

APPLICATION OF THE BALANCED SCORECARD IN A SELECTED MINING SERVICES COMPANY

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Purpose: The paper aims to show the application of the Balanced Scorecard in a mining services company as a tool enabling the implementation of the company's strategy.

Design/methodology/approach: The aim of the paper will be achieved through web/desk research, critical analysis of literature on the topic of the paper and case study.

Findings: The article contains a literature study of the Balanced Scorecard and indicates how important the development and implementation of the strategy is in the activities of mining services companies. The process of developing the strategy and its implementation is shown on the example of a mining services company (Polish abbreviation p.u.g.), existing on the mining industry market for more than twenty years, employing from 300 to 500 employees, depending on the situation in the market, with a defined mission and vision. The Balanced Scorecard (BSC) was used as a tool for translating the company's strategy into its operations. The strategic objectives and their measures, as well as the conditions for adopting BSC into the operations of a mining services company, are presented.

Originality/value: The example of the application of the Balanced Scorecard in the selected mining services company presented in the article may serve as an example for other mining companies.

Keywords: Balanced Scorecard, strategy, strategic management, mining services company.

Category of the paper: Literature review and Case study.

1. Introduction

Today's market economy is subject to continuous and dynamic changes. Organisations operating in such an environment are forced to seek effective ways of management as well as methods and tools to support the process. Only effective management of a business entity allows a company to exist and grow in the long term. Effective business management should be understood primarily as an optimisation of the use of the company's resources and carrying

out continuous activities aimed at achieving further goals. Therefore, each business entity whose goal is to gain and maintain a strong position in the market should have an established action plan that will determine the company's direction for development as well as precise strategic objectives and the manner of their implementation.

There are many various concepts related to strategic management. This article presents one of them, i.e. the Balanced Scorecard. This concept enables and facilitates simultaneous activities focused on four basic perspectives: financial, customer, internal processes, and learning and growth (Szymańska, 2014, p. 79). The predicted efficiency of a business entity will largely depend on the ability to coordinate the above perspectives.

The current situation faced by service companies in the mining industry requires achieving and maintaining competitiveness.

The Council of Ministers adopted the Programme for the Coal Mining Industry in Poland on 23 January 2018. The programme consists of the diagnostic and analytical parts as well as implementation. In addition, there is a social agreement pending notification by the European Commission (an agreement between trade unions and government representatives) signed on 25 September 2020 that envisages the closure of mines by 2049. Consequently, a systematic year-on-year reduction in the level of extraction is to be expected. It will be pursued by extinguishing mining regions until the complete closure of mining plants. Mining services companies, which until recently were an important part of the coal companies' business, are the first to feel the effects of this policy. In previous years, the proportion of corridor excavations carried out by service companies compared to total preparatory works reached up to 40%. The situation is similar in works related to the modernisation of excavations, operation and maintenance of machinery and equipment, including in particular excavation haulage equipment, reinforcement and decommissioning works, shaft works, etc. In 2021, following the decision to phase out coal as the primary energy carrier, the amount of demand for external parties to run projects for coal companies has decreased by several tens of per cent. As a result, a large number of service companies have applied for the few published restricted or open tendering procedures.

When analysing the current year, the number of potential external applicants per tender ranges from four to a dozen. To illustrate the scale of the problem, one can go back to the years 2010-2015 where the number of service companies entering per tender advertised was two on average. It was not at all uncommon for tenders issued by coal companies not to be carried out due to the lack of applicants.

The management of companies must operate under the threat of emergencies, in the changing and competitive environment. Hence, it becomes crucial for the company to have a strategy and effective strategic management to be able to operate. This article, based on a literature study, will present an example of strategy implementation in a selected mining services company through the use of the Balanced Scorecard. In the literature on the subject, and more specifically in the works of such authors as, i.a., Kowal. B., Karkula, M., Kowal, D.,

Wodarski K., Karbownik A., Sierpińska M., Emerling I. and others, there are many examples of the application of the Balanced Scorecard in mining companies. In their work, the authors present an attempt to adapt this concept to the specifics of the mining industry in order to ensure the development of the industry and improve competitiveness and operational efficiency. They show the application of the Balanced Scorecard concept in relation to large economic entities, i.e. mining companies, or present its application in a general way, showing directions rather than effects. Mining service companies are usually smaller, privately owned entities with relatively little capital where, unlike state-owned mining companies, they cannot expect state support. Hence, the application of the Balanced Scorecard as a tool for the strategy and possible measurable effects may help the company to stay afloat in such a volatile and unpredictable market as the mining industry (fluctuation of coal prices, changing government policies in different periods).

