
Peer-Reviewed Article

Metody strategické analýzy využívané při zpracovávání strategických dokumentů resortu obrany

Methods of Strategic Analysis Used by Strategic Documents Processing in the Ministry of Defence

Monika Grasseová-Motyčková, Jiří Richter

Abstrakt: V resortu obrany ČR jsou nejčastěji využívanými metodami při zpracovávání strategických dokumentů skupinová diskuze, brainstorming, rozhovor a analýza zainteresovaných stran. SWOT analýza a další jsou zastoupeny v méně než pětině případů. Z výsledků výzkumu vyplývá, že některé metody jsou používány metodicky nesprávným způsobem a že nejčastější metodou je intuice založená na zkušenosti. Realizace strategické analýzy naráží v resortu obrany ČR zpravidla na řadu bariér. Článek popisuje výsledky průzkumu v této oblasti a představuje některá doporučení ke zlepšení stavu, zejména synergické využívání metod, tzv. multimetodologie.

Abstract: The most frequently used methods during strategic documents processing at the Ministry of Defence are group discussion, brainstorming, discussion and analysis of stakeholders. SWOT analysis and other methods are represented in less than a fifth of cases. The research results show that some methods are used in methodologically wrong way, meanwhile, the most common method used is intuition based on experience. Implementation of strategic analysis usually encounters at the Ministry of Defence a lot of barriers. The article describes the results of research in this area and presents some recommendations for improvement, particularly synergistic use of methods called multi-methodology.

Klíčová slova: dotazníkové šetření; strategické řízení; strategická analýza; metody; resort obrany.

Keywords: Questionnaire; Strategic Management; Strategic Analysis; Methods; Ministry of Defence.

INTRODUCTION

The paper deals with the strategic analysis in the Ministry of Defence of the Czech Republic, and in particular with the use of the methods of strategic analysis which are inseparable from any analytic procedure. The research focuses on the use of these methods while processing strategic documents that addresses the organisation's development. The authors of the article perceive the strategic document in accordance with the methodology as any document setting the vision, goals or measures in a set area. A strategy, conception, action plan, development plan, etc. can be seen as a strategy.¹ Together with the methods' application, also the significance of intuition is explored when solving this problem. The processing of these documents can be seen as a significant problem which the Department members often encounter. At the same time it can be assumed that in order to accomplish a quality solution to such a problem, it is necessary to follow a certain procedure which uses, among others, the methods of strategic analysis.

Based on the data acquired within the research "Solving Unstructured Decision-Making Problems in the Ministry of Defence of the Czech Republic" in the previous years it is obvious that the utilisation of the strategic analysis methods in the Defence Ministry is not at a high level. Based on the carried out research there is a lack of utilisation of the methods, little knowledge about their proper application and a number of barriers which complicate their effective use. The issue of the current conditions is addressed in details later in the paper.

The aim of the article is to inform about the current state of the strategic documents processing in the CR Defence Ministry, and propose changes to be made in order to eliminate the identified problems, in particular in relation with the use of the methods of strategic analysis.

The analysis of use of the methods of strategic analysis with solving unstructured problems in the CR Defence Ministry was analysed, being based on the semi-structured interviews which were carried out in 2015,² practical experiences of the research team and a questionnaire survey from 2012. Based on the interviews from 2015, the practical experiences gained by cooperation on departmental strategic documents elaboration and on the discussions with the participants of special and career courses, it can be stated that there is no shift in the use of methods and that the current state corresponds to the results of questionnaire survey. The results of the survey were confirmed as actual by the stated methods. The use of analytical methods in the strategic documents elaboration is being analysed in these days. The preliminary findings show a very low level of reporting of analytical methods in the final documents and the consequent need to conduct a further research in this area. 19 semi-structured interviews were performed. The respondents were mainly the members of the general staff course (KGŠ) and senior officers course (KVD). From the perspective of the frequency of rank representation, the most frequent ones were major (42%), colonel (37%) and civil employee (11%).

¹ MINISTERSTVO FINANČÍ ČR. Metodika přípravy veřejných strategií [online]. Praha, 2012, 16. 2. 2014, p. 100 [cit. 2013-05-12]. Source: http://www.mmr.cz/getmedia/4ebb3cc7-6f5c-4f37-ad1f-97054a212483/metodika-pripravy-verejnych-strategii_listopad-2012.pdf

² GRASSEOVÁ-MOTYČKOVÁ, Monika a Jiří RICHTER, SWOT analýza v rezortu obrany České republiky – současný stav a doporučení pro aplikaci, *Vojenské rozhledy*, 2016, 25 (57), n. 2, pp. 36-52, ISSN 1210-3292 (printed), ISSN 2336-2995 (on-line). Source: www.vojenskerozhledy.cz

1. THEORETICAL SOLUTIONS - METHODS OF STRATEGIC ANALYSIS

General methods of strategic analysis are used for collecting information about an organisation's environment, and for creating an adequate strategic framework that is expected to bring improvement of the organisation's situation. While processing strategic documents, the methods of strategic analysis shall serve as tools for analysing the internal and external environment, and for creating a framework for future development and appropriate strategies. Furthermore, the basic and frequently applied methods, which can be used while processing the documents, are characterised in this chapter. The partial recommendations for the use of strategic method optimization can be stated based on the theoretical definition of the methods and on the comparison of these methods with their practical realization. These methods are as follows: **Analysis of interested parties**, **SWOT analysis** and **an Objective tree**. Among the methods of the external environment analysis these were selected: **DELPHI method**, **PESTLE analysis** and **Method of future scenarios**. As for analysing the internal environment the following can be used: **Benchmarking**, **Process analysis and/or EFQM model or Common Assessment Framework (CAF)**.

Analysis of interested parties is a general framework for identifying the interested parties (i.e. persons or groups that are interested in running an organisation), detecting their interests and fulfilling these interests of organisations.³ The analysis is typically carried out in the sequence of identifying the interested parties, contacting the representatives, determining the means of communication and goals, and securing the mutual communication with the interested parties. When there are more interested parties identified, the method becomes rather demanding as for administration and time. The advantage of the method, while processing the documents, is that there is information provided from the outside of an organisation, which would be, under different conditions, inaccessible.

SWOT analysis uses the findings of the internal and external environmental analysis, and by means of combining the identified factors it serves to generate alternatives to strategies.⁴ SWOT analysis can be considered one of the fundamental and most frequently used methods for creation of strategies, whose form does not significantly alter.^{5,6} It always includes identification of strengths and weaknesses of the internal environment, and opportunities and threats of the external environment of an organisation. These factors are quantified, and relative significance is assigned to them, and the strategy alternatives are generated by means of a systematic procedure of combining the most significant factors. However, according to Haberberg⁷, SWOT

³ GRASSEOVÁ, Monika, Radek DUBEC and David ŘEHÁK. *Analýza podniku v rukou manažera*: 33 nejpoužívanějších metod strategického řízení. 2. ed. Brno: BizBooks, 2012. ISBN 978-80-265-0032-2.

⁴ HILL, Terry and Roy WESTBROOK. SWOT analysis: It's time for a product recall. *Long Range Planning* [online]. 1997, 30(1), 46-52 [cit. 2016-03-07]. DOI: 10.1016/S0024-6301(96)00095-7. ISSN 00246301. Source: <http://linkinghub.elsevier.com/retrieve/pii/S0024630196000957>

⁵ PORTER, M. E. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press, 1980.

