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BALANCED SCORECARD AS AN EFFECTIVE METHOD FOR PROCESS MANAGEMENT IN A TRANSPORT COMPANY

Summary. The strategic scorecard represents a major element of an enterprise's management system, which contributes to improving the key areas of operation, as well as precisely defining operational goals, metrics and tasks within the strategic framework. Increasing competitiveness, as well as progressive globalisation of the Transport, Shipping and Logistics (TSL) services market, requires constant adaptation to change from managers. It is, therefore, appropriate to use the strategic scorecard as it can be applied for continuous monitoring of progress in the implementation of strategy and, if necessary, for enhancing actions and the measurement system. The authors analysed a transport company operating in the Podkarpackie Voivodship, with the implementation of the strategic scorecard. The purpose of this article was to create a strategic scorecard for the transport company in the context of streamlining transport processes, while simultaneously improving the quality of customer service, translating into maximising financial results.

Keywords: balanced scorecard, process management, transport company

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1. INTRODUCTION

Currently, the transport market is developing very dynamically. Companies from the TSL industry are offering a variety of services to meet the increasing demands of their customers [4, 5, 10, 11, 18]. In light of this, in an era of such strong competition, transport companies must constantly improve their strategy in the context of their processes [2, 6, 16]. Thus, strategic management is a key element of management in transport companies [9, 12, 13]. In this aspect, the authors believe that the use of a strategic scorecard provides major opportunities to link these metrics with the improvement of the accepted strategy [1, 8, 17]. Moreover, the balanced scorecard includes a wide variety of goals and sensitive metrics that permit a better understanding of the functioning of the enterprise [7]. In addition, it combines traditional informative indicators about the current implementation of processes, with metrics that analyse these processes, as well as factors that contribute to shaping future results [3, 14]. Consequently, the use of a properly executed balanced scorecard affects the improvement of transport processes [15].

2. STRATEGIC SCORECARD AS AN ESSENTIAL ELEMENT SUPPORTING MANAGEMENT IN A TRANSPORT COMPANY

The use of a strategic scorecard carries numerous benefits, for example, it helps to transform the company's vision and mission into a strategy and to assign strategic goals to specific metrics and tasks. The balanced scorecard focuses on perspectives that include the key range of activities within the framework of process management. Moreover, this management tool combines traditional (financial) indicators that reflect past events in the company with metrics that analyse processes and factors (for example, innovations), which shape the future in terms of processes. An important advantage of introducing the balanced scorecard to the enterprise process management system is its ability to monitor the implementation of strategic goals daily, and consequently, improve them. Furthermore, a strategic scorecard enables the combination of planning and target setting with initiatives to increase the efficiency of transport processes, and as a result, build management feedback (Figure 1).

The strategic scorecard focuses on four areas in the company, the perspectives. The strategy map, which focuses on the causal link between the objectives and the measurers in the given perspectives (Figure 2), is therefore relevant in this respect.

3. CHARACTERISTICS OF THE ANALYSED COMPANY

The analysed freight forwarding and transport company is located in Rzeszów (Podkarpackie Voivodeship) and has been operating since 2015. At the beginning of its activity, the company provided only freight transport services, however, the scope of services expanded over time with its forwarding, as part of which contracts were signed with manufacturers in the chemical industry. The company provides services based on cooperation with permanent contractors. It disposed of a transport fleet that includes 6 transport sets of 3.5 t, 7 trucks of 12 t, 4 semi-trailers of 13.6 t, known as MEGA. In addition, with the growth of the company and increased demand for services, there emerged a need for investment in the form of warehouse construction. Accordingly, the organisational structure of the analysed company is as follows (Figure 3).

