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CONCEPTS OF SCENARIO METHODS IN IMPROVEMENT OF AN ENTERPRISE

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Abstract. Purpose of the study, principal objectives, scope of the investigation, methods employed results and principal conclusion.

Uncertainty makes both theoreticians and practicioners face new tasks to fulfil. Enterprises, in order to win the competitive struggle must constantly improve their processes and structures. On the other hand, thinking in the categories of the future becomes really difficult nowadays. This creates particularly convenient conditions to apply scenario methods. In connection with the above, the purpose of this study is to characterize the essence of scenario methods employed in enterprise development. The article addresses the issue of factors conditioning proper selection of methods in the enterprise development process, the principles of scenario planning and the opportunities to apply other techniques and methods in scenario planning

Keywords: business environment, method selection conditions, method, organization improvement, scenario planning, scenarios.

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JEL Classification: L1.

1. Introduction

The analysis of enterprise environment is an important part of business management, while the environment shapes the principles of operation and affects success of an enterprise.As a result, each enterprise should make efforts aiming at identifying it as best as possible, which is intended not only to identify it and evaluate the phenomena occurring in it, but, above all, to predict future events.

The turbulent character of the environment poses a number of challenges for enterpise. On the one hand, the discontinuity of changes, on the other hand their revolutionary character make before the managers new tasks. Thinking in categories of the future has currently become very difficult. The crisis situation and the uncertainty of external phenomena create conditions for repeated growth of interest in macroeconomic analysis methods, in particular in the scenario methods aiming at reducing the uncertainty and evaluating potential risk.

Since the literature on the subject presents the problem of scenarios in a diverse manner, sometimes providing contradictory definitions, characteristics, principles and methodological ideas, regulating these problems seems justified.

In connection with the above, the purpose of this article is to present the essence and significance of scenarios and the use of scenario methods in enterprise improvement. The following partial objectives result from such an adopted general purpose: presentation of the origin of scenario methods and the procedure of conduct suggested by various authors, as well as the indication of factors conditioning the selection of methods.

2. Notion of scenario methods

The purpose of this part of the paper is to present and systematize the notion of scenarios. Over the past 30 years, the methods of scenario planning were described so diversely that we may call it a "methodological chaos" (Bradfield *et al.* 2005).

When specifying the origin of scenario methods, we may state that the literature presents a wide range of various and sometimes contradictory definitions, characteristics, principles and methodological ideas concerning scenarios. Additionally, as S. P. Schnaars aptly notices, the information on the methods of scenario planning comes from three sources, namely: articles, using the knowledge of practitioners; articles concerning literature research and articles using a small group of research based on empirical research. It results in, e.g. the diversity of opinions, methodological approaches, or definitions in this respect (Schnaars 1987). Numerous authors, including, e.g. M. Godet and F. Roubelat (Godet 1990, 1996), A. Khakee (Khakee 1991), D. H. Mason (Mason 1994), D. G. Simpson (Simpson 1992), A. Martelli (Martelli 2001), A. Wright (Wright 2004) believe that the notion of scenarios and methods of scenario planning is abused and it cannot be defined.

Taking the above into account and in order to maintain consistency of the discussed research problem, the essence and significance of scenarios and scenario methods, the origin of scenario methods and the procedure of conduct suggested by various authors will be presented in the first place. On the other hand, the principles of using scenario methods in the process of strategic planning will be discussed later.

The author who used the notion scenario for the first time was H. Kahn, according to whom scenarios are potential sequences of events prepared in order to expose accidental processes and the related decision-making problems. Scenarios demonstrate how certain hypothetical situations will be developing step by step and what the possibilities are with regard to stopping, changing the direction or supporting the course of this situation (Kahn 1967).

The definitions of scenarios proposed by W. R. Huss (Huss 1987), H. S. Becker (Becker 1987, 1989) and P. J. H. Schoemaker (Schoemaker 1991, 1998) refer to events

in the future and are a credible and consistent description of future conditions for the operation of an enterprise.