⁶ KOTLER, Philip and Kevin Lane KELLER. *Marketing management*. Praha: Grada, 2013. ISBN 978-80-247-4150-5.

⁷ HABERBERG, A. *Swatting SWOT*. *Strategy* (Strategy Planning Society), September, 2000.

analysis is often processed only in a form of unstructured lists of factors of internal and external environments, lacking any further systematic application. The process of the analysis creation itself is relatively complicated. It can be under the influence of subjective views of assessors, and in case of processing by multiple assessors (managers) it encounters time and organisational difficulties.⁸ SWOT analysis is currently a subject of modifications aiming at suppressing the subjective perception of assessors. The majority of authors employ here a fairly high degree of mathematical and statistical methods, in the phase of quantification and assessment of the selected factors in particular.^{9,10}

An **Objective tree** is a method of strategic planning and it is used for formulating objectives at individual partial levels. The method is based on a general rule, which says that the constituents at a lower hierarchical level specify the higher hierarchical level. In the case of objectives it refers to an organisation's vision and mission specification by means of the top strategic objectives which are further broken down into specific and operational objectives.¹¹ The method shall be used for creating strategic documents for the breakdown of objectives at individual organisational levels.

The aim of a **Process analysis** is, as its name implies, an analysis of processes and their optimisation through removing weaknesses. As a rule, the analysis is based on a complete process map that should reflect a real condition of organisational processes (therefore it is not an ideal).¹² It can be assumed that the optimisation of the current processes is not a part of the majority of strategic documents' creation. On the contrary, the documents are rather based on clearly codified process standards.

The **DELPHI method** is used for acquiring prognostic information or opinions of experts in order to forecast development of future events. By adding information from experts, the method can be supportive when there is a lack of data. The major advantage of the DELPHI method can be found in the process of structuring a panel communication. The method is especially convenient in cases when bringing everyone together for a group discussion (a meeting) would be time consuming and financially demanding, or in cases when it is more appropriate to use subjective opinions of assessors rather than analytical procedures.¹³ As for the document processing it is necessary to have the DELPHI system already implemented and set up so that it is possible to acquire the desired data within a reasonable time.

PESTLE analysis serves as a method for examining those external factors which affect an organisation, and which cannot be significantly influenced by an organisation

⁸ VALKOV, Alexander. Ten Mistakes at the Usage of the SWOT-Analysis in the Strategic Marketing Planning in the Healthcare Institutions. *Economic Alternatives*. 2010, Issue 1, pp. 93-103.

⁹ WHEELEN, Thomas L and J HUNGER. *Strategic management and business policy*. 8th ed. Upper Saddle River, NJ: Prentice Hall, c2002. ISBN 013065132X.

¹⁰ KURTILA, Mikko, Mauno PESONEN, Jyrki KANGAS and Miika KAJANUS. Utilizing the analytic hierarchy process (AHP) in SWOT analysis - a hybrid method and its application to a forest-certification case. *Forest Policy and Economics* [online]. 2000, 1(1), pp. 41-52 [cit. 2016-03-07]. DOI: 10.1016/S1389-9341(99)00004-0. ISSN 13899341. Source: <http://linkinghub.elsevier.com/retrieve/pii/S1389934199000040>

¹¹ GRASSEDOVÁ, Monika, Radek DUBEC and David ŘEHÁK. *Analýza podniku v rukou manažera: 33 nejpoužívanějších metod strategického řízení*. 2. ed. Brno: BizBooks, 2012. ISBN 978-80-265-0032-2.

¹² RAMESH, G. *Applying Business Process Improvement Concepts to Academic Advising: A Case Study on the Efficiency Improvement Approach*. *Competition Forum* 2014. 2014, 12(2), pp. 102-110.

¹³ LINSTONE, Harold A. and Murray TUROFF. *The Delphi method: techniques and applications*. Reading, Mass.: Addison-Wesley Pub. Co., Advanced Book Program, 1975. ISBN 0201042932.

itself. The analysis has multiple variants, depending on how many and what types of factors of the external environment are to be examined. Kotler classified six factors among which there are the following impacts: political, economic, social, technological, legislative, and ecological.¹⁴ The aim of the analysis is to identify the factors which significantly affect an organisation, the way this impact is manifested and what development is expected for the future. In order to achieve those analytical objectives a MAP technique (an acronym for a procedure of mapping, analysis and prediction of environmental factors) can be applied.

The **Method of future scenarios** generates descriptions of a possible future situation, reflecting a current state, an expected chain of events and a final state. While creating the scenarios, it is critical to determine key constituents which are incorporated into the scenario, and also estimate their future development. Due to the uncertainty of an environment, more scenarios are typically created. The next problematic step is a scenario classification for acquiring a smaller group of more probable scenarios. This method is highly demanding in terms of quality data and information.¹⁵ Cornelius et al.¹⁶ quotes that planning by means of scenarios is useful for researching the future, however, it is indeterminate with the question of which scenarios shall be taken into consideration. The most straightforward reaction to such doubts is to apply SWOT analysis for assessing each scenario.

The principal rule of **Benchmarking** is a comparison of selected elements of an organisation with different organisations. The selected organisations are usually of comparable levels or, on the contrary, they are “the best”, offering the opportunity to learn from them. According to Nenadál benchmarking can be carried out in terms of a comparison with competitors or processes and functions of organisations of various fields and domains.¹⁷ In case of the Ministry of Defence benchmarking can be used for learning in the selected areas and for modernisation or improving effectiveness in the problematic areas. As for processing the strategic documents the method can be used for optimising the very process of a document’s creation and implementation.

EFQM and CAF models serve as tools for a self-assessment of organisations’ performance. Both are often used by public sector organisations in the Czech Republic to improve their organisational quality and performance.¹⁸ Both models include 9 assessed criteria of the internal environment, but they differ in the amount of sub-criteria, in assigning weights as well as in the way of assessing the sub-criteria. The execution of the self-assessment requires a relatively big effort, skilful managers and enough time for a complex assessment of all the criteria. In the case of the document processing it can be referred to the outcomes of previously executed self-assessments rather than starting with this method while the document is already being processed.

¹⁴ KOTLER, Philip and Kevin Lane KELLER. Marketing management. 14. ed. Praha: Grada, 2013, 814 p. ISBN 978-80-247-4150-5.

¹⁵ GRASSEOVÁ, Monika, Radek DUBEC and David ŘEHÁK. Analýza podniku v rukou manažera: 33 nejpoužívanějších metod strategického řízení. 2. ed. Brno: BizBooks, 2012. ISBN 978-80-265-0032-2.

¹⁶ CORNELIUS, Peter, Alexander Van de PUTTE and Mattia ROMANI. Three Decades of Scenario Planning in Shell. California Management Review. 2005, 48(1), pp. 92-109. DOI: 10.2307/41166329.

¹⁷ NENADÁL, Jaroslav. Měření v systémech managementu jakosti. 2. ed. Praha: Management Press, 2004. ISBN 80-7261-110-0.

¹⁸ GRASSEOVÁ, Monika (ed.). Efektivní rozhodování: analyzování, rozhodování, implementace a hodnocení. 1. ed. Brno: Edika, 2013. ISBN 978-80-266-0179-1.

