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EVALUATION AND STRATEGY TO IMPROVE THE PERFORMANCE OF AUTOMOTIVE COMPONENT COMPANY

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ABSTRACT

Background: As one of the key actors in the automotive industry, automotive component-based companies must conduct evaluations to improve performance to compete and survive in the long term.
Purpose: This study aims to evaluate the performance and formulate strategies to improve the performance achievement of PT XYZ.
Design/methodology/approach: Analyzed using the balanced scorecard (BSC), BSC SQDC (safety, quality, delivery, and cost) performance management models, and the analytical hierarchy process (AHP).
Findings/Result: Using BSC in the 2022 performance data show that the total performance achievement of PT XYZ reached 48,74%, still below the target set by the company. Using BSC SQDC analysis on 2023 data, the results show that the total performance achievement of PT XYZ in 2023 is 71,81%, with the highest ratio of achievement to the perspective weight from the financial perspective (90,95%) and learning and growth perspective (95%). The lowest ratio achievement perspective is from customers (54%) and internal business processes (32,1%).
Conclusion: PT XYZ's performance improvement strategies are focused on two perspectives, namely the internal business process perspective, including supplier management, preventive maintenance, breakdown planning, spare part management, safety campaign, and renewable energy certificate purchase, and customer perspectives such as improving customer relationships, price adjustments, multi-source suppliers, automation and workforce management.
Originality/value (State of the art): As one of component-based company, his performance is impacting one of third biggest Indonesian commercial vehicle producent.

Keywords: automotive component company, balanced scorecard, business sustainability, performance improvement, traffic light performance review

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INTRODUCTION

Indonesia's mining, agricultural, and manufacturing industries play an important role in contributing to economic growth through national Gross Domestic Product (GDP), employment, and exports. In 2022 the manufacturing industry contributed 19.19% to the GDP (Bappenas, 2022). The industry grew on a positive trend but tended to slow down and decline in 2023, with a contribution to GDP of 18.57% (Bappenas, 2023).

The automotive industry is one of the sub-sectors of the manufacturing industry and is a pioneer in the growth of the manufacturing industry (Nurcahyo & Wibowo, 2015). This can be seen from the fact that car production in Indonesia tends to increase yearly. Car production in Indonesia experienced a low point of 690,176 units during COVID-19 in 2020 and rose again when the COVID-19 pandemic began to be overcome (Gaikindo, 2023). Indonesia's automotive industry is the second largest automotive manufacturer in Southeast Asia. Almost half of the total automotive production in Southeast Asia is produced in Thailand and Indonesia. The growth of the automotive industry has an impact on improving the national economy. Data on the contribution of the transportation equipment industry sector grew by 7.63% in 2023 (yoy) and contributed 1.49% to GDP (Ministry of Finance, 2023). Therefore, the Indonesian automotive industry must be able to compete with the automotive industry in other countries by continuing to improve its competitiveness (Nurcahyo & Wibowo, 2015).

On the other hand, the growth of the Indonesian automotive market is followed by an increase in the number of automotive component imports, especially in 2020-2023 (BPS, 2023). This shows that automotive component companies in Indonesia must be able to compete with automotive component companies from other countries. The increase in the importation of automotive components can indicate that Indonesian automotive component manufacturers are relatively low in competitiveness (Nurcahyo & Wibowo, 2015).
Like other industries, Indonesia's automotive industry faces complex global challenges, such as lower-cost competitors, fluctuating commodity prices, rising customer expectations, and economic dynamics (Alomar & Pasek, 2015). The existence of the automotive industry is inseparable from the existence of automotive component companies along the supply chain. The automotive industry can absorb more than 17 million workers along its supply chain (Gaikindo, 2020). Automotive component companies have an important role in the automotive industry, almost 70% of vehicle components are supplied by automotive component companies (Nurcahyo & Wibowo, 2015). Indonesia has over 1500 raw material and automotive component companies divided into Tier 1, Tier 2, and Tier 3 spread throughout Indonesia (Ministry of Industry, 2019).

Competition pressures are pushing manufacturing companies, including automotive companies, to constantly reevaluate and adjust their competitive strategies, supply chains, and manufacturing technologies to improve performance, compete, and survive in the long term (Alamor & Pasek, 2015). Globalization, an uncertain environment, rapid technological development, and competitive pressures force manufacturers to adopt different practices and tools to improve the performance of their manufacturing processes, operations, and supply chains (Khalfallah & Lakhal, 2020). Rapid changes in the business environment and increasingly intense competition require companies, including automotive component companies, to continuously improve their strategies and their ability to execute business strategies to win the competition (Saefuddin et al. 2017). The success rate of business strategy execution can be seen from the level of achievement of its performance. Measuring and evaluating a company's performance is one of the four stages of strategic management (Wheelen & Hunger, 2018).

