROI were relatively volatile, indicating that profitability and investment returns were still influenced by the company's operating conditions. In 2025, all indicators declined because no projects were undertaken, resulting in lower operational activity and revenue.

Based on these conditions, strategic objectives within the financial perspective focus on increasing profitability through cost control, preventing cost overruns, maintaining healthy cash flow, and accelerating collections from customers. These objectives serve as key indicators for evaluating the success of strategy implementation in the financial dimension.

Customer Perspective Analysis

The customer perspective is one of the main Balanced Scorecard perspectives and focuses on the company's ability to create customer value. According to Kaplan and Norton (1996), success in this perspective is measured by the company's ability to meet customer needs and expectations, thereby creating satisfaction, loyalty, and long-term relationships. In construction services, the customer perspective is particularly important because project success is assessed not only from technical aspects but also from customer satisfaction with the quality of the services provided.

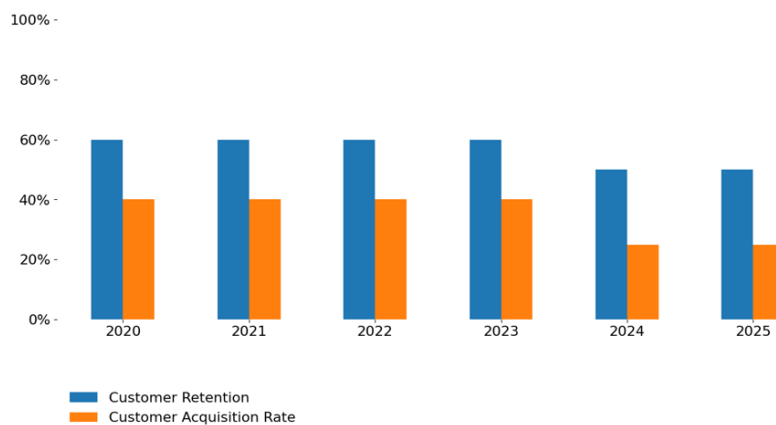


Figure 5. Customer Perspective (Customer Retention and Acquisition Rate) of PT XYZ Over a Five-Year Period

Figure 5 shows fluctuating movement in the number of customers working with PT XYZ. It also indicates that PT XYZ applies sound methods in conducting business with customers, as clients that have previously entered into contracts with PT XYZ tend to enter into subsequent contracts for different types of work. This pattern supports PT XYZ's position as a construction company with a high level of reliability. This is consistent with Rizki et al. (2024), who state that customers who are satisfied with a company's products, services, and resources (equipment and human-resource

competencies) are more likely to remain loyal. Such loyalty is reflected in high retention rates and indicates that the company is capable of maintaining a strong customer base.

Customer acquisition is the process of obtaining new customers or clients through the implementation of structured and sustainable strategies. These strategies are designed to adapt to market dynamics and thereby support business growth (Wahyudi et al., 2022). Customer retention, in contrast, refers to the company's ability to retain customers so that they continue to use the products or services offered. This indicator reflects the level of customer loyalty and is an important marketing objective for preventing customers from switching to competitors. Therefore, customer retention is used as a measure of customer loyalty intentions toward the service provider (Baber, 2020).

In construction companies, customer acquisition refers to the company's ability to obtain new clients or project owners through tender processes, negotiations, and business-relationship development. This indicator is important because the company's continuity depends heavily on its ability to secure new project contracts as sources of revenue. Customer acquisition is influenced by various factors, including company reputation, project experience, work quality, and the ability to build trust and strong relationships with prospective clients. Therefore, improving customer acquisition can expand market share while increasing opportunities to obtain new projects (Kumar & Pandey, 2026).

Customer retention refers to the company's ability to maintain long-term relationships with customers so that they continue to use the company's services for subsequent projects. In the project-based construction industry, customer retention is reflected not only in client loyalty but also in repeat orders, extensions of cooperation, or recommendations to other prospective clients. High customer retention indicates that the company is able to meet customer expectations through service quality, timely project completion, effective communication, and customer satisfaction. Thus, customer retention is an important indicator for maintaining business sustainability while increasing opportunities to obtain new contracts from existing customers (Suhendra et al., 2026; Dwiyanto et al., 2026).

Internal Business Process Perspective Analysis

The internal business process perspective focuses on improving the effectiveness and efficiency of operational processes to produce high-quality services and meet customer needs (Kaplan and Norton, 1996). Interview results indicate that PT XYZ does not yet have a structured internal business-process management system and remains focused on completing work according to the company's current capabilities. Nevertheless, this study identifies five strategic objectives: improving project efficiency, reducing rework, increasing productivity, maintaining work quality, and improving occupational safety.