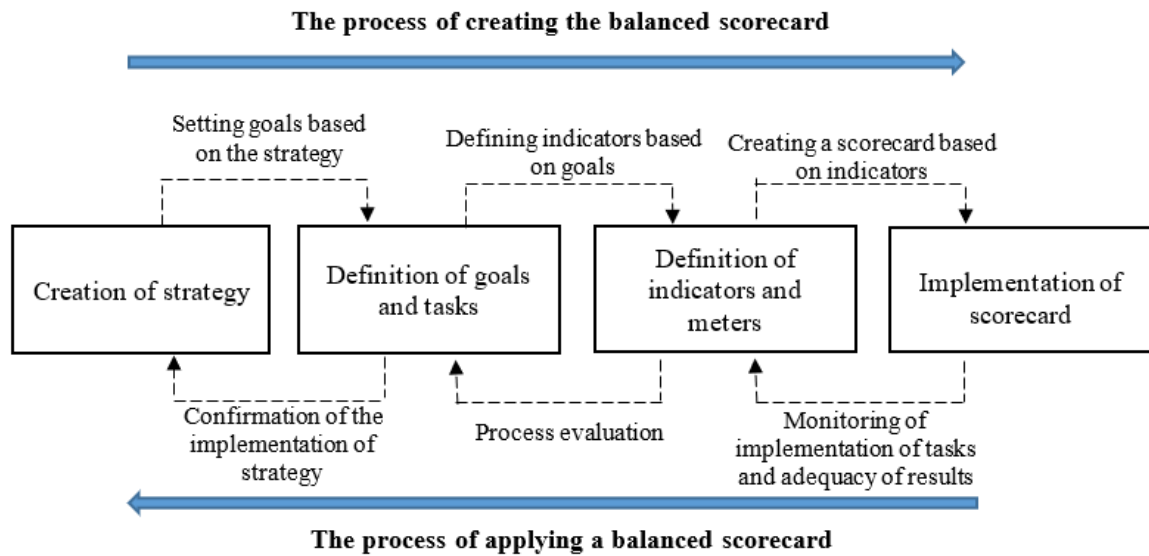


Fig. 1. Implementation and application of the scorecard in the enterprise [authors' study]

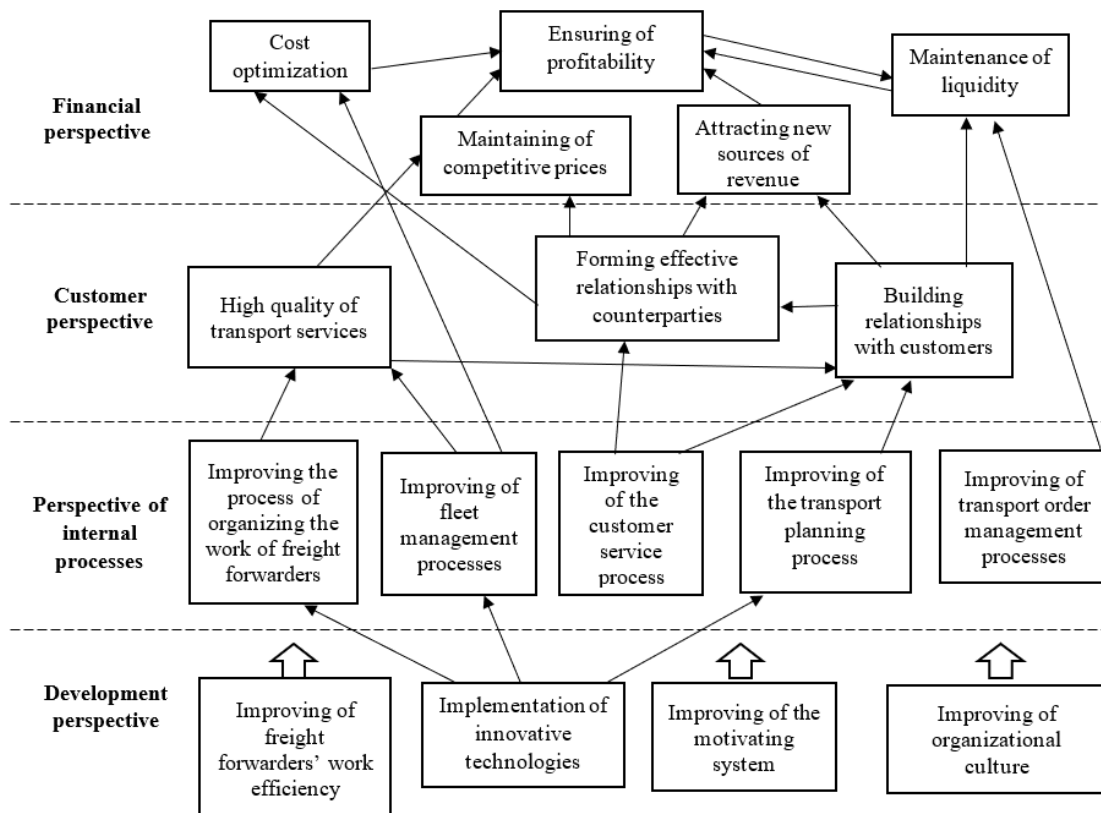


Fig. 2. Strategy map for the transport company [authors' study]