Furthermore, performance evaluation is an integrated approach to help organizations monitor the achievement of targets set to achieve company goals (Panudju et al. 2016). For automotive component companies, performance evaluation is important to analyze achievements and identify improvement initiatives to achieve the company's vision, mission, and goals. In general, the evaluation of a company's performance achievement is identical to the measurement of financial performance. For example, it can be seen from the return on assets (Hagel et al. 2010), cash flow (Aust, 2010), market-to-book value, company size, and return on capital (Adeneye & Ahmed, 2015).

However, performance evaluation should not only be reviewed from a financial perspective. A company's performance evaluation should also consider non-financial performance, which is a driver of achieving

short-term and long-term financial goals (Kaplan & Norton, 1992). Therefore, a tool was developed to measure performance and become an organizing framework and operating system for a new strategic management system, the balanced scorecard (BSC) (Kaplan & Norton, 1992; 1996). In its development, BSC is used to compile performance indicators so the level of achievement of company performance can be known from multiple perspectives (Kaplan & Norton, 1992; 2001; 2004). In addition, BSC can play a role in combining the capabilities needed by the company, the processes that must be carried out, and the appropriate customer value proposition to achieve the vision (Niven, 2002). Manufacturing capabilities generally required are cost competitiveness, precision in delivery, flexibility, and quality (Nurcahyo & Wibowo, 2015; Gong et al. 2019). Manufacturing capabilities are built for the company's competitiveness (Nurcahyo & Wibowo, 2015; Gong et al. 2019). The capabilities that must be possessed are the basis for developing SQDC BSC.

Research related to the application of BSC to evaluate the performance of a company has been widely carried out on various types of businesses such as palm oil companies (Subakti et al. 2017), property companies (Wulandari et al. 2017), telecommunication companies (Subakti et al. 2017), banking (Mahboub & Ghanem, 2024), service companies (Kumar et al. 2023), hospitals (Regragui et al. 2024), mining and energy companies (Subakti et al. 2017; Tanoto et al. 2022), manufacturing industry (Abu-Allan, 2024; Jiwa et al. 2021) and other limited liability companies (Ta et al. 2022). In addition, BSC research is also carried out on government-owned business institutions such as Regional-Owned Enterprises (Harumantaka et al. 2019) and non-profit organizations(Ashfahany et al. 2024). However, BSC's research on automotive and component companies is still limited.

PT XYZ, one of Indonesia's leading automotive component companies, has restructured its vision, mission, and business strategy to support its customers' businesses through improved quality, cost, delivery, and process safety. Quality, cost, delivery, and safe processes are important capabilities for the automotive industry. Many experts define the critical capabilities the industry needs to develop to compete and survive in the long term. Among others, cost factors, accuracy in delivery, flexibility, and quality are capabilities that companies can excel at to continue to compete (Nurcahyo & Wibowo, 2015; Gong et al. 2019). Superior capabilities to compete with competing companies are part of the company's strategy to achieve better performance and improve the company's competitiveness (Nurcahyo & Wibowo, 2015).

Therefore, evaluating the performance of PT XYZ by paying attention to the factors of quality, cost, delivery, and safe process is important. This performance evaluation is carried out as an effort to an integrated approach to assist PT XYZ in monitoring the achievement of the targets set to achieve the company's goals (Panudju et al. 2017). This study aims to evaluate the performance of PT XYZ using the BSC approach and formulate strategies to improve the performance achievement of PT XYZ. The balanced scorecard was built by paying attention to the capabilities that the company wants to develop, namely process safety (safety), quality (quality), delivery (delivery), and cost (cost), known as BSC SQDC (safety, quality, delivery, and cost).

METHODS

This research was carried out in one automotive component company in Bekasi, West Java, PT XYZ, which produces engines and other automotive components. The scope of this research focuses on analyzing the company's current performance, designing an appropriate performance management model improvement to evaluate the company's performance achievement, and formulating strategies to improve PT XYZ's performance achievement level. This study uses secondary and primary data. The secondary data used are the company's internal reports, budget, and company SAP data for 2022-2023. Primary data in the form of performance indicators, weighting data for each BSC perspective along with its performance indicators, and formulation of performance improvement strategies were obtained from interviews, questionnaire distribution, and focus group discussion (FGD) with 15 key respondents (key informants) of PT XYZ. The fifteen respondents were selected based on competence, capacity, and position criteria. The fifteen respondents consisted of ten department managers, ranging from the Finance Department, Business Department, Quality Department, Engineering Department, Maintenance Department, Production Department,Production Planning Department, Purchasing Department, General

Affairs & EHS Department, and Human Resources Department; four General Managers, and one Plant Manager in the automotive component company PT XYZ.