2. The role of the strategy in the strategic management of a company

Formalised strategy is nowadays the basis for managing a company focused on growth and value increase. The literature review shows that there are many definitions of the term strategy and derived terms such as strategic planning, strategic management, long-term planning. Corporate strategy in the literature is interpreted differently and considerations in this regard are presented in the works of Wodarski K. (2019), Kowal B. (2010). According to P. Drucker (2005), the strategy involves analysis of the current situation and changing it if needed. A. Chandler defines strategy as "establishing of the principal long-term objectives of a business and the adoption of such courses of action and such allocation of resources as are necessary to realise the objectives. Porter (1980), on the other hand, defined a company's strategy as the specifying how a company should operate in order to be competitive with others, setting objectives (company mission or specific goals) and the rules necessary for its operation to achieve these objectives. A properly developed strategy allows the company to find answers to the fundamental strategic questions, the sensitive nature of which determines the performance of certain analyses of strategic nature that are key to proper management (Wysocki, 2016, p. 55). The major importance of strategy in the management process of a company results primarily from the fact that nowadays strategy is not only a long-term plan for the functioning of an organisation, to which many entities owe their market success and survival in the market but also a tool that can explain the reasons for failures resulting from errors committed during its formulation and implementation (Kozmiński, Piotrowski, 2013, p. 123; Berliński, Penc-Pietrzak, 2004, p. 37).

The cited definitions indicate a lack of consistency and unambiguity in defining a complete theory of strategy. One of the Canadian scientists, H. Mintzberg, put the strategy in the form of 5 P's, presenting a very universal approach (Drażek, Niemczynowicz, 2003):

- P for *plan* or type of deliberate action,
- P for *pattern*, which is a model of formalised action.
- P for *play*, or control, or actions aimed at achieving a specific goal.
- P for *position*, understood as seeking and achieving a favourable position in the environment.
- P for *perspective* as a perception of one's position in the future.

K. Obłój, on the other hand, proposes dividing the various approaches and concepts into four groups, namely:

- The first approach represents those ideas that are the most popular, i.e. it views strategy as the creation and implementation of a company's action plan.
- The second approach views strategy as the organisation's position in relation to its environment.
- The third approach defines a strategy as a permanent pattern of action constituting a set of rules and ways of reacting.
- The fourth approach defines strategy as emphasising the importance of the process of self-identification of the company, shaping its identity (Obłój, 2001).

In Polish mining companies, the understanding of strategy is based on a synthesis of the majority of presented approaches, but primarily on the results of ideas created by representatives of one of the schools of thought concerning the strategic management – the planning approach (Wodarski, 2019).

Strategic management is considered a way of understanding and analysing the organisation, or as a philosophy of the organisation, enabling it to adapt to the turbulent environment, that is, to the rapidly changing environment in which the organisation functions (Szymańska, 2014, p. 80). With proper strategic management, a company can understand the reality of the organisation and determine the development directions and ways of action. Many definitions of strategic management can be found in the literature. According to R.W. Griffin, it is "a management process aimed at the formulation and implementation of strategies that ensure a proper alignment between the organisation and its environment, and the achievement of its strategic objectives" (Griffin, 1996). Preparation of a strategy for a modern company is a complex process. It is necessary to conduct in-depth analyses, in particular regarding the availability of resources and competencies of the company, the idea that is the subject of the strategy, the risks associated with its formulation and implementation, the costs of its implementation and the possibility of success (Kozmiński, Piotrowski, 2013; Berliński, Penc-Pietrzak, 2004, p. 37).

A comprehensive concept of strategic management was presented by M. Romanowska, who described it as a process consisting of three stages (Gierszewska, Romanowska, 1997). The first stage – the strategic analysis of the enterprise – is a set of activities diagnosing the enterprise and its environment, enabling the determination of current and future opportunities and threats, as well as strengths and weaknesses, and the assessment of the strategic position of the enterprise. The second and third stages are the development of the strategic plan and its implementation.

The literature on strategic management schools of thought distinguishes the following ways of defining strategy formulation (Mintzberg, Ahlstrand, Laampel, 2004, p. 14):

- the classic planning approach, understood as a process of formulating the strategy in stages, known as the top-down approach. This means that projects are derived from structured and formalised processes at board and management level,
- an instrumental approach, where the strategy process is illustrated by "muddling through". Project ideas in this case are generated decentrally in the business units, while management limits itself to general guidelines for a specific process.

In the classical approach to strategy formulation, the process can be divided into two phases: the analysis phase and the decision phase. Particular stages correspond to each of the individual phases. The stages, in turn, require performing specific actions, which include: analysing the company's environment, formulating the strategy, choosing the organisation's strategy, choosing competitive strategies, creating plans, implementing the strategy and monitoring it (Pomykalski, 2001, p. 289-291). The process of strategy formulation and selection can be more or less formalised but appropriate methods of strategic analysis are always used. The use of strategic analysis methods (Griffin, 2017) can even be considered a prerequisite for the adoption of strategic management concepts. In a strategic analysis simple as well as more complex methods with varying degrees of complexity are adopted. Strategic management deals with the important intended and disclosed initiatives taken by the management boards of companies on behalf of their owners, using the resources at their disposal, in order to strengthen the functioning and performance of companies in their external environment (Polowczyk, 2012).

3. Balanced Scorecard as a strategic management tool

The company's strategy alone will not be sufficient until it is translated into the company's operating activities. A tool that enables translating the organisation's strategy into its operating activities is a management concept developed by R. Kaplan and P. Norton referred to as the Balanced Scorecard. The Balanced Scorecard is considered one of the most interesting business concepts. It enables the solution of key performance measurement problems. BSC identifies the factors on which the future performance of the company depends, allowing focus on key

resources. The use of BSC makes it possible to translate the results obtained from intangible resources into measurable indicators that reflect the level of the strategy. The Balanced Scorecard is a system for measuring the company's efficiency from a multi-perspective point of view, useful in translating the organisation's vision and strategy into measurable goals (Cholewicka, Goździk, 2002, pp. 6-9; Kaplan, Norton, 2001). The basis for creating the Balanced Scorecard is the organisation's mission and strategies (Fig. 1).