Learning and Growth Perspective Analysis

The learning and growth perspective serves as a foundation for increasing organizational capabilities through the development of human resources, information systems, and technology (Kaplan and Norton, 1996). Interview results show that PT XYZ has not provided training evenly, particularly for contract employees. Therefore, this study establishes five strategic objectives: improving employee competencies, increasing the number of certified workers, increasing employee satisfaction, improving employee retention, and increasing the use of technology.

Balanced Scorecard KPI Measurement Simulation

Table 3. Balanced Scorecard KPI Measurement at PT XYZ

No.	KPI	Target	Performance	Achievement/Remarks
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1	Increase project profit	$\geq 15\%$	Target not achieved	Financial performance remains unstable. Many external factors affect project costs. Many customers are satisfied with the work performed by PT XYZ. No complaints were identified regarding the work performed. PT XYZ has resources that meet the requirements of the contracts agreed with customers. Appropriate personal protective equipment is available in accordance with safety standards. There is no scheduled employee training program. There is no schedule or structured support for employees to obtain certifications relevant to their work.
2	Control project costs	$\leq 5\%$	Target not achieved	
3	Increase customer satisfaction	≥ 85	Target achieved	
4	Maintain project output quality	$\leq 2\%$	Target achieved	
5	Improve project work efficiency	$\leq 5\%$	Target achieved	
6	Maintain occupational safety	0 / very low	Target achieved	
7	Improve employee capabilities	≥ 40 hours/year	Target not achieved	
8	Increase certified workforce	$\geq 70\%$	Target not achieved	

Based on Table 3, PT XYZ still has several Balanced Scorecard KPIs that have not reached their targets, while others have already achieved the targets. Several KPIs that have not been achieved relate to the financial and learning and growth perspectives, whereas indicators in the customer and internal business process perspectives have generally reached their targets. These findings indicate the need for appropriate and efficient managerial implications that can be implemented by PT XYZ to improve company performance. Performance improvements at a construction company such as PT XYZ may also provide useful lessons for other construction companies facing similar constraints.

Managerial Implications

Performance measurement using the Balanced Scorecard approach shows that PT XYZ has achieved good performance in the customer and internal business process perspectives, while the financial and learning and growth perspectives remain less optimal. This finding indicates that the company has been able to operate effectively and provide satisfactory services to customers, but these achievements have not yet fully translated into improved financial performance. This condition is consistent with Usman et al. (2023), who state that the Balanced Scorecard emphasizes cause-and-effect relationships among perspectives, in which learning and growth form the foundation for improving internal business processes, which subsequently influence customer satisfaction and financial performance. In construction companies, this condition may arise from high project operating costs, cost overruns, low labor productivity, and suboptimal utilization of company assets, which constrain profitability.

The managerial implications of this study indicate that PT XYZ should prioritize improvements in the learning and growth perspective by strengthening human-resource management. Actions may include improving the recruitment process, providing training according to competency needs, implementing a Key Performance Indicator (KPI)-based performance



appraisal system, and increasing knowledge-sharing activities and the utilization of information technology. Improved employee competencies are expected to increase productivity, business-process efficiency, and support improvements in the company's financial performance (Mio et al., 2022).

PT XYZ should also maintain the performance achieved in the customer perspective by improving service quality and strengthening long-term relationships with customers. Customer loyalty is a competitive advantage in the highly competitive construction industry. In addition, the company should strengthen project-cost control, improve asset-utilization efficiency, and optimize cash-flow management so that achievements in the customer and internal business process perspectives can be translated into higher profitability and sustainable economic value creation.

CONCLUSION

Based on the findings, the indicators that provide the basis for determining PT XYZ's performance-improvement policies through the Balanced Scorecard approach are the customer and internal business process perspectives, because both perspectives indicate that the company's management system has been functioning effectively. However, analysis of the four Balanced Scorecard perspectives shows that PT XYZ's performance continues to fluctuate, particularly in the financial and learning and growth perspectives. These two perspectives therefore require further attention and improvement, although the current conditions do not threaten the company's continuity. Accordingly, optimal policies for PT XYZ as a construction company can be formulated through the implementation of the Balanced Scorecard accompanied by in-depth examination of its implications and Key Performance Indicators (KPIs), enabling the company's strengths and weaknesses to be identified comprehensively as a basis for developing appropriate policies to improve performance.

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