The data analysis carried out in this study includes three stages: BSC analysis for PT XYZ's performance evaluation in 2022, BSC analysis by considering safety, quality, delivery, and cost (BSC SQDC) capabilities for PT XYZ's performance evaluation in 2023, and descriptive analysis to formulate a strategy to improve PT XYZ's performance (Table 1).

First, the BSC analysis for 2022 data is used to evaluate PT XYZ's (current) performance achievements using the BSC approach according to Kaplan and Norton's theory. The analysis began by grouping the performance indicators previously set by PT XYZ's management in 2022 into four BSC perspectives. The grouping of these performance indicators into the four perspectives of BSC was determined based on the opinions of the respondents in this study consisting of ten Managers, four General Managers, and one Plant Manager at PT XYZ through a focus group discussion (FGD) process. Second, the BSC SQDC analysis will use 2023 data. In this analysis, the formulation and strategic planning for preparing a performance management model are carried out. This process begins with an in-depth analysis of the company's vision, mission, conditions, and business processes. In this study, BSC SQDC is designed to improve the performance management model by incorporating performance indicators of process safety, quality, delivery, and cost, which are the company's important capabilities, into each BSC SQDC PT XYZ perspective.

In BSC SQCD, the analysis of the level of importance of each perspective and the weight of each key performance indicator (KPI) that has been determined is analyzed using AHP, which is processed with the help of Expert Choice 11 software. The results of this weighting are then poured into the company's strategy map, which is arranged hierarchically starting from the lowest BSC perspective weight to the highest perspective weight to describe the causal relationship and the interconnectedness of each strategic goal in achieving the company's goals as a representation of vision and mission. The strategy map is prepared by clarifying the mission and vision, clarifying the company's strategic factors and specific goals to achieve PT XYZ's strategy (Rohm, 2013;Indriani et al. 2017; Wulandari et al. 2017).

Furthermore, the prepared BSC SQCD will be used to evaluate the performance of PT XYZ using 2023 data. This performance evaluation is the next stage of implementing the strategy that PT XYZ has carried out. In this study, the achievement of each performance indicator achievement is measured using a score calculation using two calculation formulas, namely KPI maximize (the higher, the better) and KPI minimize (the slighter/lower, the better). Examples of KPI minimization include the number of production defects, the number of complaints from customers, and the number of goods returned from customers. A traffic light system marks the achievement value in three colors: green, yellow, and red (Saefuddin et al. 2017). The color expression shows the achievement of the KPI target (Saefuddin et al. 2017), namely (1) red, indicating that the achievement of the target from the KPI set does not reach the target or is below the target, then it needs to be improved (KPI<80 score limit), (2) yellow, indicating that the target achievement score needs to be improved, with a score limit of $80 \leq KPI \leq 100$, and (3) green indicates that the score is by the target with a KPI limit of ≥100.

Tabel 1. Data analysis methodes

Data Analysis	Data	Output
Balance scorecard	Study data of the company's internal reports, budget data, and SAP data in 2022	Grouping of performance indicators and current performance of PT XYZ
Balance scorecard SQDC, value chain, and AHP	Company data in 2023 and primary data through interviews and questionnaires filled out	PT XYZ's business process and PT XYZ's performance evaluation design by taking into account the SQCD factor
Descriptive	Primary data through FGD on BSC SQDC output	Formulation of performance improvement strategy according to PT XYZ's strategic map

Third, formulate a strategy to improve PT XYZ's performance achievement. This analysis was carried out descriptively based on the evaluation results obtained from the performance analysis using the previous BSC SQDC. In formulating a strategy to improve PT XYZ's performance achievement, the researcher conducted an FGD with 15 research respondents. The FGD began by analyzing the root cause of the low level of performance achievement from the perspective of BSC SQDC, which has a low level of achievement, and establishing alternative strategies to overcome the root cause.

RESULTS

PT XYZ is a joint venture company in engine assembly (diesel). It produces automotive components such as case bearings, cylinder blocks, cylinder bodies, case fronts, and camshafts for commercial vehicles (pick-ups and trucks) for domestic and export market fulfillment. PT XYZ has a niche market. The assembly of the engine and the production of automotive components are carried out based on orders received (made to order) from the parent company and its affiliated companies. PT XYZ's vision is to "Become a world-class manufacturing partner," and its mission is "Supporting the parent company's business through quality improvement, product delivery, and more efficient processes and costs."