A company's mission is the specific reason for a company's existence, distinguishing it from others (Drażek, Niemczycki, 2003, p. 31). It is a desired, clear and convincing picture that describes the future of the company in terms of aspirations (Urbanowicz-Sojkin, Banaszyk, Witczak, 2007, p. 236).

A company's vision, on the other hand, describes the aspirations of the company and constitutes its image (Drażek, Niemczynowicz, 2000, p. 31). It also serves as the most general guideline for all activities it conducts (Urbanowicz-Sojkin, Banaszyk, Witczak, 2007, p. 237).

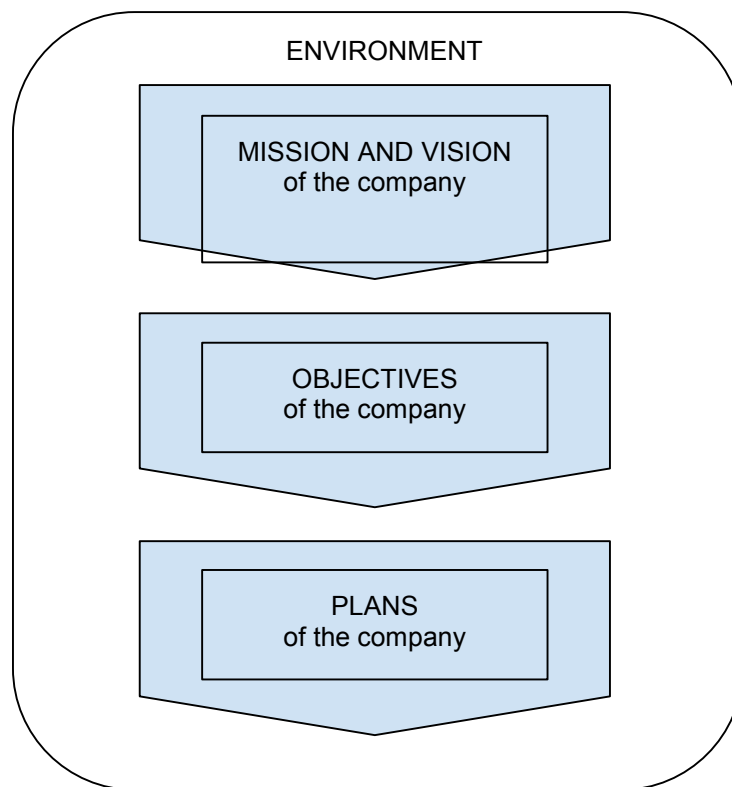


Figure 1. The essence of planning in a company in general. Source: Wodarski, 2019, p. 2.

The Balanced Scorecard, then, is a tool used to illustrate the cause-and-effect relationships to compare financial ratios from past activities with ratios that stimulate future activities of the organisation. It combines short- and long-term ratios concerning both financial and non-financial perspectives into a single evaluation system. This allows BSC to establish a long-term strategy with current operations and financial results (Bukh, Molni, 2005).

The Balanced Scorecard is a multidimensional structure based on four perspectives, i.e.: financial, customer, internal processes and learning and growth perspective. (Brzóška, Karbownik, Kruczek, Szmal, Żebrucki, 2012). Table 1 shows the characteristics of each perspective in BSC and Fig. 2 illustrates them.

Table 1.
Characteristics of perspectives in BSC

Perspective	Characteristics
Financial	Assesses how the organisation is perceived by its customers. Financial ratios indicate whether the implementation and realisation of the strategy improves the company's economic performance. Examples of financial objectives may include operating profit, rate of return, and Economic Value Added.
Customer	It shows how an organisation creates value for its customers. Management staff identify the customers and market segments in which the company will compete as well as the organisation's performance ratios related to them. Correctly formulated strategy allows to isolate the ratios i.e. satisfaction, retention, profitability and acquisition of customers, volume and value target market share.
Internal processes	Defines priorities from the perspective of delivering value to owners and customers, as well as internal processes in the company. The company's staff identify key internal processes in which the organisation must excel. Such processes must enable the organisation to create value that will attract and retain customers of the target market segment and meet shareholder expectations for financial performance.
Learning and growth	Assesses the growth of employees and their satisfaction with the performed tasks. Identifies resources the organisation is developing to lay the foundation for long-term growth and improvement. A company's source for learning and growth is people, systems, procedures. The organisation must invest in retraining human resources, improving technology and information systems, and adjusting organisational procedures.

Source: own study based on Brzóška J., Karbownik A., Kruczek M., Szmal A., Żebrucki Z., 2012.

A strategy map is the first activity to be carried out when implementing the Balanced Scorecard. It describes how a business entity intends to pursue its mission and vision and consequently achieve its main strategic objective. A strategy map is thus a description of the cause-and-effect relationship between the strategic main objective and the formulated strategic objectives, which are defined in the individual perspectives of the Balanced Scorecard. It is therefore an extension of the four-perspective Balanced Scorecard model, further supplemented by detailed subgroups representing the dynamics of the strategy, which improves clarity and focus. The strategy map allows employees to see the links between goals and their corresponding measures. It is a visual presentation of a company's strategy, which is the principle of combining objectives in four perspectives to promote a better understanding of the strategy and greater commitment to it (Kaplan, Norton, 2004, p. 25).