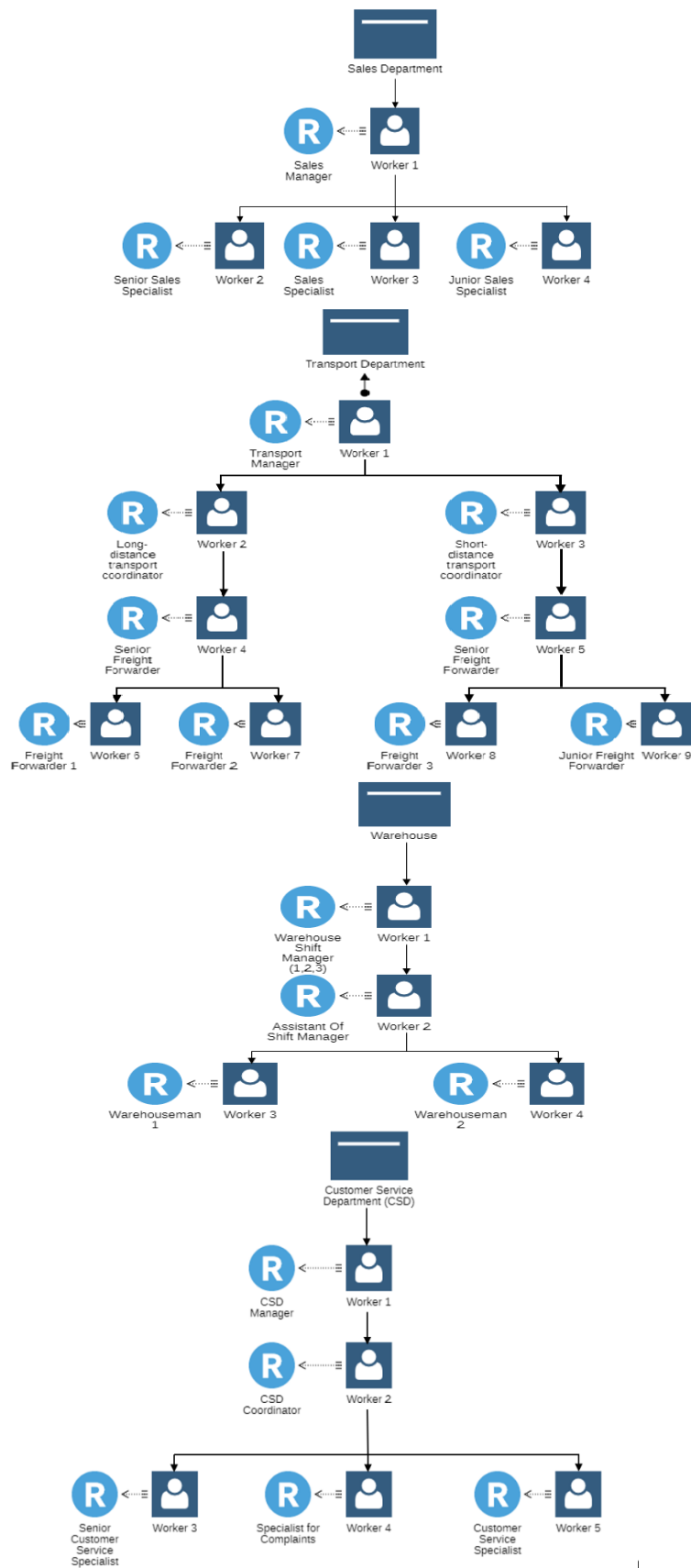


Fig. 3. Organisational structure at different departments of the studied freight forwarding company (R – denotes role) [authors' study using Adonis]

An integral element in the implementation of processes in the enterprise are costs, therefore, the leading objective in this respect is to generate maximum profit at minimal costs. Consequently, both management, operational and functional processes are fundamental to the company. In the case of the analysed enterprise, the process of accepting orders from the customer, the process of planning and implementing deliveries, and the process of accepting and issuing goods from the warehouse were considered.

4. ANALYSIS OF THE TRANSPORT COMPANY IN TERMS OF THE STRATEGIC SCORECARD

The strategic scorecard is an essential element of management in transport companies. It allows changing the strategy into specific tasks and measures for their implementation. The strategic scorecard draws particular attention to such areas as customer service, process improvement, internal processes and finance, which are to improve the situation in these four areas, either directly or indirectly, and to generate the greatest possible profits and high market value.

To describe specific goals, we used abbreviations, in which the first letter denotes the unit to which the goal relates (K – general management, D – department), the second letter is an abbreviation of the name of the perspective (K – client, f – finance), and the third symbol is an ordinal number, for example, KK1 is a target for the top management in the client's perspective.