PT XYZ's performance in 2022 based on BSC

Based on the analysis of performance achievements using BSC, it was obtained that the lowest performance achievement in 2022 was from the perspective of internal business processes at 5.6%, followed by a customer perspective of 9.50%, a learning growth perspective of 10%, and a financial perspective of 23.64% with the total performance achievement of PT XYZ in 2022 of 48.74%. This means that the total performance achievement of PT XYZ in 2022 is less than 80%, which indicates that the performance achievement is in the low category. In addition, it is known that based on the grouping of each BSC perspective, the total weight of the 2022 performance indicators is only 76.50% (smaller than the total weight of BSC performance indicators, which should be 100%).

PT XYZ's Performance in 2023 based on BSC SQDC

Proper performance evaluations can determine how far the company has achieved its mission and vision. Ultimately, it can be used to formulate strategies for improvement and much better business development strategies in the future. Based on this, PT XYZ's performance evaluation uses BSC based on safety, quality, delivery, and cost (SQDC) factors from the internal process perspective that aligns with customer needs. This must be done considering that customers are the key to the company's sustainability. The company's capabilities built into its internal business processes support good customer perspective performance. An internal business process perspective is developed to achieve customer expectations for safety, quality, delivery, and cost, which aligns with PT XYZ's mission. The mapping of the company's internal business processes is carried out to ensure that the company's business processes run to meet customer expectations for safety, quality, delivery, and cost. Therefore, a mapping of PT XYZ's internal business processes was carried out using value chain analysis.

Based on the value chain analysis carried out, it is known that PT XYZ is a company that is included in the category of the manufacturing industry and accepts orders only from the parent company and its affiliated companies, both repeat orders and orders for new products by safety standards, quality, delivery and cost that is determined. The parent company and its affiliates give repeat orders through an annual forecast, which is confirmed monthly to ensure the total number of orders. Meanwhile, the business process for ordering new products begins with receiving sales orders from the Department of Business (corporate business). The engineering team will study and conduct feasibility studies and justify the company's ability to make the product according to the quality, process, deadline, and price standards set by the mother company and its affiliates. Figure 1 shows the business process of PT XYZ.

The process of designing and improving the performance evaluation of PT XYZ with the BSC approach based on the SQDC factor in internal business processes is in line with the company's mission to "Support the parent company's business through quality improvement, product delivery, and more efficient processes and costs." The process of redesigning PT

XYZ's performance evaluation begins with aligning the vision and mission, aligning strategic goals with the company's mission, and aligning PT XYZ's goals and objectives. Strategic goals are an elaboration of the vision and mission of a company so that it is complete, systematic, and integrated (Saefuddin et al. 2017). The strategic goals can be described in the strategy map to make it easier for the company to communicate the overall strategy to all employees so that they have the same understanding of achieving the company's goals (Saefuddin et al. 2017). Figure 2 shows PT XYZ's strategy map, which is compiled starting from the lowest weight (Table 2), namely development and growth perspective (0.104), internal business processes (0.136), customers (0.318), and finance (0.442) to describe the causal relationship and interconnectedness of each strategic goal in achieving PT XYZ's goals as a representation of vision and mission.

Support activities	*Corporate Business , Strategic Planning & Control*				Profit
	Human Recourses Management				
	Engineering, Maintenance, General affair, EHS				
	Finance, Budget control, Accounting				
Main Activities	***Sales order:***	***Supply:***	***Production Process***	Delivery & After-Sales Guarantee	
	1) Repeat order	*1) Production planning*	1) Production		
	2) New product order	*2) Procurement*	2) Quality Inspection		
	Based on Standard Safety, Specific Quality level, Total low cost, Specific delivery time				
	(S, Q, C, D)				

Figure 1. General description of the value chain of business activities of PT XYZ