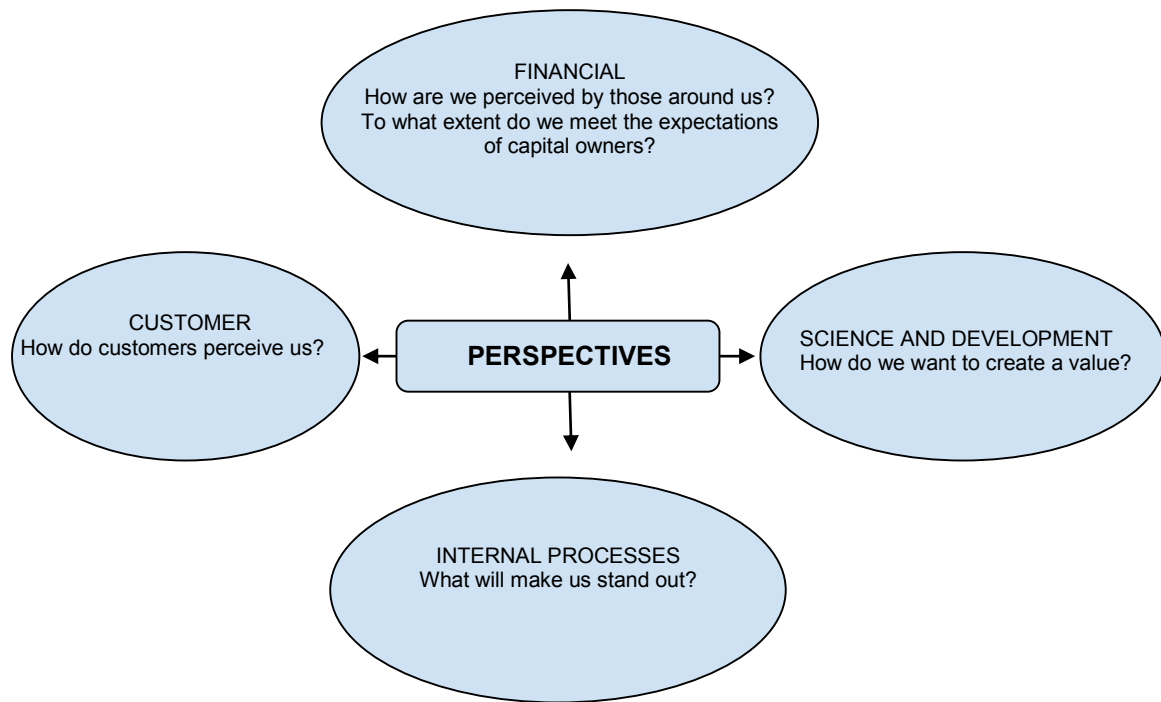


Figure 2. Perspectives in the Balanced Scorecard Source: Kaplan, Norton, 1992, p. 72.

4. Applying the Balanced Scorecard in a selected mining services company

Based on the conducted literature study, the implementation of mining services company strategy through the concept of a Balanced Scorecard was proposed.

The mining services company under review has been in business for 20 years. It carries out mining projects concerning:

- complex drilling of coal, coal and stone and stone excavations,
- modernisation of mine excavations,
- construction, operation of conveyor belts, scraper conveyors,
- bottom rocks collection,
- making belt conveyors by cold method, vulcanisation.

The company has its own repair and service facilities. In addition, the assets include mining machinery such as roadheaders, dinting loaders, lightweight type conveyors and machines making belt conveyors.

During its existence, the level of employment in the company under review has varied between 350 and 700 employees. On average, four mining projects and two in making conveyor belts are executed per year, generating revenue of PLN 35-45 million on average. The organisational chart of the company under study is shown in Fig. 3.