On the other hand, L. Fahey and R. M. Randall (Fahey, Randall 1998) claim that a scenario is a projection of the potential future. It is a special combination of possible events and assumptions regarding future events. However, scenarios are not forecasts of future events, but a certain kind of view into the future which is formed on the basis of specific information and a set of logical assumptions. P. Schwartz (Schwartz 1996, 2011) is also of a similar opinion. He believes that scenario methods are not used for forecasting, but increasing the level of strategic decisions.

The notion of scenario according to G. Johnson, K. Scholes, R. Whittington is slightly different than those presented earlier. It means a detailed and credible evaluation of the possible development of the business environment of an organization in the future, presented on the basis of information on major factors driving changes, whose impact on the organization's strategy is difficult to predict (Johnson *et al.* 2010).

For the purposes of this publication, we will adopt the definitions of scenarios by M. Porter, according to whom the scenario is an internally consistent picture of what the future may look like (Porter 2006).

To sum up, we may state that scenarios in enterprise management: stimulate managerial personnel to think about the external environment, enable a better understanding of the dynamics of changes, indicate ground-breaking future moments, facilitate the identification of opportunities and threats, make it easier for the managerial personnel to test the future and prepare appropriate response methods, make it possible to consider significant consequences of future changes for the enterprise, increase the scope of possible operation variants, increase the flexibility of strategies, support the observation of the environment and are a source of information used in current decision-making (Raltson, Wilson 2006).

The essence of scenarios is the description of phenomena, as well as the indication of their logical and consistent consequences, and the determination of their development in the future. On the other hand, the starting point is the description of the status of phenomena of interest and preparation of a future, alternative sequence of events. The generated scenarios are thus a system of events, combined into a logical, usually chronological, sequence which should: be significant for the phenomenon for which the scenario has been drawn up; refer to a specific time and be related with one another by means of various types of relations (formal and legal, casual, time sequence, conditional probability) in such a manner that the approximation of the entire system of events may be obtained on the basis of the hypotheses derived from these relations (Ducot, Lubben 1980).

In connection with the above, we may state that scenario methods are used for creating long-term forecasts in situations in which: the phenomenon is not continuous, namely there is a leap between the past and the present and the present and the future; we have no

sufficient knowledge on the regularities of the analyzed phenomena; the activities are of an unpredictable and non-routine character; the phenomena are of a descriptive character and we may not define a large probability of impact on the organization.

Later on, we would like to focus on the origin and the evolution of scenario planning methods.

3. The development of scenario planning method concepts

When conducting a critical analysis of the subject matter, we notice that the notion of scenarios and scenario planning methods evolved throughout the centuries. However, it seems that certain ideas, notions, events were so significant that they strongly influenced the contemporary shape and character of scenario planning.

Although the literature on the subject, with regard to the origin of scenarios, dates back to remote history, the 1960s and 1970s are the most important period from the point of view of this discussion. The concept of scenarios was introduced for the first time by the company General Electric and the company Shell Nederland (Millett 2003), on the other hand, it was popularized and transferred to business ground by H. Kahn and A. J. Wiener (Kahn, Wiener 1967) who were operating in the Rand Corporation center along with other researchers such as, e.g. T. J. Gordon, N. Dalkey or O. Helmer. The second significant American center for the development of scenario methods is the Stanford Research Institute.

The precursor in the field of research on scenarios in Europe was the French philosopher G. Berger (Godet 1987) who, at the same time as the American researchers, founded the school of creating scenarios in the 1950s: *La Prospective*. The concept of *La Prospective* draws attention to a more critical view on and into the future as well as to the openness of this view. Further work was continued by, among others, P. Masse, B. de Jouvenel, M. Godet (see Godet 2000, 2001).

Another important period for the development of scenario methods and their popularization were the 1970s and, along with them, changes in the organizational environment caused by economic crises. This period became the direct reason for the adaptation and use of scenario methods as one of the tools of strategic planning.