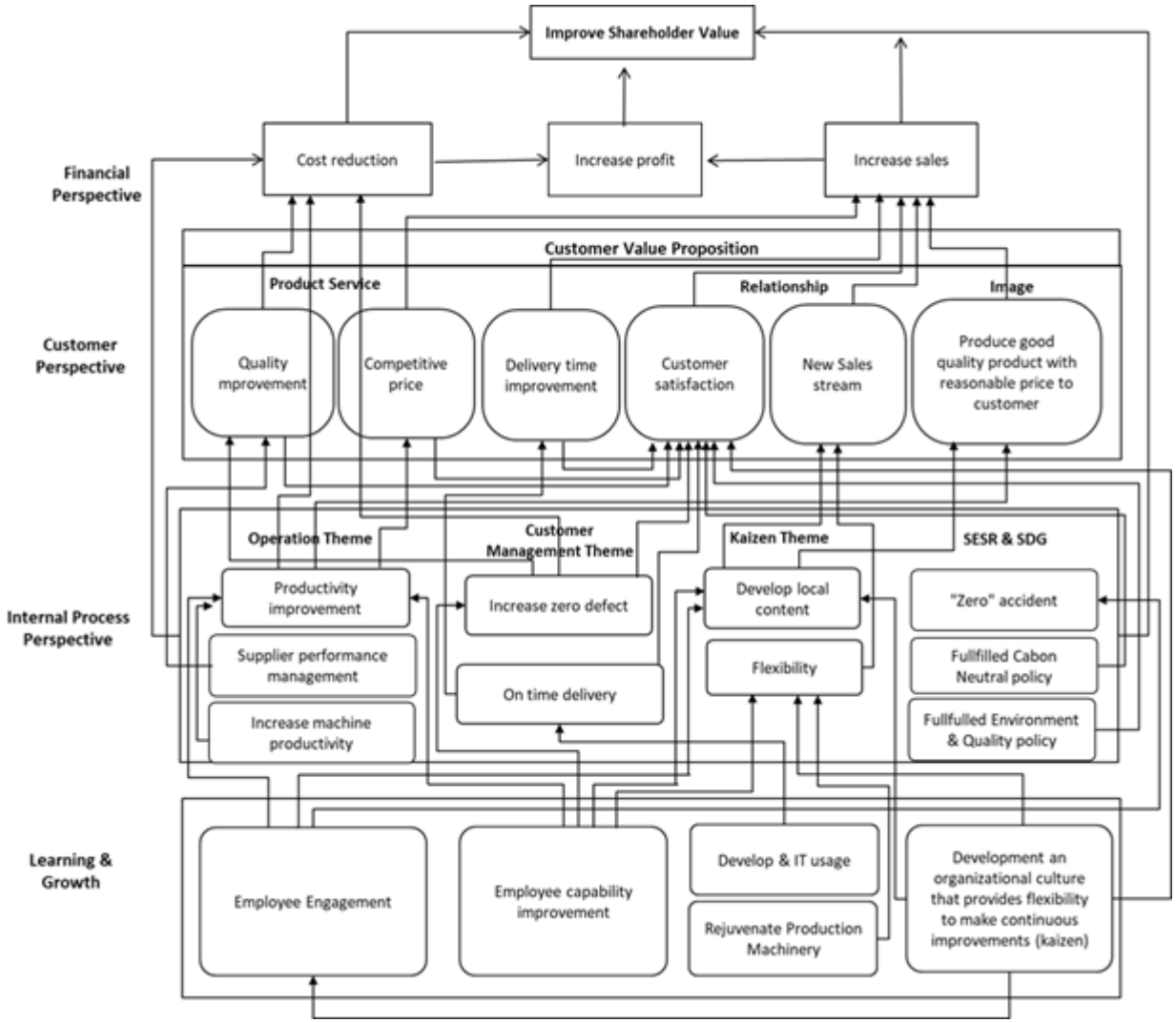

Figure 2. Strategy Map of PT XYZ

Table 2. Simulation of PT XYZ's Performance Achievements in 2022 and 2023

Perspective	Target 1		Actual 2		Ach. (%) 3 (1:2)		Scoring	Score (1:2)		Weight 3	Weighted Score 4 (3x4)		Traffic light	
	2022	2023	2022	2023	2022	2023		2023	2022		2022	2023	2022	2023
Financial Perspective														
K1: Massive Cost Reduction	10.837	4.043	10.837	3.956	129.94%	97.90%	Lower is better	129.94%	97.85%	10.92%	14.19%	10.68%	129.94%	97.85%
K2: Profit Increase	-	0,07	-	0,07	-	97.00%	Higher is better	-	97.01%	12.99%	-	12.61%	-	97.01%
K3: Revenue Increase	-	41.298	-	34.424	-	83.00%	Higher is better	-	83.36%	20.29%	-	16.91%	-	83.36%
Total Financial Perspective										44.20%	14.19%	40.20%		
Customer Perspective														
P1: Quality Improvement (Reject Rate)	Customer Claims	Reject rate 6000 ppm	Customer Claim	6229	1000.00%	96.32%	Lower is better	90.00%	96.32%	5.50%	5.00%	5.30%	90.00%	96.32%
P2: Competitive Pricing	-	Approved Price Adjustment	-	Delay	-	0.00%	Higher is better	-	0.00%	4.00%	-	0.00%	-	0.00%
P3: Delivery Lead Time Improvement	-	Max 2 claims / year	-	0	-	100.00%	Lower is better	-	100.00%	2.00%	-	2.42%	-	100.00%
P4: Customer Satisfaction	0 Warranty Claims	Grade A	0 Warranty Claims	Grade B	0.00%	0.00%	Higher is better	0.00%	0.00%	8.30%	0.00%	0.00%	0.00%	0.00%
P5: New Sales Acquisition	-	1	-	0	-	0.00%	Higher is better	-	0.00%	2.00%	-	0.00%	-	0.00%
P6: High Quality Product with Reasonable Price	-	Cost process 95% vs LY	-	0,97	-	98.00%	Lower is better	-	98.00%	10.00%	-	9.56%	-	97.94%
Total Customer Perspective										31.80%	4.95%	17.28%		
Internal Business Process Perspective														
PBI 1: Productivity Improvement	-	3333 unit/MH	-	3227	-	97.00%	Higher is better	-	96.80%	2.00%	-	0.25%	-	96.8%
PBI 2: Supplier Performance Management	50	Zero D Grade	50	1	0.00%	0.00%	Lower is better	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%
PBI 3: Machinery Effectiveness Increase	-	Downtime 10.6%	-	0,168	-	63.00%	Lower is better	-	63.10%	2.00%	-	0.97%	-	63.1%
PBI 4: Zero Defect Performance Improvement	99.61%	99.65% FTQ	0,9961	0,9961	99.99%	100.00%	Higher is better	99.99%	100.00%	1.00%	1.00%	0.73%	99.99%	100.00%
PBI 5: Delivery Accuracy Improvement	-	Grade B	-	B	-	100.00%	Higher is better	-	100.00%	0.00%	-	0.42%	-	100.00%
PBI 6: Local Content Development	4	12 LOI	4	2	200.00%	0.00%	Higher is better	200.00%	0.00%	0.00%	1.00%	0.00%	200.00%	0.00%