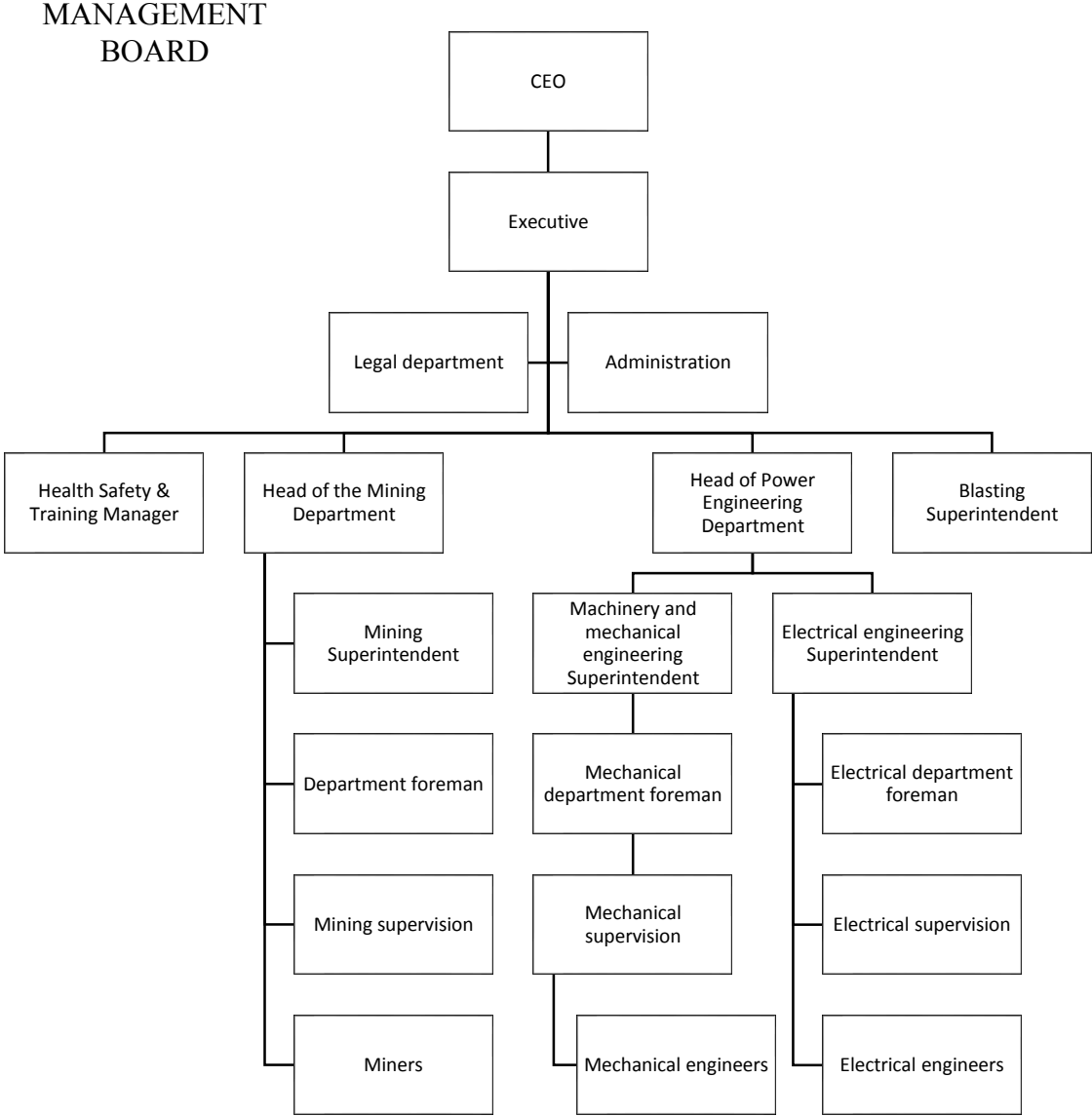


Figure 3. Organisation chart of the mining services company under review. Source: Author's own elaboration.

The company under review has a vision and mission formulated as follows.

The mission of the mining services company under review is to provide services and technical solutions to clients (mining companies) to strengthen their market position.

The mining services company meets the needs of its customers with its skills, experience and knowledge. The mission of the mining services company is to carry out projects for mining companies in the area of drilling, modernisation of underground excavations and making conveyor belt connections.

The company's vision is to achieve a significant position in the underground mining services segment. Achieving a leading position among mining services companies employing more than 500 employees in the execution of projects related to drilling, modernisation of underground excavations and achieving a leading position in the segment of performing conveyor belt connections performed for the benefit of the mining industry.

The strategic objectives of the mining services company were formulated based on the four balanced scorecard perspectives are presented in Tables 2, 3, 4 and 5. In addition, the tables set out measures whose values will be monitorable from year to year, at the same time indicating the degree of achievement of each of the strategic objectives. Each measure for assessing the degree of achievement of the strategic objectives has been defined with identification of unit, has a brief description, the source of the information, the frequency of monitoring the measurement and the expected values.

Table 2.

Strategic objectives of the mining services company in the financial perspective

No.	Strategic objective	Unit
1.	Obtaining a projected financial result	1. Net financial result per project, project portfolios 2. Unit result per project or unit result per 1mb of progress(drilling or modernisation)
2.	Maintaining financial liquidity	1. Current financial liquidity indicator
3.	Increase in return on assets	Return on assets
4.	Completion of financial restructuring by 2022	1. Restructured liabilities repayment rate

Source: Author's own elaboration.

The financial perspective presented includes objectives such as: financial result, profitability, financial liquidity. The objectives set out in this way are influenced by macroeconomic conditions such as state and European Union policy towards mining sector. The volatility and necessity of mining restructuring forces mining companies to operate through the lens of recognized performance criteria and value paradigm. The best example is the current situation in which mining service companies operate.

Table 3.

Strategic objectives of a mining services company from a customer perspective

No.	Strategic objective	Unit
1.	Gaining a strong position in the aspect of drilling, modernisation and in the performance (cold technology and vulcanisation) of conveyor belts in mining plants and outside them.	1. Share in projects dedicated to external entities by mining companies. 2. Share in linear metres performed in the extractive industry by external parties. 3. Share in the orders of belt conveyors for mining and non-mining. 4. The number of conveyor belts made for the extractive industry and beyond.
2.	Increased customer satisfaction (coal companies)	1. The customer satisfaction indicator (number of comments in work acceptance protocols, completion of tasks according to schedule)
3.	Improving the quality of project execution	1. The indicator of contractual penalties

Source: Author's own elaboration.