The first perspective in the strategic scorecard is the financial perspective. The key area of the company's strategic goals is the financial indicators that make up the company's success. The financial perspective mainly includes profitability in terms of profit and expenses (Table 1).

Tab. 1.

The financial perspective of the strategic scorecard for top management in the analysed company

Goal	Metres	Value of metres
Increase of service revenue (KF1)	ROS (return on sales)	>0
Increase of asset profitability (KF2)	ROA (return on assets)	>0
Increase of equity profitability (KF3)	ROE (return on equity)	>0
Increase of enterprise productivity (KF4)	ROI (return on investment)	>0
Cost advantage in the industry (KF5)	Average cost per kilometre in comparison to competitors	PLN 2.90/km or 10% less than other companies

In the context of this perspective, the aim is to increase sales of services to the level of the ROS. Therefore, all action must be geared towards a high value of the ROS, which will consequently constitute a competitive advantage.

Another area of activity is the customer service perspective (Table 2). The organisation's strategic goals from the perspective of the client include increasing the market share of services and improving customer satisfaction with the quality of the provided transport services.

Tab. 2.

Customer perspective strategic scorecard for top management

Goal	Metres	Value of metres
Increasing the transport market share (KK1)	% of the sales of transport services in relation to sales in the segment	min. 20%
Improving customer loyalty (KK2)	Number of regular customers increase in the number of customers number of new customers average value of transport orders	50 35% 20 per month 1600 €
Increasing customer satisfaction (KK3)	Degree of customer satisfaction share of long-term contracts repeatability of transactions with 1 customer number of complaints	min. 98% 40% min. 3 per week 0
Ensuring timely delivery of services (KK4)	Percentage of orders executed on time	99%
Improving the company's image (KK5)	Place in the ranking of the best companies according to customers	1-5

Accordingly, each goal and measure must be transformed into specific tasks to facilitate the implementation of the strategy, for example, the company seeks to increase its market share in the target market (KK1). The position of the company in the market is an important indicator through which the company can observe its percentage of sales of transport services with other businesses. Following such an assessment, managers have the opportunity to take action towards improving the offered services. Subsequently, the company will maintain its well-established position, and since the goal of the senior managers is to gain customer loyalty (KK2), then by taking such actions, the company can even achieve the position of leadership in the competitive transport market. Hence, in this context, customer satisfaction (KK3) is the main determinant; customer satisfaction determines the success of the company. For this reason, it is quite important to provide transport services in just-in-time and door-to-door systems, as well as ensure continuous analysis of services, and consequently, their improvement to meet the highest standards (kk4). Such actions will translate into another equally important element, namely, the company's image (kk5), upon which the company can expand the range of services, and thus, maximise the financial result. The key strategic goal for the analysed enterprise is cost optimisation. In this aspect, the company seeks to reduce operating costs (Table 3), which will be measured by the percentage of the load capacity of each type of vehicle. For large semi-trailers, this is 33-34 euro pallets (dimensions 80 cm*120 cm), for a solo vehicle – 14-20 pallets, and a bus 8-10 pallets. Therefore, it is the task of the forwarding department to plan transport routes in such a way as to convey as many goods as possible at the lowest possible cost. Furthermore, the forwarding department should aim for a vehicle fill rate of at least 96%.

Tab. 3.

Financial perspective of the balanced scorecard for the forwarding department

Goal	Metres	Value of metres
Reduction of operating costs (DF1)	Filling of cargo space: semi-trailer, solo vehicles, buses up to 3.5 t	96% 96% 100%
Efficient cost management (DF2)	Supercharging in the unloading area	30 per month

High-quality transport services is a priority for the analysed company (Table 4). Thus, in the given perspective, the forwarding department is driven by a single goal - timeliness (Fig. 4).

Tab. 4.

The customers' perspective of the balanced scorecard for the forwarding department

Goal	Metres	Value of metres
Ensuring the punctuality of services (DK1)	Punctuality of departure from the place of loading, timeliness of arrival at the place of unloading, timeliness of transshipment (if applicable) number of delays, % ETA 2h (estimated time of arrival)	98% 98% 100% 1 per quarter 70%
Providing customer access to information (DK2)	Current order status update	hourly