Research clearly indicates that the interest in and the popularization of scenario planning methods in Europe appeared after the first oil crisis in 1973, and the next in the years 1976–1978 (see Malaska 1985, Malaska *et al.* 1984; Meristo 1989). On the other hand, this period in the USA covers the years 1977–1981 (see Linneman, Klein 1979; Linneman, Klein 1983). However, the authors J. W. M. Doorn and F. A. Vught are of a different opinion on this subject and claim that between 1973 and 1980, there was a decrease in the interest in scenarios, especially in the USA. This was caused by their complicated character and the amount of time needed for their creation (Doorn, Vught 1983).

We may notice that the period of development of scenario methods is long and it was shaped by numerous factors, while their popularity is of a sinusoid character and currently they are experiencing their renaissance. It seems that the most probable reason is the global economic situation and the economic crisis as well as the continuous need to conduct systematic research in the organization's future.

When making an analysis of the literature related to scenario planning methods, we may note a distinguishing proposal to regulate the origin of scenario methods developed by the authors R. Bradfield, G. Wright, G. Burt, G. Cairns as well as K. Van der Heijden (Bradfield *et al.* 2005). The authors enumerate:

- the school of intuitive logics;
- the probabilistic modified trends school – PMT, containing two different methods: the trend impact analysis (TIA) as well as the cross impact analysis (CIA). These methods generate a number of alternatives for the development of the future and not only the extrapolation of historical data. After combination with the experts' opinions, they form scenarios;
- the La Prospective school, mentioned above, which was developed at the same time as the American schools of creating scenarios. The basis for the *La Prospective* school was the preparation of long-term plans based on multi-variant visions of the future (scenarios). The scenarios were created on the basis of expected changes in the environment as well as noticeable future implications of changes and decisions made currently by the organization. M. Godet (Godet 2000, 2001) claimed that choices made today may shape and even create the future, and he thus summed up this proactive approach, typical of *La Prospective*. Therefore, in order to reduce the uncertainty, it is important not only to observe the external environment, but also to look closely at the internal one.

It seems that the literature on the subject provides numerous interesting methodological indications characterizing the use of this group of methods in the process of creating the organization's strategy. On the other hand, the claim of P. W. F. Van Notten *et al*., seems reasonable. They claim that each attempt to classify and regulate the techniques of creating scenarios quickly becomes outdated. This is caused mainly by the development of numerous techniques and methodologies. In addition, it seems that the attempt to classify the techniques created across more than several decades of scenario development is very difficult. Such an attempt was taken by the authors P. W. F. Van Notten *et al*., in their book. When classifying scenarios, the authors took into account the following criteria: the purpose, the method of implementation and the content of scenarios (Notten *et al.* 2003).

On the other hand, the issue of creating scenarios has been well described in the literature on the subject. We may notice that scenarios differ among one another in their creation, form as well as structure. Sample selected types of scenarios according to the authors have been presented in Table 1.

Table 1. Classification of scenarios (Source: created by the authors on the basis of: Tyrańska, J. Walas-Trębacz 2010; Klasik 1993; Borjeson *et al*. 2005)

No	Author	Types of scenarios	Characteristics
1	C. Ducot, G. Lubben	1. research 2. anticipation 3. descriptive 4. normative	1. research (discovery) scenarios – define what are the effects of a given set of causes; 2. anticipation scenarios – define what the causes of given effects may be; 3. descriptive scenarios – define only the ordered system of possible events, ignoring the effect; 4. normative scenarios – describe events and take into account positive or negative effects;
2	A. Klasik	1. descriptive 2. normative 3. exploration 4. anticipation	1. descriptive scenarios – contain descriptive trains; 2. normative scenarios – contain normative content, namely the determination of what should be and not what may occur; 3. exploration scenarios – describe the sequence of events in a logical manner leading to a possible future (consistent with the induction approach); 4. anticipation scenarios – the starting point are images of the future which are defined as desired (consistent with the deduction approach);
3	D. Faulkner, C. Bosman	1. key indicators 2. main impact factors	1. key indicators – namely significant events or trends the occurrence of which may be expected in the future economy; 2. main impact factors – reflect the likely impact of key indicators on an enterprise;
4	K. Van der Heijden	1. induction 2. deduction 3. created by the incremental method	1. induction scenarios, created on the basis of the identification of subsequent connections between possible events; 2. deduction scenarios, created at the beginning, by the identification of the most significant statuses, then after the determination of the basic character of each scenario particular data are adjusted, forming a logical and chronologically ordered history; 3. scenarios created by the incremental method in which the starting point is the officially adopted company vision. These scenarios demonstrate certain modifications of the future and verify its internal consistency, as well as are intended to convince the organization to use scenarios;