2. THEORETICAL SOLUTIONS - INTUITION

A role that **intuition** plays within the execution of strategic decision making is by no means negligible, whether managers admit using it or not. Being perceived from various angles, the term intuition is not comprehended consistently by either professionals or the lay public. Nevertheless a large number of authors agree on the fact that intuition is formed by many years of experience and learning.^{19, 20, 21, 22} The fact that it is appropriate to relate intuition with experience is supported also by Burke and Miller,²³ who carried out semi-structured phone interviews with 60 professionals of different specialisations working at middle and top managerial positions in the US businesses. They focused on the perception of intuition among managers, and found out that majority of respondents had based their intuitive decision making on experience and/or feelings. Intuition comprises also a number of facts, patterns, terms, techniques, abstractions, and generally all that is referred to as formal knowledge or conviction which affects human mind (Barnard, quoted in Simon²⁴).

In the frame of the conducted research the concept of intuition was used as is quoted by Matzler et al.: *"Intuition is a highly complex and highly developed form of reasoning that is based on years of experience and learning, and on the facts, patterns, concepts, procedures and abstractions stored in the decision maker's head."*²⁵

According to Gerard et al.²⁶ there is growing agreement about intuition and its relationship in the management area with the following:

(1) Capacity for achieving direct knowledge or comprehension without any apparent use of rational thinking or logical conclusion;

(2) It is neither the opposite to rationality, nor a random process of guessing, intuition reflects thoughts, conclusions and choices that have been largely or partly created through unconscious mental processes;

(3) Acquired assessments which arise thanks to fast, unconscious and complex associations.

Shapiro and Spence²⁷ quote that it is appropriate for effective managerial decision making to be combined with a rational analysis and intuition. The solutions shall be first obtained by using intuition, and after that put through the rational analysis

¹⁹ SIMON, H.A. Making Management Decisions: the role of intuition and emotion. Academy of Management Executive. 1987, 1(1), pp. 57-65.

²⁰ AGOR, W. H. Intuition in organizations: Leading and managing productively. Newbury Park, CA: Sage Publications, 1990.

²¹ PARIKH, J. Intuition: The new frontier of management. Oxford: Blackwell Business, 1994.

²² MATZLER K., BAILOM F. and MOORADIAN T.A. Intuitive decision making. Management Review. 2007, 49, pp. 13-15.

²³ BURKE L.A. and MILLER M.K. Taking the mystery out of intuitive decision making. Academy of Management Executive. 1999, 13, pp. 91-99.

²⁴ SIMON, H.A. Making Management Decisions: the role of intuition and emotion. Academy of Management Executive. 1987, 1(1), pp. 57-65.

²⁵ MATZLER K., BAILOM F. and MOORADIAN T.A. Intuitive decision making. Management Review. 2007, 49, pp. 13-15.

²⁶ GERARD P. Hodgkinson, Eugene SADLER-SMITH, Lisa A. BURKE, Guy CLAXTON and Paul R. SPARROW. Intuition in Organizations: Implications for Strategic Management. Long Range Planning. 2009, 42, pp. 277-297.

²⁷ SHAPIRO, S. and SPENCE, M. T. Managerial intuition: A conceptual and operational framework. Business Horizons. 1997, 40(1), pp. 63-68.

because intuition helps the decision maker better understand the system structure. However, Agor²⁸ suggests a contrary procedure. First, carry out the analytic decision making, and then use intuition for a synthesis of the information. In the view of the article's authors this was aptly summarised by Bergson²⁹ who quotes that both approaches, analytical and intuitive, shall complement each other.

Based on his study, Agor³⁰ identified conditions under which managers shall prefer intuitive decision making which are as follows: a high risk value, impossibility to use and/or unavailability of analytical data, lack of previous experience (precedents), and absence of a preferred solution. The use of intuition with the lack of information is also addressed in a publication Department of the Army³¹: Using the informed intuition can help commanders achieve an effective decision under uncertain conditions by overcoming the uncertainty arising from the situation. Khatri and Ng³² found out in their empirical research that it was exactly at the time of uncertainty and indefiniteness when the intuitive decision making proved to have better results among managers. These authors quote that for the effective intuitive managerial decision making it is necessary to have years of experience and perfect comprehension and understanding of a problem situation.

Using analyses and/or intuition have advantages and disadvantages. The pros and cons of both approaches are described by Mintzberg³³ from the perspective of time and costs. While analyses are slower and more expensive, the intuitive decisions are immediately available. However, this applies only to operational costs. Capital costs of intuition are much higher due to the fact that intuition is based on experience and knowledge which is acquired over many years. A good analysis is of course ready to be executed any time if there are quality quantitative data available for an analyst. In our view, another advantage of analyses is also the fact that they enable analysts to document and justify the executed decision-making process.

The areas with the most frequent intuition use were covered by Parikh³⁴ as a part of the outcomes of the research which included 1312 managers and directors of big private sector industrial businesses from nine countries. The respondents used intuition most frequently in the following areas: creation of business strategy, planning, marketing, public relations, human resources development and research.

²⁸ AGOR, W. A. The logic of intuition: How top executives make important decisions. *Organizational Dynamics*. 1986, 14(3), pp. 5-18.

²⁹ BERGSON, H. *Duchovní energie*. Praha: Vyšehrad, 2002.

³⁰ AGOR, W. A. The logic of intuition: How top executives make important decisions. *Organizational Dynamics*. 1986, 14(3), pp. 5-18.

³¹ DEPARTMENT OF THE ARMY. *Field Manual 3-0. Operations*, Government Printing Office, Washington, D.C., 2001.

³² KHATRI, N., NG, H. A. The role of intuition in strategic decision making. *Human Relations*. 2000, 53, pp. 57-86.

³³ MINTZBERG, H. *The Rise and Fall of Strategic Planning*. New York: Pearson Education, 2000. 458 p. ISBN 978-0-273-65037-9.

³⁴ PARIKH, J. *Intuition: The new frontier of management*. Oxford: Blackwell Business, 1994.

3. THE CURRENT STATE OF USING THE METHODS OF STRATEGIC ANALYSIS IN THE MINISTRY OF DEFENCE

The carried out interviews and other stated methods of data collection show that the problem of *processing a strategic document dealing with the organisation's development* is most frequently addressed by the commanders at the tactical command level (34%), and strategic level (34%), and least frequently at operational level (32%). The median of the document processing in the last five years is nearly two and therefore it is not a routine nor regular activity.