PBI 7: Production Flexibility	100% Project Completion	Machinery Readiness	100% Project Completion	0	17.00%	0.00%	Higher is better	17.00%	0.00%	1.00%	0.00%	0.00%	17.00%	0.00%
PBI 8: Zero Accidents	Max 4 Medium	No Leave Accident	Max 4 (Medium)	3	0.00%	0.00%	Lower is better	0.00%	0.00%	4.00%	0.00%	0.00%	0.00%	0.00%
PBI 9: SDG Policies Fulfillment	0	GHG Reduction 120 ton CO2	0	90,17	100.00%	75.00%	Higher is better	100.00%	75.10%	1.00%	1.00%	0.62%	100.00%	75.1%
PBI 10: Quality & Environmental Standards Compliance	IATF	On-time IATF & ISO 14001	IATF	On time	Delay	100.00%	Higher is better	0.00%	100.00%	1.00%	0.00%	1.37%	0.00%	100.00%
Total Internal Business Process Perspective										13.50%	2.57%	4.37%		
Learning & Growth Perspective														
PP 1: Employee Engagement	-	Score NPS 80	-	85	-	106.00%	Higher is better	-	106.30%	3.00%	-	2.81%	-	106.3%
PP 2: Employee Capability Improvement	-	14 hours / employee	-	15	-	107.00%	Higher is better	-	107.10%	2.00%	-	2.51%	-	107.1%
PP 3: IT Development & Utilization	-	2 Projects	-	1	-	50.00%	Higher is better	-	50.00%	1.00%	-	0.66%	-	50.0%
PP 4: Production Machinery Rejuvenation	100% Complete	100% Project Completion	100% Complete	0,75	17.00%	75.00%	Higher is better	17.00%	75.00%	2.00%	0.30%	1.31%	17.00%	75.0%
PP 5: Organizational Culture Development	Awareness 6	Awareness Index 7	Awareness 6	8	100.00%	114.00%	Higher is better	100.00%	114.30%	2.00%	2.00%	2.69%	100.00%	114.3%
Total Learning & Growth Perspective										10.40%	2.65%	9.97%		
GRAND TOTAL										100.00%	48.71%	71.82%		

Furthermore, the evaluation of PT XYZ's performance achievements was simulated using a performance evaluation design that had been rearranged using the BSC SQDC method. This is done to identify the extent of PT XYZ's performance achievements compared to the targets set so that efforts can be analyzed to improve performance achievements if the set targets have not achieved performance achievements (Oktavia et al. 2020). As explained in the previous Method Subchapter, the achievement of each performance indicator achievement is measured using a score calculation using two calculation formulas, namely KPI maximize (the higher, the better) and KPI minimize (the slighter/ lower, the better). The achievement value is marked by the traffic light system, three colors, namely green (≥100), yellow (80 ≤ KPI ≤ 100), and red (<80), which shows the achievement of the KPI target.