End of Table 1

No	Author	Types of scenarios	Characteristics
5.	L. Borjeson, M. Hojer, K.H. Dreborg, T. Ekvall, G. Finnveden	1. anticipation scenarios 2. exploration scenarios 3. normative scenarios	1. anticipation scenarios – answer to the questions of "what is going to happen?" in the future. The purpose of this type of scenarios is to prepare the organization for various types of events, by the identification of the probability of their development; 2. exploration scenarios – try to answer the question of "what may happen in the future?", the main objective of which is to examine various possible options for the development of events; 3. normative scenarios – answer the question of how to implement the assumed objective. The basis for creating this type of scenarios is the definition of conditions making it possible to achieve the assumed objective in the future;
6.	G. Gierszewska and M. Romanowska	1. scenarios of possible events 2. simulation scenarios 3. environment status scenarios 4. scenarios of processes in environment	1. scenarios of possible events which are based on intuitive logic, consist in creating lists of events possible in the future, identifying their causes, possible evolution directions, the strength and character of impact on the company and defining its ability to adapt to these phenomena; 2. simulation scenarios enabling the evaluation of the value of particular strategic choices in the organization, depending on the impact of the environment; 3. environment status scenarios have a qualitative character, which means that the evaluation of the potential impact force of particular processes occurring in the environment on the organization, and the evaluation of the probability of occurrence of these processes; 4. scenarios of processes in the environment are a specialization of methods of environment state scenarios, they focus on the most significant processes, of a potentially high impact force on the company.

Data in the table indicate that the approach to the problem of creating scenarios is diverse and very complex at the same time. Due to the purpose of the article, we are not able to review all the typologies of scenarios. On the other hand, to recapitulate, we may clearly emphasize the fact that the diversity and richness of scenarios provide a number of possibilities of their application in practice.

4. The essence of improvement

From the point of view of goals of the study, in this point we present the concept of improvement and its different ways of interpretation (For more information see Bielińska-Dusza 2009).

The issue of the company improvement is not a new problem. It should also be emphasized that eminent representatives of scientific school of management such as: F. W. Taylor, H. L. Gant, H. Ford, F. B. Gilbreth, H. Le Châtelier, K. Adamiecki created a system of organizing work aimed at improvement of the company organization and management

In the present study we assume that improvement is a continuous process aimed at increasing efficiency of an organization implemented in accordance with the cycle of organized actions.

In reference books we can encounter the notions of improvement, streamlining or enhancement (see table 2). Some authors treat them as terms of different meanings, while others use them interchangeably.

Table 2. Basic definitions related to the essence of improvement (Source: prepared by the author on the basis of: Pszczołowski 1978; Mikołajczyk 1995; Kotarbiński 2003; Romanowska *et al.* 2004)

Term	Characteristics
Improvement	Increasing operational efficiency of an organization (Mikołajczyk 1995), it is a concept coming from the direction of research of organizational behaviours (Romanowska *et al* 2004).
Streamlining*	Increasing efficiency; refers to repeated action or operation. The result is streamlining. In the theory of organization streamlining is performance of the principle of efficiency, it is carried out by using, among others, the cycle of organized actions (Pszczołowski 1978).
Enhancement	Improvement of activities or operation in some respect. Enhancement of the notion of rationalization and optimization. The final form of enhancement is achievement of excellence relative to a given place and time (Pszczołowski 1978).
Modification T. Kotarbiński T. Pszczołowski Z. Mikołajczyk	Taking a mutual position in such a way with regard to the component parts of an organization, so that the whole operation efficiently leads to the goal. Considering organizing more broadly, it can be stated that any streamlining of activities comes down to some modifications in an organization (Kotarbiński 2003). This is also permutational action**, introducing changes in some subject, therefore it obtains higher evaluation. It is the same as streamlining, namely increasing efficiency, quality (Pszczołowski 1978). Changing something in such a way so that it becomes better, more useful, functional, revised, improved (Mikołajczyk 1995).