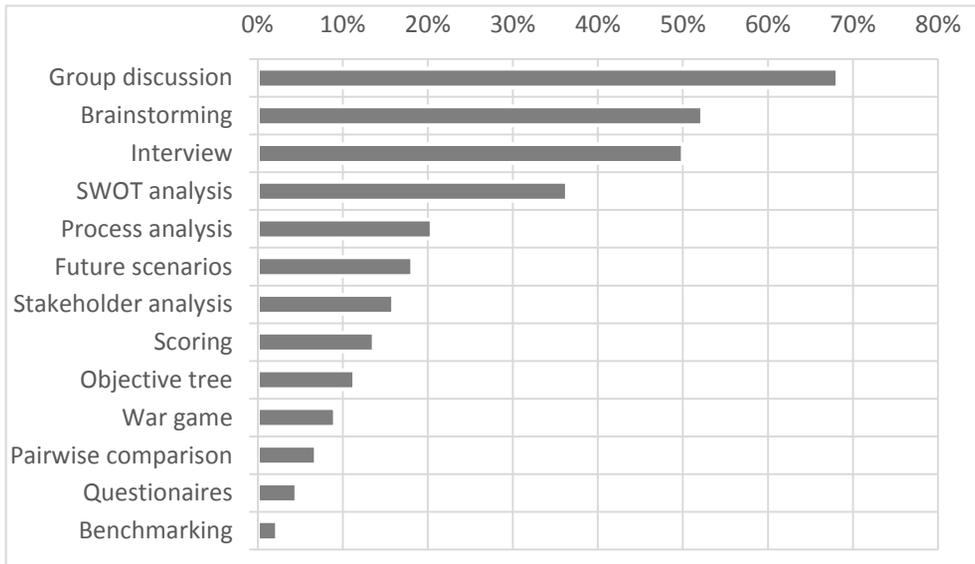


Figure 1: The use of methods for document processing

The figure above illustrates the use of the methods with document processing. The most frequent methods are Group discussion (68%) and Brainstorming (52%), then Interview is also significant (50%) and SWOT analysis (36%). Process analysis (20%) and others are represented by less than one fifth of the cases. Benchmarking and PEST(EL), EFQM and CAF were not used once, in other words, they were not used at all. It is alarming that in order to create a strategic document, the most frequently used methods are those which are not primarily intended for a strategic analysis, but solely for data collection (Discussion, Interview) or idea generation (Brainstorming). Moreover, based on the performed interviews, there is an aggravating fact about brainstorming where the majority of commanders understand Brainstorming just as a slightly structured discussion about opinions, which does not observe the standard requirements nor generate the same outputs. The interviews showed that the reason for preferring Discussion to Brainstorming is mainly the promptness of output generation. At the same time, it is surprising that the method of Questioning is scarcely applied (5%), though it can be considered highly effective in terms of acquiring quantitative data from multiple resources. Quite a surprise regarding the nature of the documents, which are focused on the distant future, is also an infrequent use of the method of Future scenarios (18%).

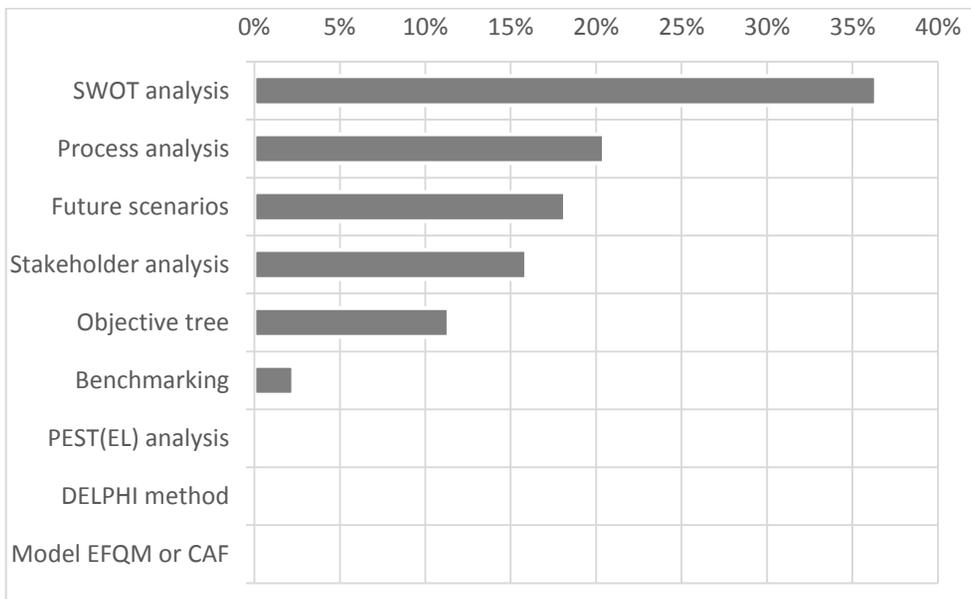


Figure 2: The use of methods of strategic analysis for document processing

The use of methods of strategic analysis is illustrated separately in Figure 2. The most frequently used method is SWOT analysis (36%), then Process analysis (20%), Future scenarios method (18%), and Analysis of interested parties (16%). And then, there is an Objective tree (11%) and Benchmarking (2%). The question remains about the purpose of executing a process analysis method while processing a document. Based on the existing findings it can be assumed (though it has not been verified) that it is carried out in the form of a description rather than in the form of an analysis as mentioned above. This assumption is supported by another certain findings from the interviews, where a respondent considers the process analysis to be an external audit. Another respondent describes it as an internally codified analysis which must be carried out across the entire Department, but at the same time the other respondents do not use this method at all. PEST(EL) analysis, DELPHI, EFQM and CAF were not used by the respondents a single time. The finding in case of Benchmarking is acceptable, since it is a tool designed for a competitive environment, which the Defence Ministry does not belong to. In any case, one of the interview participants quoted that he/she uses Benchmarking as a form of education abroad, and so as a specific modified approach this method is usable. Yet the remaining not-applied methods belong to standard and highly beneficial tools, and in the case of CAF it is even a method that was deliberately designed for the use by public sector organisations. With PEST(LE) analysis, as found out in the interviews, the problem of ambiguity of the external environment was mentioned, which does not usually correspond with the PEST specification. Furthermore, it is important to realise that, in general, the methods of strategic analysis are scarcely used for the strategic document implementation. Theoretically, it is possible that almost 70% of the documents are not based on any standardised method of strategic analysis. On the contrary, it may be the case that for

each document there is maximally one method used, which is still, from the perspective of quality, relatively insufficient. These reasons can be mainly associated with the fact that the use of the strategic analysis methods is not required in any form at all.

In the course of the interviews we focused on the ways the selected methods of strategic analysis are used. Generally, these methods are mainly used for mere data collecting, and as a rule they are not used by the Department members for analysing nor assessing. For instance, there is a repeatedly mentioned use of SWOT analysis in a way that only a commander or a manager makes up an overview of strengths and weaknesses, opportunities and threats just as a mere list without any further methodical work.

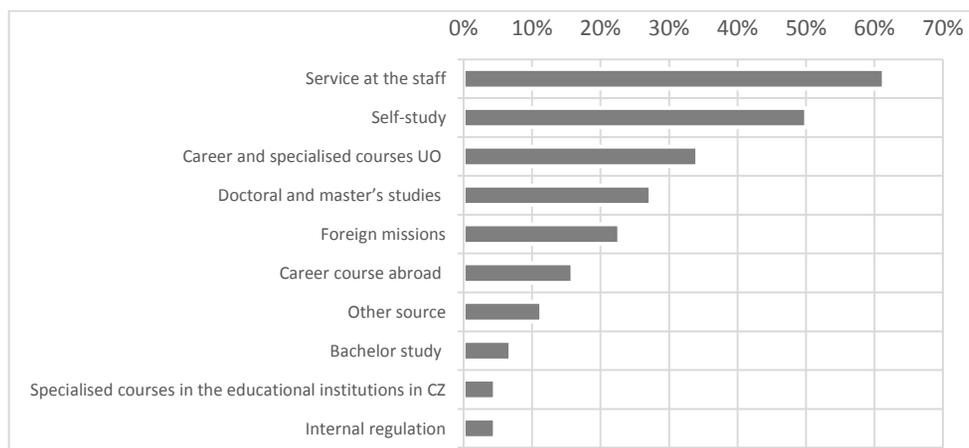


Figure 3: Sources of familiarisation with the methods

For the purpose of analysing the use of the strategic analysis methods it is appropriate to know where the Department members meet the methods. The results are shown in Figure 3. Although basic standardised methods are used for the document processing only a few Department members met them, according to their opinions, in the previous education. In this perspective the most successful are Career and specialised courses UO (34%). Then, Doctoral and master's studies (27%), Career course abroad (16%), very little representation of Bachelor study (7%) and Specialised courses at educational institutions in the Czech Republic (5%). The problem that the methodology of strategic analysis is not anchored in the Ministry's regulations becomes evident here by the fact that the very last place of the respondents' choices goes to an Internal regulation (5%). On the contrary, the Department members meet the used methods most frequently within the Service at the staff (61%) and Self-study (50%). Based on the above it can be assumed that the university graduates adopt the standard analytical methods as they are used in the units, not using their knowledge acquired through the study. Furthermore, they do not observe the procedures from regulations, but rather follow local customs and traditions. It is probable that they come to a sufficient understanding of the issue of strategic analysis in the course of time when participating at career courses, where they are able to meaningfully interconnect the work methodology with the practical experience from the units.