Table 2 shows that PT XYZ's performance achievements in 2023 are 71.82% (<80%). From the four perspectives of BSC, the lowest performance achievement was from the perspective of internal business processes at 4.37% and from the perspective of customers at 17.28%. Based on the grouping of performance achievements using the traffic light system, the two perspectives with performance achievement below 80% are marked in red (Table 2), which shows that the achievement of KPI targets is still low and not by PT XYZ's targets.

In the evaluation conducted on PT XYZ's performance in 2022 and 2023, the achievement of low non-financial performance, which is seen in the achievement of customer perspective performance (2023 achievement of 4.37%; 2022 achievement of 5.6%) and internal business processes (achievement in 2023 of 17.28%; 2022 of 9.50%) is still below the target set by the company, not reflected in the low achievement of the financial perspective. Based on the results of the study, although the achievement of non-financial performance did not reach the target, the performance of PT XYZ's financial perspective managed to achieve the set target (>80%) (Table 2). However, if further analyzed in PT XYZ's financial statements in 2022 and 2023, the ratio to cost of revenue (cost of revenue) and gross profit margin, it can be seen that the achievement of the performance indicators from the financial perspective has not been able to reduce the cost of revenue (cost of revenue) of the company.

In 2023,PT XYZ's cost of revenue will increase by 0.92% compared to 2022, and based on the forecast, the cost of revenue will increase by 1.43% in 2024. The increase in cost of revenue affectsPT XYZ's gross profit margin, which fell from 11.60% to 10.68% in 2023 and is predicted to decrease based on the forecast for 2024 to 9.25%. It is essential to recognize that financial performance is closely tied to non-financial indicators, such as customer perspective, internal processes, and learning & growth, as highlighted by Rangkuti (2011) and Saefuddin et al. (2017). If management focuses only on short-term financial performance and does not invest in a non-financial perspective for PT XYZ's future growth, this can hurt PT XYZ's long-term performance (Kaplan & Norton, 2002; Rangkuti, 2006; Saefuddin et al. 2017).

Overall, the achievement of PT XYZ's good financial performance is not in line with the achievement of non-financial performance, especially the achievement of customer perspectives and internal business processes. These findings indicate the need to formulate a comprehensive and multi-perspective strategy to improve the performance achievements of PT XYZ. In other words, improving PT XYZ's performance not only focuses on short-term financial performance but also needs to invest in other non-financial performance as a driver for long-term financial performance. Therefore, the recommendation of strategies to improve the performance achievement of PT XYZ is carried out for the achievement of low performance (red expression in Table 2) by the strategy map (Figure 2).

Strategy to Improve PT XYZ's Performance Achievement

The focus of PT XYZ's performance improvement strategy initiatives is carried out from the perspective of BSC, which is still low in achievement, namely from the perspective of internal business processes and customer perspectives (Table 2). First, compared to the other three BSC perspectives, the internal business process perspective has the lowest performance achievement ratio of 32.1% (4.37% of the total perspective weight of 13.50%), expressed in red (Table 2). Improving product quality and the effectiveness of operational processes to produce products, as well as the development of supply chain networks, are efforts that can be made to improve the achievement of an internal perspective of business processes (Panudju et al. 2016). Performance improvement strategies that PT XYZ

can carry out to improve performance achievement in performance indicators from the internal perspective of business processes that are still of low value (red) with the support of resources and programs in the form of strategic initiatives can be seen in Table 3.

Second, the achievement in the second lowest performance of PT XYZ is the customer perspective, with a performance achievement ratio of 54% (17.28% of the total perspective weight of 31.80%), expressed in red (Table 2). Some strategies that can be used to improve customer perspective performance are creating operational excellence, business growth, and customer loyalty (Harumantaka et al. 2019), increasing customer satisfaction, and reducing the number of complaints (Wulandari et al. 2017). Based on this, the formulation of a strategy to improve performance achievement from the perspective of PT XYZ's customers is carried out by improving performance on performance indicators from the perspective of customers that are still low or red with the support of resources and programs in the form of strategic initiatives as listed in Table 4.