The first step in the process of cargo movement is loading onto the vehicle. The task of the transport department, together with the warehouse and the driver, is to cooperate efficiently to meet the deadline (DK1). The analysed company uses the ETA to provide high-quality services. If the customer is very time-sensitive, the company offers express or critical transport, which means that the cargo will be delivered in the shortest possible time. The ETA indicator gives the customer information about the time of delivery. Towards improving the quality of service, the top management set an ETA target of 2 hours (that is, the estimated delivery time may differ from the actual time by a maximum of 2 hours) at 70%. This target applies not only to express shipments but also to all other shipments, so the company must aim for at least 7 out of 10 to be delivered to the destination within ≈ 2 hours of the ETA. Although the company strives to ensure that all deliveries are carried out timely, however, in practice, considering unexpected events, delays may occur. The actions of all functional cells responsible for transport are aimed at eliminating such issues, and the maximum number of deliveries carried out after the deadline is 1 delivery in 3 months. In terms of high-quality customer service, an equally important question in the transport department is keeping the customer informed of the order execution status (DK2).

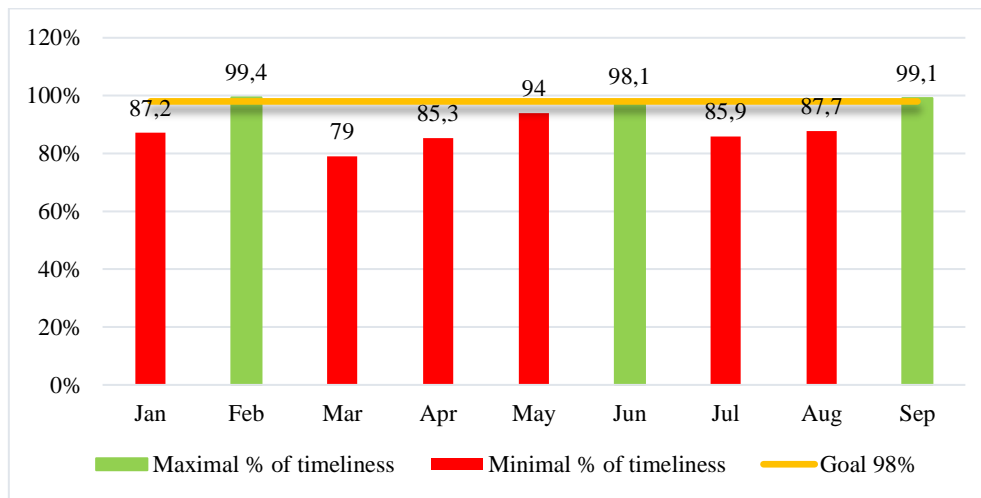


Fig. 4. Timeliness of deliveries at the analysed enterprise

The profit of a company offering services is largely based on the sum of margins on each transaction. To maximise profit, the analysed company generates the desired margin of 10-20% of sales (DsF1) (Table 5).

Tab. 5.

Financial perspective of balanced scorecard in the analysed enterprise

Goal	Metres	Value of metres
Profit maximisation (DsF1)	Margin per transaction	10-20%
Increase in sale revenue (DsF2)	Amount of sales of transport services	PLN 50,000 per month

In addition, the company applies a preferential pricing policy for regular customers. When the margin is, for example, 10%, it is applied to new customers to encourage further cooperation. Another margin value will be determined in the case of express transportation when the customer is keen on the fast delivery of cargo, and our company, as one of the few in the region, can offer such a service. Another major goal for the company is to increase the sale of transport services. Therefore, the managers strive to ensure that each employee of a given department receives orders for at least PLN 50,000 every month; according to the financial plan, exactly such an amount will be optimal for covering the costs of the company's activities and ensuring financial liquidity. Approximately 50% of the revenue is to come from the delivery of services to regular customers who, for example, will have to transport 24-30 tonnes of goods two or three times a week. On the other hand, around 5-10% of revenue can originate from the orders of customers who will use the company's services not less than once a month. The remaining 40-45% of revenue should be the result of effective negotiations of freight forwarders with new customers.

5. CONCLUSIONS

The strategic scorecard is an extremely important element of effective management in transport companies. It is a tool for implementing the adopted strategy since it allows determining both specific metrics of strategic goals and a list of tasks, the implementation of which will allow achieving the desired results in line with the company's strategy. In this article, the authors developed a strategic scorecard for the studied company to accurately determine the desired values, including those from the client's perspective, through which managers can determine whether the adopted strategy is appropriate or requires improvement. Subsequently, the presented scorecard has contributed to the identification of vulnerable areas in the analysed enterprise. Thus, by taking immediate action, the company's processes were streamlined, leading to the expansion of activities on the European market through cooperation with new counterparties. Consequently, the inclusion of the tool presented in this article in the activities of the analysed enterprise will ensure success in the long term.

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