To be able to propose an appropriate methodology for the strategic documents

processing, it is necessary to analyse the barriers that hinder the commanders' effective strategic analysis, and also the factors that they consider significant for this work.

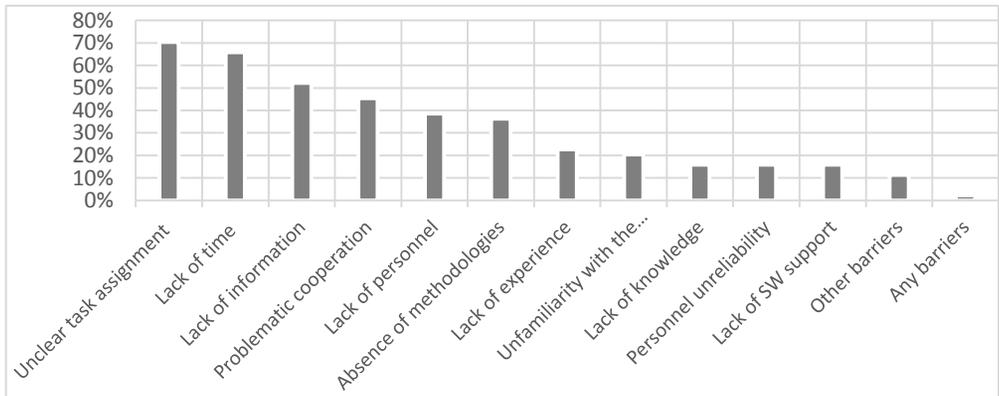


Figure 4: Barriers of decision making

Figure 4 illustrates the most significant barriers that hinder commanders' decision making and processing the strategic documents. More than a half of the commanders consider Unclear task assignment to be problematic (70%), then Lack of time for processing (66%) and Lack of information (52%). Absence of methodologies for the document processing is considered problematic by one third (36%) of the interviewed commanders. On the other hand, only 20% of the commanders view Unfamiliarity with the methods as a barrier. It can be inferred that even though the commanders are familiar with the necessary methods, there are more important factors which do not allow them to carry out the selected methods appropriately or at all. The interviews have also revealed that the barrier Lack of information is often manifested in an unclear assignment of the addressed problem when the problem solvers are forced to inquire about additional information within a task assigner. This additional research is rather time-consuming, and usually takes place at the time reserved for a problem solving, which synergistically causes another barrier Lack of time. Therefore, there is necessity to adjust the current methods of strategic analysis in a way that they are more usable under the conditions of the Defence Ministry.

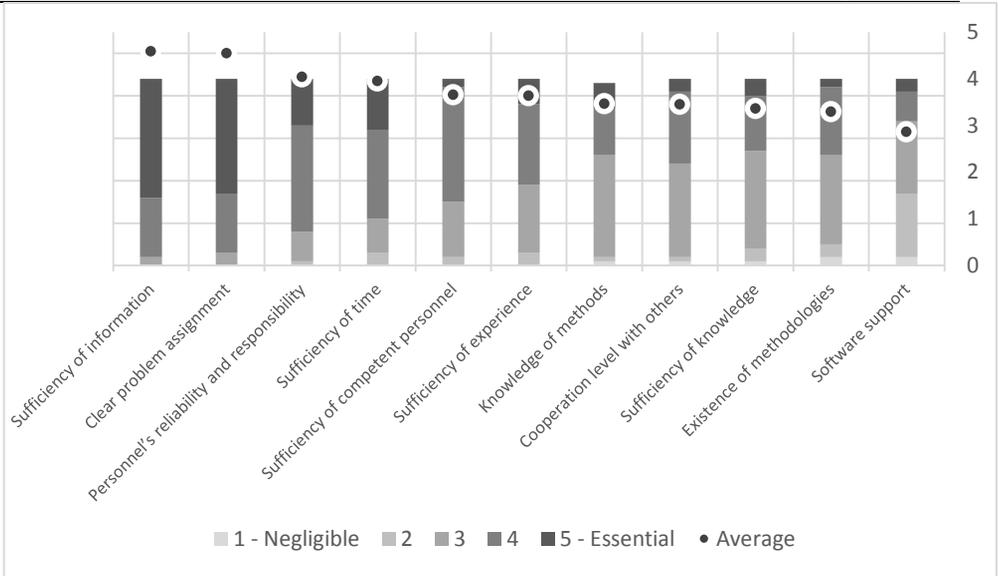


Figure 5: Factor significance for effective problem solving

With the method modification it can be referred to the information shown in Figure 5 which illustrates the significance of selected factors for effective processing of a strategic document. The factors are arranged in order from the highest mean rating, and because of a different frequency of rating, also complete scales are shown. The commanders consider the Sufficiency of information for a task solving to be the most significant (the mean of 4.59), Clear problem assignment (4.55) and the Personnel's reliability and responsibility (4.05). The fact is that these factors reflect the set system of work and task delegating (orders, delegating) rather than the applied methods. But still, it is possible to focus on the methods of the lower time consumption, because the question of time for the processing appears both here and also as a significant barrier. Additionally, the multimethodology of the document processing can include the methods of collecting such information that can help decrease the impact of this factor on an effective analysis. Let us make an assumption that the currently most commonly used methods of interview and group discussion do not necessarily have to be among those most effective ones (as far as the information quality and time consumption). Also this question indicates a relatively insignificant role which the commanders assign to the Knowledge of methods (3.47), the Existence of methodologies (3.30) and the Software support for the problem solving (2.86). On the other hand, there was an opinion expressed during the interviews, saying that the software support could help solve the problem of the lack of well-structured data and information, which are neither available in time nor in appropriate quality. To discuss the future and the software it can be considered in terms of both analytic tools and databases. Unfortunately, after having all opinions examined, it seems that the commanders and managers feel that the effectiveness of the strategic documents processing is not so much influenced by the methodology of processing, but rather by the working mode itself.

4. THE CURRENT STATE OF THE USE OF THE STRATEGIC ANALYSIS METHODS IN THE PUBLIC SECTOR OF THE CZECH REPUBLIC AND FOREIGN INSTITUTIONS

Within the comparative analysis there was good practice identified with creation of strategies in the Czech Republic, particularly the use of the analytical approach which is based on the following.³⁵ An organisation begins the work with defining the problem that is to be solved by the strategy, and the analyses of legislative framework and comparative analyses with abroad are carried out. In the next phases, the methods such as Brainstorming or SWOT analysis are used. Last but not least, the strategy's impacts are modelled, for example the impacts on the very institution that creates the strategy, other institutions of public sector, economic sector or the society as a whole. There are a large number of methods used abroad within the partial phases of creating the public strategies.³⁶ These are, for instance, environmental analyses, such as SWOT and PESTLE analyses (Great Britain, Austria, Denmark), Problem analyses (Great Britain, New Zealand, France), Analysis of interested parties (Great Britain, New Zealand, Austria), Analyses and modelling of impacts (Great Britain, New Zealand), Scenario creation for strategic prognoses (France, New Zealand), Future development prognoses (Great Britain, New Zealand), budget analyses (Denmark), Cost-benefit analyses (Great Britain, New Zealand, Austria), Multi-criteria analyses (Great Britain), and more (mostly Great Britain, New Zealand).