The customer perspective in the current period primarily refers to the definition of direct competitiveness objectives, an orientation towards more efficient service in the market, including the analysis of customer satisfaction of mines and coal companies.

Table 4.*Strategic objectives of a mining services company in the internal process perspective*

No.	Strategic objective	Unit
1.	Adjusting the level of employment to the level of projects carried out	1. Labor productivity: overall, underground, annual. 2. Employment structure: underground (85%), surface (15%) 3. Employment level
2.	Reducing operating costs	1. The level of costs involved in executing the project. 2. The level of average unit costs for the execution of 1 linear metre of a mine working.
3.	Increasing the efficiency of investment outlays.	1. The indicator of the amount of investment outlay per project. Net present value (NPV) of the investment programme for a mining services company
4.	Adapting preparatory work capacity to the needs of coal companies Adapting capacity to implement conveyor belts to the needs of coal companies and other branches of industry.	1. Mining services company capacity to execute preparatory works 2. Mining services company capacity to implement belt conveyors.

Source: Author's own elaboration.

The objectives in the internal process perspective result from the specific conditions of a company operating in the underground mining industry, particularly in the coal extraction process. Operating in the mining sector generates high labour costs. Hence, the efficiency and competitiveness of an enterprise depend to a large extent on the structure and level of employment.

Table 5.*Strategic objectives of a mining services company in a perspective of learning and development*

No.	Strategic objective	Unit
1.	Ensuring an adequate level of competence of managerial staff	1. The indicator of annual expenditure on managerial staff training. 2. The number of mining approvals obtained.
2.	Ensuring an adequate level of employee satisfaction	1. Employee satisfaction index
3.	Standardisation and modernisation of the IT systems used	1. The share of standardised IT systems

Source: Author's own elaboration.

The objectives of the learning and development perspective include management systems as well as human resources development.

A strategy map was developed for the selected company to verify the efficiency of its operation, which is presented in Fig. 4

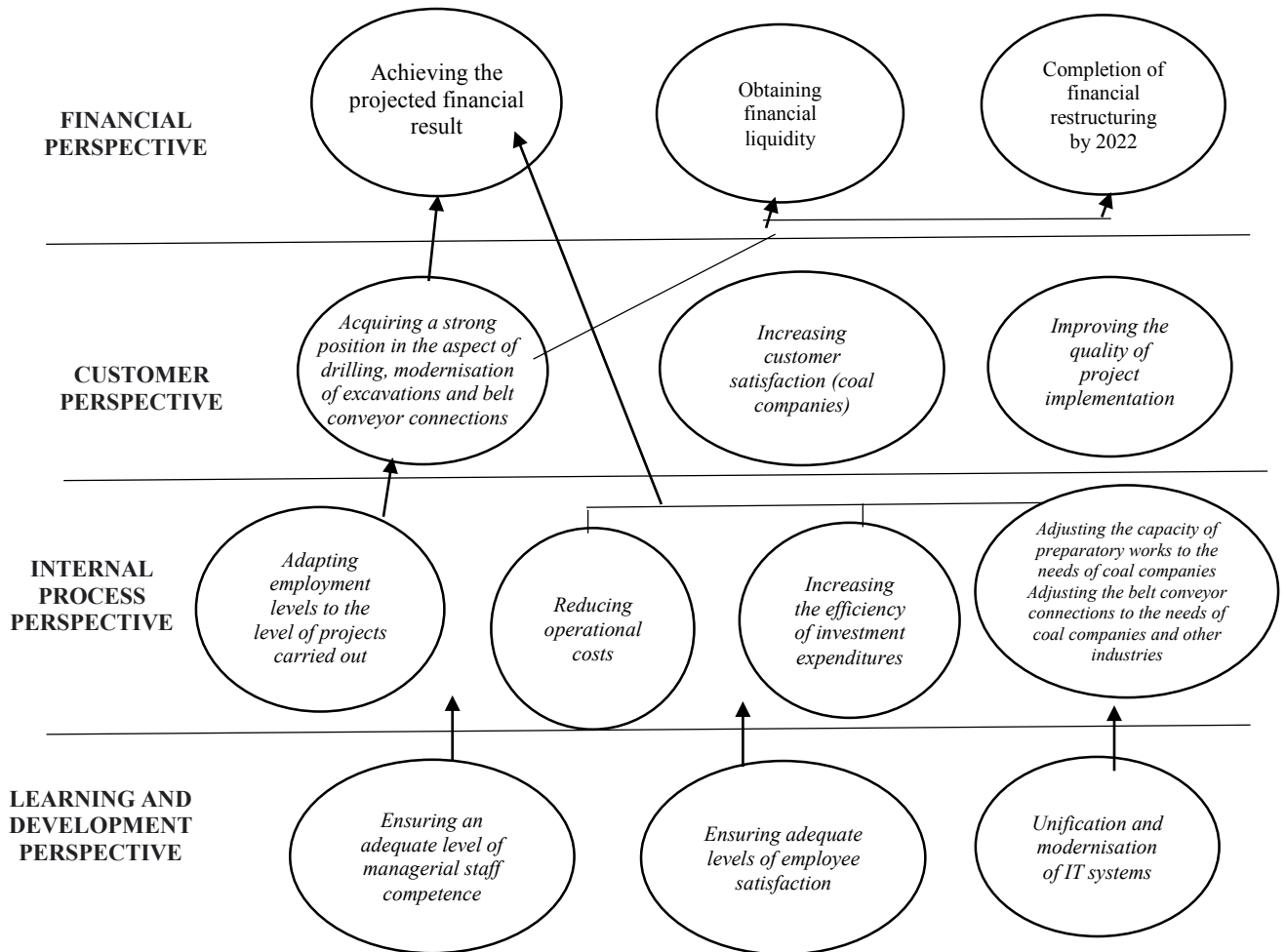


Figure 4. Strategy map in a mining services company. Source: Author's own elaboration.

