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**ANALYSIS OF PLANNING METHODS IN THE SLOVAK
ENTERPRISES**

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Abstract

With regard to the fact that the issue of suitable procedures and methods of planning is not given enough attention in the managerial practice of companies, the findings of the surveys carried out so far have been an inspiration for me to analyze planning methods and procedures in enterprises of the Slovak Republic. The purpose of the article is to analyze the planning methods and procedures applied in the planning practice of Slovak enterprises. Its aim is to create and present a study on planning methods and procedures used by successful companies operating in the Slovak market economy. The main benefit is a comprehensive overview of planning in the Slovak Republic. The article provides general information on planning, its functions, aspects, and makes it possible to understand its meaning. It also describes various procedures and methods that can be used in enterprise planning practice. In the paper, we analyzed the methods and techniques of planning most commonly used in enterprises in the Slovak Republic. Data collection for analysis was conducted in the form of inquiries, a traditional way of obtaining the respondents' answers to closed and open questions. After evaluating the results of the analysis, a study was made of the methods and procedures used by successful companies.

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1. Introduction

Planning has always been a key factor in achieving the success, long-term development and prosperity of businesses, and this is not the case now, when planning with complex conditions becomes an essential part of every business and the starting point for all its activities. Planning is a way to create a strategy to maintain and develop the company's market position. The plan serves businesses as an information tool to prepare the future, bringing together owners and managers visions and employees' efforts to achieve goals within a set timeframe. The role of business planning as a management default function is to set clear desired goals, and to develop ways to achieve them. Planning can be, on the one hand, a very time-consuming process, but on the other hand it is an essential element of business activity, without which businesses cannot ensure the effectiveness of their actions, predict the future, adapt to foreseen changes and achieve their business goals and prosperity. The key to success in effective business planning is the choice of the appropriate planning process, best applicable in the unique organizational structure of each enterprise, and the selection of adequate planning methods for the current issue.

Despite the undeniable importance of planning, this management function is neglected by many businesses and insufficient attention is paid to the planning process, procedures and planning methods.

2. Literature Review and Theoretical Framework

Belohlavek, Kostan, and Suler (2006) considered planning as a management function of great importance, and Gregova and Dengova (2014) said that "the plan is the foundation of management". Veber (2009) considers planning "one of the oldest human activities associated with the unique ability of people to predict the future." This ability allows you to plan ahead the goals that need to be achieved, respectively. needs we want to satisfy. The author talks about business planning as a process that, like other business processes, consists of a series of stages and a sequence of steps that are sequentially arranged in a logical sequence. A similar view is also given to Rajnoha (2008), who says that "planning as a multi-stage process is understood as a thought prediction of future action formed by analyzing a number of alternatives and making systematic decisions on the most favorable alternative to achieve the goals set." He further develops this idea and considers planning to be the most important area of management, which is the fundamental basis of all other management activities. Planning is also characterized as a set of activities in a logical sequence allowing the formation of management objectives through the creation, evaluation and selection of optimal alternatives to their achievement and by defining the procedures necessary to ensure their achievement. An important part of planning activity is the selection and use of an appropriate planning method. The methods are different summaries of the procedures for obtaining background data that will be used in each planning stage adds (Templar, 2008) . The essence of qualitative planning methods is based on the special knowledge and subjective approaches of the experts in the field in solving the planned problems. In the group of qualitative methods we include expertise, scenarios and various variations of creative thinking methods. Their essence is based on the skills of professional managers who, through empirical-analytical procedures, can predict future developments in a defined area. In this method, we encounter mainly the use of expertise and scenarios (Pitra, 2007). Expertise is the use of the planning stage and the search for a business strategy. They enable solution of planning problems thanks to expert knowledge and experience. Scenarios are a method that can be

accomplished by quantifying certain plan parameters, but we still classify it as a qualitative approach to data processing (Kmecova, 2018).

In addition to these methods, we also include methods of intuitive and systematic creative thinking among qualitative methods. The intuitive group includes modern methods of collecting ideas, of which brainstorming, brainwriting, the Delphi method, and method 66 are best known add (Bolton, Machova, Kovacova, & Valaskova, 2018). Among the systematic methods of creative thinking, there are various tables of advantages and disadvantages, analogous and comparative methods, decision trees and many others. Quantitative planning methods are the most widespread group of planning methods. Their starting point is an analysis of historical development trends and factors that have caused deviations from forecasted trends in the past. They process information to plan all future activities that may affect business goals. These include various balances, capacity calculations, production programming methods, as well as methods taken from mathematical and economic statistics, financial analysis, and management economics (Grznar, Sinsky, & Marsina, 2011). Comprehensive planning methods are based on a simple model that allows them to work with the underlying contexts affecting the organization's resulting indicators. Their effectiveness depends on the knowledge of the organization's historical data and on the knowledge and skills of the planning manager. They are particularly important in terms of simplicity (Borovsky & Vargic, 2005). Balances represent the core of planning and their use is wide. We talk about them as normative methods, because they allow you to track, secure, and maintain balance in your business add(Tothova, 2009).