In the Czech Republic the methodology for public strategy preparation exists.³⁷ This methodology is usable with creation of various types of strategic documents. While processing the strategic documents the governmental personnel and the managers of central state administration bodies are required to observe the mentioned methodology by the Government resolution.³⁸ At the regional level the methodology's use is recommended.

Let us look at the selected foreign countries. The methodology for public strategy preparation exists in Great Britain and New Zealand, but its use is not legally binding. In the countries where no methodology for strategy preparation exists (e.g. France, Denmark and Austria), the approach of strategy creation is usually determined at the beginning of the individual strategies' preparation.

Frequent mistakes, identified by ERNST & YOUNG³⁹, within the analytic and

³⁵ ERNST & YOUNG. Projekt Metodika přípravy veřejných strategií: Komparativní analýza přípravy veřejných strategií v zahraničí a v České republice. Praha, 2011. [cit. 2015-07-12]. Source: http://www.mmr.cz/getmedia/5da3e96b-bbcd-4d0f-b7d5-7893393ef28c/komparativni_nalyza_111031_final.pdf

³⁶ ERNST & YOUNG. Projekt Metodika přípravy veřejných strategií: Komparativní analýza přípravy veřejných strategií v zahraničí a v České republice. Praha, 2011. [cit. 2015-07-12]. Source: http://www.mmr.cz/getmedia/5da3e96b-bbcd-4d0f-b7d5-7893393ef28c/komparativni_nalyza_111031_final.pdf

³⁷ MINISTERSTVO FINANČÍ ČR. Metodika přípravy veřejných strategií [online]. Praha, 2012, 16. 2. 2014 [cit. 2013-05-12]. Source: http://www.mmr.cz/getmedia/4ebb3cc7-6f5c-4f37-ad1f-97054a212483/metodika-pripravy-verejnych-strategii_listopad-2012.pdf

³⁸ ÚŘAD VLÁDY ČR. Usnesení Vlády České Republiky ze dne 2. května 2013 č. 318 k Metodice přípravy veřejných strategií. Praha: 2013.

³⁹ ERNST & YOUNG. Projekt Metodika přípravy veřejných strategií: Komparativní analýza přípravy veřejných

prognostic phase of the strategic document processing (see Figure 7) are as follows:

- Subjective execution of analyses;
- Inconsistent identification of causes of problems;
- Working with inadequate data;
- Careless execution of the analysis of existing solutions, abroad in particular;

Incorrect application or insufficient knowledge of analytical methods.

5. THE USE OF INTUITION IN THE DEFENCE MINISTRY

In order to evaluate the total extent of the use of intuition by the Department members, the answers to the individual questions about their attitudes towards intuition were averaged and merged into a single variable. This was used for the division of the respondent group into two clusters: *intuitive commanders - cluster 1* and *rational commanders - cluster 2*. For the division into the clusters, *k*-means clustering was used. The classifying variable ranged within the interval of 1 - 5, the formed final cluster centres reach the value of 3.44 with cluster 1, and 2.47 with cluster 2.

Based on the measurement of the extent of the intuition use for decision making by the Department members it is evident that the Department members use intuition due to the lack of time, information and knowledge to the same extent, and not quite unambiguously. On the contrary, the use of experience is very frequent with decision making. Here it seems that experience really is a part of the intuitive approach to decision making, and that it does not involve any expert use of rational methods. But on the other hand, the Department members preferred rational decision making to a large extent. This indicates that as long as there are verified procedures and experience available, the commanders prefer them. However, if the Department members have to make decisions with the barriers affecting them, such as the lack of time, lack of information and lack of personnel, they rather choose intuitive decision making stemming from their experience.

While identifying the character of the more or less intuitive commanders and managers no significant differences were found between the two groups. From the perspective of the management levels there is a significant finding that the extent of the intuition use is practically equal at all management levels.

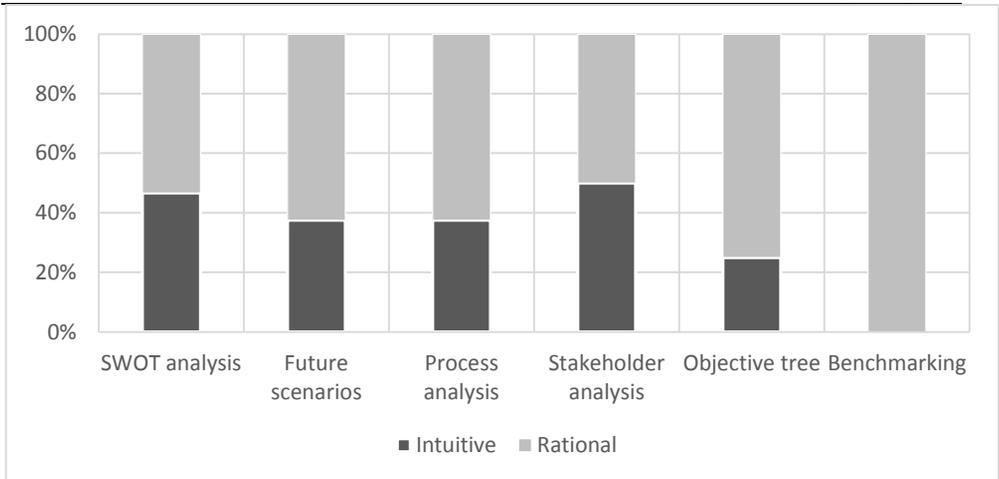


Figure 6: The use of strategic analysis methods depending on intuition

Figure 6 illustrates the use of the strategic analysis methods for the document processing, presenting also the information whether the respondents belong to the intuitive or rational group, as it is outlined above. The data show that most of the methods are used approximately equally by both the rational and intuitive members of the Department. As for Benchmarking, it is necessary to remind that it was used by only one respondent. In total, the extent to which the methods are used is larger with the rational Department members, except for the case of the analysis of interested parties with a ratio of 50:50. The rational respondents predominate most in case of the Objective tree method (75:25). The intuitive approach can be used with all the presented methods to a certain extent. However, the truth is that the Objective tree in particular requires logical and rational links among the individual constituents.