The analysed company, based on a definition of strategic objectives contained in Tables 2-5, adopted the achievement of the predicted net financial result as the dominant strategic objective. The purpose of the individual indicators presented is only to provide information regarding the extent to which the objective has been achieved. To achieve the strategic objectives, it becomes necessary to determine the actions to be taken for each objective. To achieve the strategic objective, it is, therefore, necessary to achieve other objectives. An overview of links between the objectives referred to below for achieving the projected net financial result as the dominant and long-term strategic objective is shown in Fig. 5.

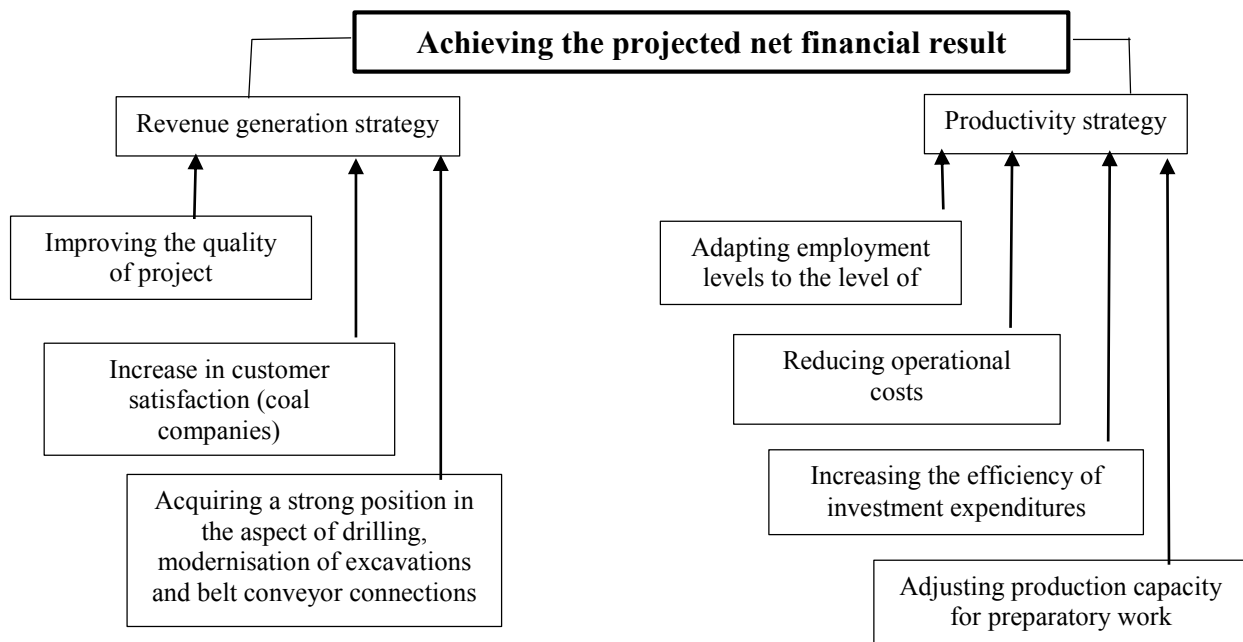


Figure 5. Links between specific objectives to achieve the expected net financial result as the dominant and long-term strategic objective. Source: Author's own elaboration.

5. Effects of the Balanced Scorecard application

The implementation of the Balanced Scorecard in a mining services company has brought certain results. The first noticeable effect after applying the balanced scorecard was the showcasing of cause-and-effect relationships that lead to the achievement of the intended objectives. The mining services company learnt to measure their performance in terms of the objectives set. The tangible benefits of using the balanced scorecard in the context of four perspectives are presented below.

a. The effects of implementing the balanced scorecard in the financial perspective

As defined in paragraph 4 of the article hereby, the dominant strategic objective is to achieve a positive net financial result. The results are obtained by analysing the return on equity (ROE). After introducing the balanced scorecard, the mining services company obtained:

- an increase in ROE of 0.4 percentage points compared to the previous year when the balanced scorecard was not used,
- an increase in the profit of 6% year-on-year (the year without the balanced scorecard to the year with the balanced scorecard),
- an increase in the annual sales revenue by 4%,
- reducing operational costs by 8%.

The implementation of the described objectives resulted in a significant improvement in the situation of the entire company despite the difficult situation of the external business environment (restrictions on business activities in the shrinking hard coal market). The higher profit resulted in greater opportunities in investment activities. The mining services companies under review used the generated resources to finance development activities, which resulted in a partial change of the business profile from typical mining services to mining and tunnelling services.