Table 3. Strategic initiatives to improve performance from the perspective of PT XYZ's internal business process

Color Expression Value	Key Performance Indicators	Cause	Strategic Initiatives
0%	Supplier performance evaluation management - Zero D grade	1. Raw material delivery is not on time 2. Shortage of raw materials from suppliers	1. Evaluate the achievement of supplier delivery performance periodically by the PPC and Purchasing Dept. 2. Supplier appreciation performance program (with a minimum grade. B performance)
63.10%	Increased machine effectiveness (Downtime max. 10.6%)	1. Preventive maintenance is not carried out as scheduled. 2. Breakdown occurs outside the plan. 3. Spare parts are not available when the Maintenance team performs repairs.	1. Preventive maintenance & breakdown of production machines are scheduled periodically before making a monthly production schedule. 2. Implementation of spare part management system
0%	Local content product development - 12 Letter of intents	1. Part localization has not been approved 2. Changes in the target of elimination from mother company.	1. Escalate the localization of part approval through Japanese executives. 2. Re-alignment with mother company related to the part localization target.
0%	Flexibility of production capabilities - readiness machine for new customers	1. High workload in the Manufacturing Engineering Team. 2. Project delay. 3. Engine breakdown occurred unplanned.	1. Preventive maintenance & breakdown of production machines are scheduled periodically before making a monthly production schedule. 2. Mapping the competencies of team members and eliminating duplication of work processes.
0%	"Zero" work accidents	1. Not following work instructions. 2. Anti-fault system is not available.	1. Development of safety Dojos, increasing campaigns, implementation of behavioral base safety (BBS) and conducting regular refreshment training. 2. Increased incentives for employees who report Safety bottom up (SBU) due to near missed & potential hazards.
75%	Fulfillment of SDG policies	Increase in production volume in 2023	Purchase a REC (Renewable Energy Certificate)

Table 4. PT XYZ customer perspective performance improvement strategy initiative

Color Expression Value	Key Performance Indicators	Cause	Strategic Initiatives
0%	Competitive pricing - Approve price adjustment	1. Supporting data is not fully available. 2. Bureaucracy of price adjustment submission (between buyer & end customer)	1. Develop integration of historical databases of fluctuations in raw material prices, production supporting materials and labor costs. 2. Map & Strengthening good relations between buyers and end customers. 3. Escalate price adjustments through Japanese executives.
0%	Customer satisfaction - Grade A	1. Delivery is not on time 2. Shortage of raw materials from suppliers	1. Evaluate the achievement of delivery performance to customers periodically by PPC Dept. 2. Conducting supplier development for multisource suppliers
0%	Acquisition of sales (new types of products)	1. Process cost is higher compare to similar machining industries 2. The labor cost ratio is higher than similar industries	1. Reduce labor use by adding automation in machining process. 2. Workforce re-arrangement at uncritical posts on the machining line.

In addition to the two perspectives mentioned above, in order to improve the overall performance achievement of PT XYZ, PT XYZ can also consider general strategies to improve its performance achievements, as follows: (1) conduct periodic evaluations, (2) evaluate internal business processes to improve the performance of the internal perspective of business processes and customer perspectives, (3) use visual control to avoid hidden problems,(4) building a culture of stopping to improve, to obtain good quality from the beginning (first time right). Furthermore, employees, as the executors of PT XYZ's business activities, must understand the strategic goals derived from individual performance indicators. Therefore, management needs to communicate with employees so that they know how the implementation of their duties and responsibilities contributes to the performance of PT XYZ. In the end, overall strategy improvement, both from the perspective of low BSC and other strategies simultaneously, is expected to improve the overall performance of PT XYZ.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

PT XYZ's performance achievements in 2022 and 2023 are still below the company's target, reaching 48.74% and 71.81%, respectively. The order of highest performance achievement is the financial perspective, followed by the learning and growth perspective, the customer perspective, and the internal perspective of the business process. The strategy to improve the performance achievement of PT XYZ is focused on the two lowest perspectives, namely the internal business perspective and the customer's perspective. Supplier management, preventive maintenance and breakdown planning, spare part management, safety campaigns, and the purchase of renewable energy certificates are identified as strategic initiatives to improve the achievement of the internal performance of business processes, and from a customer perspective, such as improving customer relationships, price adjustments, multi-source suppliers, automation and workforce management.

Recommendation

PT XYZ needs to cascade performance evaluationsat the division, departmental, and individual levels to align performance indicators to achieve the company's vision. A periodic review process to ensure continuous performance improvement (the method that can be used is the PDCA cycle) allows the company to compare (check) the targets that have been set (Plan) with the achievement (Do) to develop prevention and improvement initiatives (Act). Additional perspectives are needed, for example, related to sustainability issues, so that companies can know other important factors and identify other strategic goals that support achieving the company's vision.

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