According to Pitra (2007) specific methods are used to solve specific cases, which can be divided, for example, in relation to the individual stages of the planning process. The MBO method or "goal-based management" is an atypical method of strategic planning, the process of which consists in the creation and subsequent development of a strategic plan at the levels of lower organizational units. Its importance lies in ensuring an understanding of the wider context of the strategy and strategic objectives at all levels of governance. In this way they eliminate their misunderstanding caused by the isolation of plan executives from their creation. The basic prerequisite for success is to familiarize interested employees from all levels of management with the aim and purpose of this method (Papula & Papulova, 2004). Methods for evaluating alternatives are used to plan criteria such as business process performance, quality, and cost. Their disadvantage is that they do not approach the problem comprehensively and do not allow preference and weighting of individual criteria (Papula & Papulova, 2004). The PMI method also called "plus - minus - interesting" represents a simple assessment of possible alternatives to plans and their acceptance, respectively. rejection (Moravcikova, Krizanova, Kliestikova, & Rypakova, 2017).

Scoreboard is a very simple method suitable for elementary planning needs. It is a table consisting of parameters and their qualitative or quantitative assessment (Hardingham, Vrbka, Kliestik, & Kliestikova, 2018). Evaluation matrix is a method applicable to complex cases requiring work with a large number of environmental factors and their changes (Mika, 2010).

Gantt Chart is suitable for personal planning or easier planning tasks in the enterprise. It allows you to sort activities over time and observe the sequence and deadlines of each task, but without their relationships and relationships (Buno, Nadanyiova, & Hraskova, 2015). Inflection diagram, its structure is similar to a network graph. In addition to the sequence of activities over time, it also allows them to show their mutual relations (Belohlavek et al., 2006).

Key Event Diagram is a good way to solve complex planning problems. It is a graphical representation of the list of planned activities, along with their mutual relations and ranking in a time series. In the case of extensive planning problems, it allows the grouping of some activities, but requires the effective communication of stakeholders (Veber et al., 2009).

Network Graph is a planning method that graphically displays the time sequence of activities and their mutual sessions, allowing you to optimize the schedule of complex activities needed to reach the goal. It serves as a basis for selecting measures to reduce the duration of certain activities. The most well-known method of network analysis is the deterministic method of the critical path - CPM, which uses the shortest path to reach the target. The stochastic PERT method, respectively, is also widely used. "Project evaluation and control method", used to model the likely duration of activities under different conditions of operation (Kmecova, 2018). Current business trends include the following planning trends. The use of benchmarking is known from the past. Its specificity is that it does not deal with evaluation, but allows the goal of change based on "learning from the best." It is a structured process of comparing processes and performance parameters of a company with leading organizations that represent a unit in the area. This comparison can take place externally between businesses, but also internally, between each other's strategic units (Gregova & Dengova, 2014). Balanced Scorecard is originally used in strategic business management, later developed into lower management levels for a coherent system of operational planning and management of strategic business units. Its importance lies in the elaboration of strategic plans for implementation plans of individual functional areas of the company (Mika, 2010). Rolling Forecast is a method that greatly increases the flexibility during plan implementation and ultimately the efficiency of the enterprise planning process. The task of managers is to evaluate the results achieved during the planned period and to use the identified changes and causes of deviations to revise the original plans for the remaining planned horizon (Bolton et al., 2018). The output of Value Driver Model is a clear plan allowing comparison of performance changes due to differentiated planning parameters. This method is based on simulations of development trends of value creation, influenced by so-called. "Driving forces (Rajnoha, 2008).

Risk Management is a method that deals with identifying risk factors and planning potential threats to an organization, quantifying their impact and impact. The importance of this method is to create alternative plans that contribute to reducing risk (Templar, 2008).

3. Methodology

The primary process of investigating the continuity and relationships between the phenomena under consideration is the specification of the problem of analysis, which we defined as follows: "What methods, techniques, and procedures of planning are used in the management practice of Slovak enterprises?"

As a primary source of information for our study needs, a data base consisting of responses collected by the respondent's inquiry method in the form of an electronic questionnaire will serve. The selection of the target group of respondents participating in the study was carried out in accordance with the objective of the work.

Data collection was carried out in the form of a questionnaire sent to fill the required group of respondents. The data collection was carried out in the traditional way of obtaining verbal answers from the research file respondents to closed and open questions. Through the questionnaire, the 150 largest companies in the TREND Top 200 ranked in the Trend magazine and a random set of 50 enterprises were asked to select which no requests or restrictions were made. The rate of return of the questionnaire was 28% which represent 56 enterprises.

4. Results

The first was to find out who implements the creation of functional areas of the company. The importance of this question is to get information about those responsible for making plans at the individual functional areas of the business. This will allow us to allocate responses to a category overview, which can identify shortcomings in this area of planning practice.