* The notion of streamlining originates from praxeology where any activities aimed at streamlining activities are called practical directives. They were introduced to reference books by T. Kotarbiński (See: Kotarbiński 2003). **Permutation is an event in which within a given time the final state is different from the initial state (Pszczołowski 1978).

On the basis of the analysis of basic terms concerning improvement (table 2) it can be stated that the definition adopted by us recognizes improvement more broadly than the other presented definitions. According to it, it is a continuous process, lasting continuously, while according to T. Pszczołowski enhancement was a permutational action, namely in a given period.

If we look at a company as an organized unit, then improvement can be considered in the following three aspects: scope, plane and state. **The scope of** improvement of a company consists of two areas (Stabryła, Trzcieniecki 1986): structure (statics) and processes (dynamics). From the point of view of complexity, each of them can be perceived on various **planes** (levels): creation and implementation. However, with regard to **states** it is possible to enumerate: the state of development, correct state (satisfactory), incorrect state (unsatisfactory). Improvement within these states may take one of three forms: creative design of the new system; gradual, planned improvement and gradual and systematic removal of defects (Kieżun 1980).

Analyzing improvement in the company within statics, we can distinguish streamlining of objectives and functions, subordination of components of the system and establishing organizational positions, grouping organizational positions, organizational dependencies, decision-making rights distribution, structure formalization (Nalepka 2003). On the other hand, from the point of view of dynamics, we can distinguish improvement in management process and production process. It seems that the use of scenarios may be helpful within the dynamic aspect of improvement, though it is also necessary to point out that those areas may overlap.

The significance of improvement understood as a process of conscious changes in an organization within static aspect applies to improvement with regard to bonds and relations between them, tasks and methods of functioning of particular parts. It leads to creation of a new organizational structure, an institution with a higher degree of organization, adapted to the current internal and external conditions. On the other hand, scenario analysis becomes an auxiliary tool for the correct adjustment of an organization to conditions in the environment. It should be emphasized that the necessary condition to initiate appropriate improving actions is to carry out research that should contribute not only to detection of their irregularities but also to learning about their essence and determining the reasons causing them. The use of scenarios to organizational improvement is significant since scenarios are used to build organization strategy in conditions of variable, and not structured, environment. They make it possible, on the one hand, to anticipate future phenomena, while on the other hand, when properly realized, they should increase effectiveness of an organization and improve its competitiveness. However, the condition is the complex nature of the changes made, which should be the basic principle of organization improvement. This complex nature of changes should take account of the system approach which indicates that the company's improvement may apply to each selected area within it. Often modifications introduced in one subsystem also affect other subsystems, causing their adaptation responses aimed at reaching balance.

As it is emphasized by Z. Mikołajczyk, improvement is an integral part of company operations and internal changes "for today" and predicting its operation in the future (Mikołajczyk 1995). On the basis of opinions mentioned above it can be stated that introducing changes in the company as a result of adaptation reaction to the situation, is identical with the notion of improvement.

It can also be said that improvement through continuous adjustment of the organization to the new conditions is intended to increase its flexibility. It has a significant meaning in today's conditions of the turbulent character of the environment of the company and is a necessity. In addition, improvement of a company may not only have adjustment nature but it also should anticipate the appearing conditions, which are anticipated by scenario analysis with good result.

5. Remarks on applying scenario methods

We may then notice that the selection of appropriate methods in this process is a complex process depending on numerous factors. We will understand the notion of the method as a systematic, repeated and effective manner of conduct, based on scientific research terms and aiming at solving management problems in organizations (Błaszczyk 2005).