- b. The results of implementing the balanced scorecard from the customer's perspective
Creating a positive public image among customers of a mining services company has been identified as a key objective in this perspective. Customers are understood to be individual coal companies and their constituent mining companies. In this regard, it was assumed that the best way to satisfy the customer was to complete the mining projects within the timeframes contained in the detailed requirements of the orders and the defect-free partial and total acceptances. Table 6 presents a comparison of the years in which the balanced scorecard was used and the years in which it was not used.

Table 6.

Problems in the course of project implementation occurring in years with the use of the balanced scorecard up to the year when it was not used

Problems in the course of project implementation	The year without the balanced scorecard application	The year with the balanced scorecard application
Failure to issue an invoice due to defects in sub-commissioning, i.e. monthly on time. (the client makes a positive acceptance after the removal of defects following a protocol acceptance)	6	2
Contract withdrawal for reasons attributable to the Contractor	1	0
For delays in the removal of defects identified at the acceptance of the subject of the contract or during its warranty period	2	0
In the event of delay in performing the subject of the contract	2	1
In the case of not employing persons indicated in the named list of persons	5	0
Other (taking property, coming to work under the influence of alcohol, etc.)	3	0

Source: Author's own elaboration.

The achievement of the set objective is directly reflected in the number of contractual penalties. In the year in which the company implemented strategic management using the balanced scorecard, it achieved savings of PLN 1.2 million, i.e. much less was spent on paying contractual penalties.

- c. The effects of implementing the Balanced Scorecard in the perspective of internal processes

In the context of this process, the company has restructured its workforce. Table 7 shows employment before the introduction of the balanced scorecard as a strategic management tool up to a year when the balanced scorecard was used.

Table 7.

Employment before the introduction of the balanced scorecard as a strategic management tool up to one year with the application of balanced scorecard

Employment ratio of administrative and office employees to employees working in production (underground)	30-70	18-82
Total number of employees for a similar number of projects (Execution of 3 projects at the same time)	500	420

Source: Author's own elaboration.

The reduction in the number of full-time and production jobs has resulted in higher productivity, i.e:

- overall productivity by 5%,
- underground productivity by 3.4%,
- annual productivity by 4.6%.

The application of the balanced scorecard made it possible to reduce the costs of the company's activities in terms of project-specific disbursement of supplies. Savings on this account reached 8.4%.

d. The effects of implementing the Balanced Scorecard in a development perspective

The main objective in terms of the development perspective was to ensure comprehensive development in particular of human resources and subsequently of intangible resources. With this aim in mind, the number of courses and training for physical workers as well as managers has been increased compared to previous years where no balanced scorecard experience was used. Table 8 provides an overview of the course (training), approvals with annual growth after applying the balanced scorecard (%).

Table 8.

Overview of the course (training), approvals with annual increase after applying the balanced scorecard (%)

The name of course (training), approval	Annual growth after implementing balanced scorecard (%)
Approval for a person responsible for senior supervision (mining, power machinery blasting)	50
Basic specialist course in blasting methods	120
Scraper conveyor operating course	45
Self-propelled face machine operating course	50
Self-propelled face machine drilling trucks operating course	0
Self-propelled face machine roadheader operating course	80
Course for operators of stationary and mobile winches and hoists controlled from the working level	120
Crane rigger course	60
Diesel driven mine suspended monorails handling course	200
Ward orderly course	20

Source: Author's own elaboration.

The presented specific objectives for the development of human resources have been oriented towards raising professional qualifications and building highly motivated human potential. As regards the development of intangible resources, an integrated IT system has been implemented.

The proposed activity has allowed mining services company to be flexible in directing resources to individual projects and to adapt to a varying number of projects.

6. Conclusions

The implementation of the Balanced Scorecard in mining service companies should result in the completion of the following actions:

1. Establishing a strategic management system consisting of:
 - Strategy implementation monitoring,
 - adapting the company's organisational structure to the needs of strategy implementation and monitoring,
 - appointing a leader of changes, who will act as a strategic management system manager at the same time,
 - launching projects within the project management system for the implementation of one-off tasks.
2. Developing a Balanced Scorecard for the implementation of mining projects (excavation, modernisation, etc.) and projects concerning conveyor belts, which must coincide with the established strategic objectives of the entire company.
3. Creating a system for monitoring the implementation of the strategy by monitoring the adopted metrics, within which the following activities should be carried out:
 - monthly operational reviews to compare short-term results with the targets set in the annual Technical and Economic Plan,
 - quarterly strategic reviews analysing the annual trend of metrics,
 - annual strategic reviews analysing long-term trends in the development of metrics to assess the achievement of strategic objectives.
4. Updating the strategy and Balanced Scorecard as a result of annual strategic reviews.

The literature research carried out and the example presented show that the SKW concept is a tool used not only to monitor company management processes, but above all it is a tool aimed at implementing the company's strategy. The answer to the need for continuous improvement of management processes in mining service companies, adapting to the changing environment with limited financial and human resources, may be the transformation of the strategy into an appropriate set of projects and programmes. The starting point for this process

is the SKW, which shows what actions (initiatives, undertakings) should be taken to achieve the strategic goals. The example presented will be used for further research on project portfolio construction and management in mining service companies.

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