5. PROPOSAL OF METHODS OF STRATEGIC ANALYSIS FOR SELECTED PHASES OF STRATEGIC DOCUMENT PROCESSING

Based on the identified good practice in creating strategies in the Czech Republic⁴⁰ the authors of the article recommend primarily the use of the methodology for creating the public strategies as a source for the proposal of a methodological procedure - see Figure 7. As far as the use of the methods is concerned, the methodology is relatively general, without any specification of the use of appropriate methods for individual activities of given phases within the strategy creation. The use of the methods of strategic analysis is desirable in phases 1 and 3 as shown in Figure 7. In our view, in terms of the use of analytical methods these phases overlap to a certain extent. This is probably caused by the fact that phase 3 is presented in the methodology as a continuous phase. For activity 1.3 and 3.3 it is possible to use, **for the analysis of a current state of a given organisation or its component** that a strategy is being created for, one of these methods: **Benchmarking, Process analysis**

⁴⁰ ERNST & YOUNG. Projekt Metodika přípravy veřejných strategií: Komparativní analýza přípravy veřejných strategií v zahraničí a v České republice. Praha, 2011. [cit. 2015-07-12]. Source: http://www.mmr.cz/getmedia/5da3e96b-bbcd-4d0f-b7d5-7893393ef28c/komparativni_nalyza_111031_final.pdf

and/or EFQM model or Common Assessment Framework (CAF). The presented methods are briefly characterised in terms of the use in the introductory part of this article. For activities 1.3 and 3.4, or more precisely **the prognosis of future development**, it is possible to use the following methods: **DELPHI method, PESTLE analysis** and **Method of future scenarios**, which are also characterised earlier in this article. It is also appropriate, for the purpose of prognoses, to use the quantitative prognostic methods which are described in details for instance by Makridakis et al.⁴¹ As for the **synthesis of analytical findings** (basically it is activity 3.5) we recommend the use of **SWOT analysis** whose outcomes are usable for activity 4.1 as well as activity 5.3. To carry out phase 4 it is suitable to apply the **Objective tree. The analysis of interested parties** can be carried out primarily within activity 1.3 and subsequently also within phase 2. The methodology determines, as one of the operations of activity 1.3, an operation of analysing a problem (which shall be solved by the created strategy) in order to define it. For the problem analysis there are successfully used methods of issue tree and/or dimensional analysis, which are further described also in this publication.⁴²

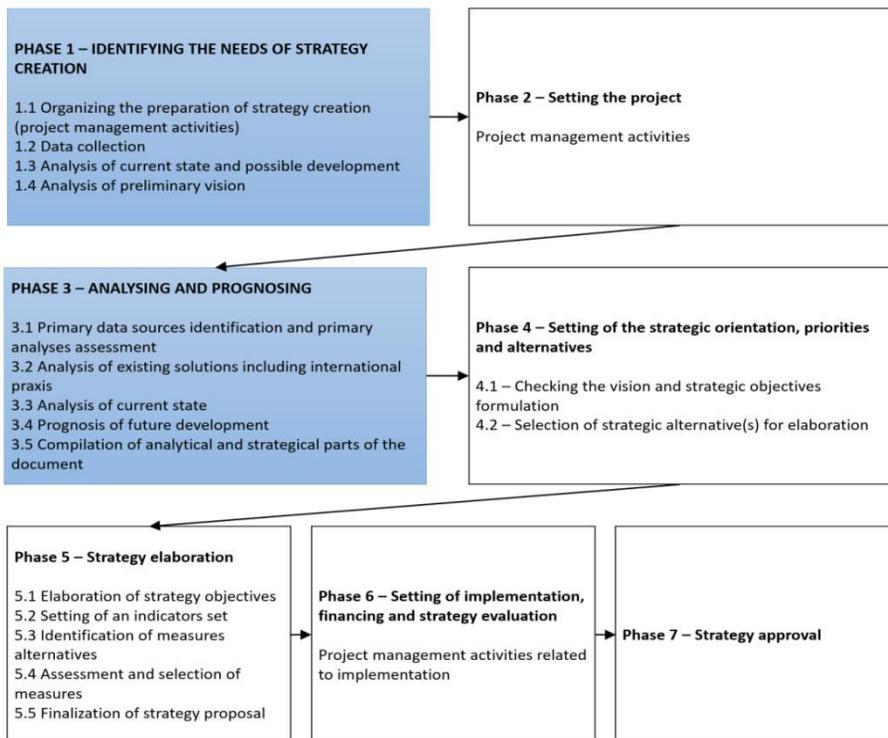


Figure 7: Strategy creation phase with activities of the given phase
Source: Modified according to the methodology⁴³

⁴¹ MAKRIDAKIS, Spyros, Steven C. WHEELWRIGHT, and Rob J. HYNDMAN. Forecasting: Methods and Applications, 3rd ed. John Wiley and Sons, 1998. 656 p. ISBN 978-0-471-53233-0.

⁴² GRASSEOVÁ, Monika (ed.). Efektivní rozhodování: analyzování, rozhodování, implementace a hodnocení. 1. ed. Brno: Edika, 2013. ISBN 978-80-266-0179-1.

⁴³ MINISTERSTVO FINANČÍ ČR. Metodika přípravy veřejných strategií [online]. Praha, 2012, 16. 2. 2014 [cit. 2013-05-12]. Source: http://www.mmr.cz/getmedia/4ebb3cc7-6f5c-4f37-ad1f-97054a212483/metodika-pripravy-verejnych-strategii_listopad-2012.pdf

In the methodology⁴⁴ there is only a list of the frequently used analytical and prognostic methods for phase 3. We have supplemented the list of the methods below with the information of the activity or operation within the strategy processing for which we recommend the method in terms of the purpose of the use.

- Business Impact Analysis, BIA - we recommend this method to be used for activities of all phases except for phase 3, in particular for activity 4.2 and/or 5.4 where the given proposals (variants) shall be evaluated by a single criterion.
- Cost-benefit analysis, CBA - we recommend using this method for activities of all phases except for phase 3, namely for activity 4.2 and/or 5.4 when the given proposals (variants) shall be evaluated by a single criterion. In the case of a multiple criteria evaluation of the proposals it is appropriate to use one of the methods of the multiple criteria variant evaluation, for example a direct expert assessment or Saaty's method - for further details see the publication.⁴⁵
- Mind maps - provide clarification and comprehension of the context by means of problem visualisation. For this purpose they are suitable for the use with activity 1.3.
- PEST(LE) analysis - suitable for activities 1.3 and 3.4 in order to identify opportunities and threats from the organisation's external environment within the analysed areas of the external environment.
- Issue Tree - usable for activity 1.3 in order to identify and analyse problem(s) in the area which the strategy is created for.
- Feasibility studies - are designed to assess practicability of an investment intention in terms of all perspectives which are significant for the project achievement. A study includes technical, financial, resource, time, risk and strategic assessments of the intention.⁴⁶ Due to the tendency to cover all the important parts of a project, a feasibility study goes through all phases of strategy creation.
- SWOT analysis - useful as a synthesis of findings of activities 1.3, 3.3 and 3.4. Subsequently it is effective to use the method as a basis for carrying out activities 4.1 and 5.3.

Then, the methodology presents a list of prognostic methods, which is identical with the contents of a publication by Potůček et al.⁴⁷ The prognostic methods are divided into three groups: universal methods (e.g. Brainstorming; panel of experts), procedural methods (e.g. DELPHI method; Scenarios), and structural methods (e.g. System approach; Cross interactions) without further information or clarification on the purpose of the methods.

⁴⁴ MINISTERSTVO FINANČÍ ČR. Metodika přípravy veřejných strategií [online]. Praha, 2012, 16. 2. 2014 [cit. 2013-05-12]. Source: http://www.mmr.cz/getmedia/4ebb3cc7-6f5c-4f37-ad1f-97054a212483/metodika-pripravy-verejnych-strategii_listopad-2012.pdf

⁴⁵ GRASSEOVÁ, Monika (ed.). Efektivní rozhodování: analyzování, rozhodování, implementace a hodnocení. 1. ed. Brno: Edika, 2013. ISBN 978-80-266-0179-1.

⁴⁶ PITAŠ, Jaromír; ŠTOFKO, Hubert. Projektové řízení. Brno: Edika, 2013, pp. 296-317. In Efektivní rozhodování: Analyzování - Rozhodování - Implementace a hodnocení. 1. ed. ISBN 978-80-266-0179-1.