Selection of appropriate methods in the enterprises improvement process should take accounts of a number of factors which will condition the effectiveness of application of a particular method. Moreover, taking account of the specific nature of various detailed methods and techniques, as well as situational conditions, it is difficult to clearly identify all the significant factors. The ones presented below may greatly contribute to further discussion and analysis.

When analyzing the literature on the subject, we observe that there are no methods which would solve the problem of enterprise development in a comprehensive manner. As a result, when selecting detailed methods and techniques, we should take into account the following guidelines:

- competences, namely combinations of knowledge, experience and skills of persons using scenario methods;
- the analysis of needs for which a given method is to be used, including the possibility of using supplementary methods and those which are already used;
- the possibility to select methods from other fields of knowledge;
- the analysis of requirements, conditions, terminology of use from the point of view of the organizational operation principles;
- the evaluation of situation, internal and external conditions;
- financial expenditures necessary for using the selected method;
- opinions of other users concerning the suitability of a particular method;
- the availability of required information, as well as the degree of specialization of expected results;

- practical indications for using the selected method;
- the possibility to use assistance both from inside the organization and from the outside, e.g. by means of opinions of experts;
- the degree of the organization's preparation (e.g. organizational and technical conditions, structural solutions), time-consuming character, cost-consuming character of using a specific method as well as the enterprise's resources, which may pose various types of obstacles;
- intra-organizational environment, in particular: capabilities, skills; values (organizational culture); personnel; structure and size of enterprise; styles of leadership and management guidelines, complexity of the system.

It seems that in the case of a turbulent environment, scenario methods are of particular significance. These methods are used to anticipate the future and evaluate potential risk. For this reason, scenario planning seems to be the optimum response to the intensifying turbulence of the environment and the occurrence of discontinuity periods. Just like any other method, also scenario methods should meet the methodical requirements, understood as correlating the methodic principle, the used approach, languages, equipment as part of procedures used to solve specific problems. The notion of methodic principle will mean a characteristic, well thought-out and ordered set of codes of conduct (guidelines, rules, directives). On the other hand, the approach is a manner of presenting or approaching the problem's solution. The notion language in this case is a specified and organized system of signs used to transfer information, and equipment is a set of devices used in a given method. On the other hand, the notion of procedure will mean the description of the course of actions, regulating the system and the sequence of requirements when solving the problem (Antoszkiewicz 1990).

The author's set of principles for scenario planning has been presented below in alphabetical order:

- principle of accuracy and objectivity – indicates the use of objective, independent and complete information, reflecting the current status of the examined problem;
- principle of significance – indicates the presence of relations between scenario planning and the function of planning in an enterprise. As a result, scenario planning may be treated as an element of the planning system;
- principle of research complexity – indicates the obligation to conduct research and draw conclusions in connection with all significant facts, circumstances and information;
- principle of perspective thinking – indicates continuous thinking in categories of the future and its programming;
- principle of system and situational thinking – uses system approaches in the process of scenarios formulation. It treats organizations as an integral part of the environment;
- principle of professionalism – indicates the use of qualified and specialized employees, experts, to formulate scenarios. It is also worth emphasizing the problem

of proper personnel selection which should take appropriate competences into account;
- principle of equal partnership and cooperation – takes into account the aspect of cooperation of employees across various organizational levels. The support and commitment of top management in the process of formulating scenarios should also be taken into account as part of this principle;
- principle of regularity – applies to updating scenarios if changes occur in a repeated, continuous manner, which may contribute to increasing the organizational operating efficiency;
- principle of using entire knowledge and experience.