Table 01. Implementers of the creation of functional areas of the company

Functional area planning	Number	Relative expression (%)
Owner	8	14,29%
Top management	11	19,64%
Functional area management	25	44,64%
Managers and staff	7	12,50%
Enterprise planning unit	5	8,93%
Combination	49	87,50%

The answers in Table 01 show that in the largest part of the 25 (44.64%) research group, the creation of functional areas of the business is entrusted to the managers responsible for managing each functional area as you can see in Table 01. 11 (19.64%) of respondents stated that the top management of the company was responsible for the creation of functional area plans and in 8 (14.29%) these were the owners. Only 7 (12.50%) of respondents stated that the plans of functional areas of the company were created in cooperation with managers with employees and in 5 (8.93%) it is implemented by a separate planning department of the company. In this case, respondents were given the opportunity to identify multiple responses, suggesting that in 49 (87.50%) companies of the research group, several different functions are involved in developing functional area plans. We also looked at what techniques they used to plan.

Table 02. Planning techniques used by enterprises

Planing techniques	Number of enterprises	Relative expression (%)
PMI	29	51,79%
Scoreboard	39	69,64%
Evaluation matrix	12	21,43%
Brainstorming	49	87,50%
Brainwriting	45	80,36%
Delphi method	26	46,43%

The answers show that the most research file companies use brainstorming 49 (87.50%) and brainwriting 45 (80.36%) as ancillary techniques in planning. The third most used planning support techniques are ranking tables, which are used by 39 (69.64%) businesses to plan. 29 (51.79%) businesses said they used "Plus - minus - interesting" technology in their planning, and 26 (46.43%) of businesses help in planning with the Delphi method. Thus, at least 12 (21.43%) companies use the evaluation matrix technique to plan as you can see in Table 02.

We have also examined whether businesses use graphical planning methods, as the visual nature of plans helps to better understand the plans by all the human components involved in its implementation. The task of this question was to obtain information about planning techniques used by the research file companies as a tool for graphical visualization of planning operations and to monitor their implementation at each planning stage, as well as in the analysis and preparation of plans, at the planning stage, at the observation phase control of the implementation of plans.

Table 03. Graphical planning techniques used by enterprises

Graphic technique	Number of enterprises	Relative expression (%)
Gantt chart	47	83,93%
Key event diagram	28	50,00%
Network charts	11	19,64%
Decision trees	50	89,29%
Flowchart	21	37,50%
Affinity diagram	14	25,00%
Control diagram	5	8,93%
Relation diagram	8	14,29%
Decision diagram	37	66,07%
Cause and effect diagram	10	17,86%

As you can see the answers in Table 03 show that decision-making trees are the most used in enterprises, which have identified as many as 47 (89.29%) enterprises and the Gantt chart, which has been used by 47 (83.93%) of all companies of the research group, is very often used. The decision diagram uses 37 (66.07%) enterprises to graphically visualize planning, and the key event diagram found its application in 28 (50.00%) businesses. 21 (37.50%) of the research file companies use the flowchart for planning and 14 (25.00%) enterprises apply the affinity diagram. 11 (19.64%) enterprises identified the network graph technique and the cause and effect diagram is used in 10 (17.86%) enterprises. 8 (14.29%) enterprises use the relational diagram for planning and only 5 (8.93%) apply the regulatory diagram.

We can evaluate that the graphicplanning methods are applied in successful Slovak companies and can be helpful not only in the preparatory phases of the project, but especially during the implementation phase.

5. Conclusion

On the basis of the answers, it can be stated that in a large part of enterprises the functional area plans are the managers responsible for managing these departments. We consider this positive, as this approach ensures that the plan is implemented by persons thoroughly aware of the conditions under which the plans will be implemented and that all factors affecting the planned reality are taken into account. The

fact that only 12% of businesses are involved in the creation of functional area plans by the managers and staff of the departments concerned by the plans is evaluated negatively. In this way it is not possible to ensure the effectiveness of the plan in terms of its thorough understanding and motivation of the employees involved in its implementation. Despite the fact that in almost 35% of the research group's businesses, the owners or top managers form functional area plans, I do not assess this fact because the vast majority of these companies admitted that they were created with some collaboration with lower levels of management.

Based on the answers to the use of planning techniques, it can be stated that planning support companies use a relatively large number of techniques, and the results show that the vast majority of enterprises apply the most widely known techniques such as brainstorming, brainwriting and ranking tables to our expectations. The most common use of these techniques is based primarily on the simplicity of their design and broad application. The use of the Delphi method is lower, which suggests the under-utilization of the knowledge and skills of experts in the areas in their planning. The fact that, in the smallest number of enterprises, the matrix matrix technique has been applied, is largely due to the higher complexity of this technique.

In the next area, it can be stated that a wide range of graphical planning techniques are used in companies, which we value positively. In particular, planning support techniques such as decision trees, Gantt diagrams and decision diagrams are used, which are associated with their relatively simple concept and universal application to a wide range of planning problems. However, other techniques are used to a much lesser extent in businesses, which speaks of the inadequate knowledge of businesses in this area or the inability to use these techniques because of their complexity. Techniques such as network graphs and control diagrams that are more complicated, but surprised by their absence in many large and medium sized large enterprises, where they are of great importance mainly for streamlining business processes and for controlling their optimal course.

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