⁴⁷ POTŮČEK, M. et al. Manuál prognostických metod. Praha: Sociologické nakladatelství, 2006.

6. DISCUSSION ON OUTCOMES AND RECOMMENDATION TO APPLY SELECTED METHODS OF STRATEGIC ANALYSIS

Based on the above mentioned findings, a general partial conclusion can be made: The methods of strategic analysis are often used in the Defence Ministry in different ways than they were originally intended. The Department members use them most frequently in the way they learnt from their colleagues in practice, or study them on their own. Based on the collected data, among the quoted frequent mistakes there are subjective execution of analyses, incorrect application and insufficient knowledge of the methods, which correspond with the above. It has been also found out that due to the lack of time and information, which are the most frequent barriers to decision making, the Department members use a number of analytical methods in considerably simplified forms. A typical example is that of SWOT analysis, which is often reduced into a mere formulation of strengths and weaknesses, opportunities and threats. As the research revealed, the Department members tend rather to a collective way of solving, since they most frequently use the methods of Group discussion, Brainstorming and Interview while creating the strategic documents. This fact suggests that this particular working style shall be maintained, and only modified into more effective and faster decision making.

For the most of the recommended methods it is suitable to use structured data, out of which a part should always be of historical character (new documents are created according to the current state of an organisational environment). Because of this, it is appropriate to process and store the data in a form that allows a repeated use within the future activities. Although the methods of a Group discussion and Interview are able to generate a great amount of information, the most of it is usually lost (it is not further utilised within a decision-making process). If this is the case, a greater extent of using the written formalised interviewing can be recommended. By means of this method it is possible to repeatedly acquire the identically structured data that can be easily processed, evaluated and repeatedly used. A similar function, which supports working with adequate data, is secured by building local expert databases which allows for the use of the DELPHI method. The Department members may rely on the fact that an expert in a given problem should suggest a solution in a shorter time than a layman. In addition to that, since the DELPHI method is usually carried out in a written form, it is less time-consuming than face-to-face meetings and discussions. Another finding promotes the DELPHI method, showing that during the research the respondents identified insufficiently competent personnel as one of the most significant barrier, but paradoxically, despite this fact they solve most problems with the same personnel in discussions.

According to the research by Ernst & Young a frequent mistake is working with inadequate data and low analysis of existing solutions and working with them. Also these reasons support the above mentioned principle of data processing in a structured and written form. This can be further supplemented with recommendation, where the partial outcomes of the analytical methods shall be (in terms of membership) freely accessible and quickly traceable. The following can be recommended with the particular methods which are most frequently used:

- SWOT analysis - the lists of strengths and weaknesses, opportunities and threats, related to a particular environment. In the case of creating repeated strategic documents, a certain organisational component can be used as historical experience and a basis for the follow-up analysis.

- Process analysis - elaborated process maps for the processes that enter into the activities described by a document. As it was outlined above, an analysis and optimisation are time-consuming activities. Therefore, it is highly effective, for the individual document creation, to work with current and easily accessible process maps. At present, there is a process model of the Department available within the environment of Staff information system (ŠIS), which contains descriptions of processes as far as the level of activities.
- Future scenarios method - overviews of the created scenarios, including those not carried out. In the case that it is possible to use some of the not carried out scenarios in a modified and updated form, it shall bring considerable time savings within the problem solving when compared with creating a completely new scenario.
- Analysis of interested parties - as a rule, the interested parties are not often changed with the individual organisational components, and a once compiled list of the interested parties, consisting also of their main characteristics, will do for the future with just updating it, saving time instead of creating the same documents repeatedly.
- EFQM and CAF methods have a high added value, though they were not used among the respondents at all when preparing strategic documents. As it was mentioned in the text above the methods of the internal environment analysis are not a necessary part of a strategic document, but they can serve as a valuable informational basis. And now it is again appropriate to remind the frequent problems of inaccurate identification of the problems' causes, processing of inadequate data and insufficient execution of the analysis of existing solutions. These problems can be also interconnected with the barriers of a lack of time and lack of information. At the same time, the outputs of EFQM and CAF provide a systematic and detailed overview of the current state of the organisation's internal environment, and if well processed they also help identify the problem areas together with their causes. Because of this reason these analyses can be recommended in the Department at the level of partial components (units) for "preventive" reasons. The outputs of such analyses can be stored, as it was suggested with the previous recommendations, as an accessible source of quality information, which is ready to be used for the document processing. Also in this case, it is necessary to keep this database regularly updated.
- A peculiar situation is within the question of methodically correct use of the analytical methods. The available findings reveal that the Department members have insufficient knowledge of the methods (not only "what" to do, but especially "how" to do it correctly). They have second-hand knowledge of the methods from the practice and from their self-study, and they do not use their knowledge acquired through the master's studies sufficiently. At the same time, they do not consider the unfamiliarity with the methods to be a significant barrier, and they even do not consider the knowledge of the methods and existence of methodologies to be a key factor for effective problem solving. However, from the external perspective it is obvious that the methodically incorrect analytical work leads to conclusions which are difficult to be used, making the existing barriers (especially the lack of quality information) even more serious. For this reason, it seems appropriate to suggest at least some of the key

principles, which are the most neglected in practice, with the most frequently used methods of strategic analysis while preparing a document:

- SWOT analysis - a set of factors entering the matrix and stemming from the analysis of internal and external environments. It is highly desirable when the units have their environment at least generally analysed, and thus it is not necessary, in terms of executing SWOT analysis, to waste time with a complex environmental analysis. Then, the aim of the analysis is to generate strategic variants that are based on the identified environmental factors. There is no need to use SWOT analysis for a mere list of strengths and weaknesses of an organisation.
- Process analysis - it can be used both as an informational basis about the current state of an organisational environment and as a working aid in case of preparing extensive strategic documents. In the cases when the document processing is an activity demanding a lot of time, personnel and other resources, it is effective to devote some time during the preparation phase to the determination of the basic processes within the document creation. The aim here is to avoid duplicating the work (lack of time), and to achieve a complex processed issue (subsequent lack of information).
- Future scenarios - subjective forecast of probable development of an environment can be objectivised by means of multiple persons engagement, and a systematised (i.e. quantitatively evaluated) forecast of the environmental development can lead to a fairly precise forecast of the probable development. With the scenarios it must be clearly specified by which assumptions and prerequisites their execution is determined.

CONCLUSION

The article's focus was the evaluation of use of the methods of strategic analysis while creating strategic documents in the Ministry of Defence in the Czech Republic based on a conducted research. The research "Solving Unstructured Decision-Making Problems in the Ministry of Defence of the Czech Republic" revealed that the methods of strategic analysis are used very little during the preparation of documents, which can impact the real quality and usability of the documents. Due to this reason, the authors proposed possible ways to improve the use of the methods.

An analysis of the methodology for creating the public strategies from 2012 was conducted within the article. This analysis results in recommendations for the utilization of concrete methods of strategic analysis primarily in the phase of strategy creation, analytical and prognostic phase and in the phase of strategic orientation setting.

Furthermore, the barriers affecting the decision-making and the most common decision making mistakes have been described and based on these factors, further recommendations for the use of methods of strategic analysis have been formulated. The essence of these recommendations is the higher standardization of data collection and replacement of the Interview and Discussion methods by higher structured DELPHI or Questionnaire methods. The optimization of SWOT analysis, Process analysis, Method of future scenarios and other methods has been recommended. At the same time, more frequent use of the EFQM and CAF methods is suggested.

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