In view of the foregoing, we may make an assumption and suggest an original approach to treating scenario methods as a super-method. This means that it may be supplemented with other detailed methods and techniques. For example, the following groups of methods may be specified: methods and techniques of environment analysis: analysis of strategic gap, method of economic forecasting, stakeholder analysis;

- integrated methods: method of complex qualifications of company activity, ASTRA analysis or SPACE analysis;
- heuristic methods – free association techniques (brainstorm and its varieties, Gordon's technique, synectic technique, new association), techniques of forced associations (translation, transfer of concepts, the teratology method, the Delphi method, the nominal group method);
- information methods which are used, among others, in the decision-making process, multi-dimensional data analysis or in the implementation of the functions of particular organizational units. It seems that these methods will enjoy an ever increasing popularity, due to the fact that the second half of the 20th century is a period of intense development of information systems and changes taking place in information technologies make it possible to constantly increase the scope of their use (for more details concerning information methods, see Bielińska-Dusza 2011).

For example R. Bradfield *et al.* (Bradfield *et al.* 2005) suggest the following tools: Intuitive-Logics Models: Generic - brainstorming, STEEP analysis, clustering, matrices, system, dynamics and stakeholder analysis. In La Prospective Models: proprietary – structural, (Micmac) and actor (Mactor) analysis, morphological, analysis, Delphi, SMIC Prob- Expert, Multipol and Multicriteria evaluation. Whilst in Probabilistic Modified Trend Models: Proprietary Trends, Impact and Cross Impact, Analysis, Monte Carlo simulations.

We may emphasize the fact that scenario planning does not consist only in precisely forecasting values of selected variables in the future, but also in constant organizational learning. The readiness for practical use of the scenario method is an expression of the organization's openness to changes taking place in the environment, determines its ability to continuously monitor them, draw conclusions on their basis and modify strategic assumptions.

An unquestionable advantage of using the scenario planning method in improving enterprise is the reduction in the uncertainty level which accompanies almost all activities carried out in the contemporary world. Reducing the uncertainty level is directly associated with its prediction. However, in order for the anticipation of events to be possible, it is important to properly learn not only about the present, but also the past, despite the fact that the complexity of the environment makes it difficult, and sometimes impossible, to predict the future on the basis of the past.

However, a some doubt appears as to what extent the human mind is capable to learn about the surrounding reality to an appropriate extent. Two limitations may be indicated here: one is associated with the occurrence of the so-called self-agreed trap, the other on the other hand with the activity of various constraints inside the mind and the compensation of limitations in the system brain/mind. Some of those compensations may lead to cognitive distortions and illusions or acquiring objective partial knowledge (Wheeler 1977), which may affect the reduction in the effectiveness of predicted changes and, as a consequence, creating scenarios.

The problem of concepts of scenario methods to improve an eneterprise presented above by the author should be treated only as a contribution for a broader discussion on the subject. The undertaken actions do are not supposed to be final decisions and due to the complexity of the problem, they could not be solved completely. It seems that this discussion may be an inspiration for further research.

6. Conclusions

Scenario planning identifies environmental factors which have or may have impact on the functioning of an organization. However, it should be defined that scenario planning is a process of the organization's continuous learning, is an expression of the organization's openness to changes taking place in the environment and continous improvement of the organization.

By using scenario methods, managers pursue the process of continuous monitoring and updating of accepted assumptions.

An unquestionable advantage of using the scenario planning method is the reduction in the uncertainty level which accompanies almost all activities carried out in the contemporary world. We may venture a statement that uncertainty is the biggest challenge of the present day. On the other hand, if we expect scenario planning to have causative power to predict the future, this is a symptom of misunderstanding of the essence of planning. We should expect, first of all, increasing the quality of made decisions and facilitating the decision-making process from planning. In addition, contemporary planning of enterprise should aim at stimulating a certain kind of mistrust, pragmatism in conduct and a perspective way of thinking in managers. Criticism towards scenario planning not only does not protect the company against issues related to permanent unpredictability, but it also stimulates a number of persons to state that one may equally

well resign from it. We may abandon planning, but a question arises: what may we suggest in exchange?

The problem of concepts of scenario methods to improve an eneterprise presented above by the author should be treated only as a contribution for a broader discussion on the subject. The undertaken actions are not supposed to be final decisions and due to the complexity of the problem, they could not be solved completely. It seems that this discussion may be an inspiration for further research

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