

USING SCENARIOS IN MANAGEMENT STRATEGY DESIGN IN THE CONTEXT OF THE GLOBAL RISKS

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Abstract: The process of organization's future anticipation is part of the strategic management. It is a management practice to use in advance the knowledge about the external environment in order to avoid disasters and the strategies disorders. One of the techniques used in the future anticipation is the scenario. On the other hand, the actual global environment is characterized by an increasing complexity and risks. They may produce different pressures and dysfunctions in any organization's strategies. In this briefly presented context, the paper is aiming to analyze the importance of using scenarios in the management strategy design, having in view the global risks. After a briefing about the concept of the global risk, a matrix of relevance-uncertainty is proposed. Then, the scenario as a management tool is presented and a model of strategy design management by scenarios is proposed. The methods used in the research are the literature searching and conceptualization.

Keywords: organization's environment, global risks, scenarios, management, strategy design

1. Introduction

It is well known that any organization operates in a tri-dimensional environment: internal environment, near external environment and far external environment. Whether the internal environment may be controlled by the organization's management and the near external environment even if it could not be controlled but may be influenced, the far external environment could not be nor controlled, nor influenced, but it may be understood and anticipated. Nevertheless, the far external environment is composed by five groups of factors, i.e. political, economical, social, environmental and technological factors and in this respect the majority of the companies are assessing them.

Adapting to these factors the organizations are changing their strategies or changing themselves to face the external pressures. This is the key of the organization's strategy.

In order to gain success the organizations have to anticipate the possible changes and to be ready anytime to face the opportunities and the challenges in a pro-active and not re-active manner (Morgan, 1988).

The external environment changes may be opportunities or threats for all organizations. Hence, the strategies imply the opportunities capitalization for countries and for organizations, as well.

The management strategy approach have to be dynamic, flexible and innovative and thus, the importance of intuition, knowledge and the learning process by actions in completion of the scientific analysis must be recognized (Grant, 1998).

The organizations future anticipation or forecasting, as part of the strategic management, is coming as a response to the environment complexity and increasing the degree of risks and uncertainties in which the organizations operate. The future anticipation does not offer certainties, but solutions and options about the future.

In the management practice there are several techniques for socio-economic phenomena forecasting, some of them qualitative, others quantitative ones.

In this paper, the scenarios method is approached, having in view the global risks, as factors of the far organizations environment that are making pressures on the organizations strategies.

2. Global risk

The risk exists when a set of unfavourable consequences are associated to possible decisions and the chance of these consequences may be known or determined. When this chance cannot be estimated by using the probabilities, the analyses is done in the uncertainty domain.

The global risk is defined as being the external (environmental) risk outside the influence of a country's government (Business dictionary). It is also defined as the possibility that something bad may happen which will affect all countries (Cambridge Business English Dictionary).

The prerequisite of risk appearance is the uncertainty, because not all risky situations are uncertain, but the condition to consider situations like being risky is unfavourable consequences. Nevertheless, generally speaking, when discussing about risks, the concept of uncertainty is tacitly accepted as being part of the risk.

The global risk is appraised annually by the [World Economic Forum](#) ahead of the Forum's Annual Meeting in [Switzerland](#), which is publishing a report. This report describes changes occurring in the global risks landscape from year to year and identifies the global risks that could play a critical role in the upcoming year. The report also explores the

interconnectedness of risks, and considers how the strategies for the mitigation of global risks might be structured (Wikipedia).

The 2016 Report is emphasizing that the global risk has 29 forms and it could be found in all five external factors of a country: geopolitical, economical, environmental, societal and technological factors (Global Risks Report 2016, p.11). Reading this report, the main risks that enter into the global risk composition may be considered as being:

Geopolitical: the huge migration from the East to the West and the regional military conflicts in the Middle East and Africa;

Economical: the fiscal crises, the unemployment and energy price chock;

Environmental: the climate change, water crises and natural catastrophes;

Societal: the social instability;

Technological: the cyber threats.

Considering the actual main geopolitical context may be underlined that “more than 59 million people globally are classified by the United Nations as “forcibly displaced,” the highest number since the Second World War. The conflict in Syria alone has displaced at least 11 million people, around 4 million of whom have taken refuge outside the country (McKinsey, 2016).

These facts contribute to the increased uncertainty regarding the geopolitical, economical and social stability in the world. On the other hand, the cyber criminality is provoking worries in all the activities, increasing the risks regarding the technological factors.

It is no doubt that the global risks are influencing the complexity of the management strategies around the world and all these factors need to be under the countries and organizations observation and scanning.

All the far environmental risk factors need to be understood, evaluated and their course of action anticipated. The matrix proposed in the figure 1 may be a useful tool for this process.

The matrix is based on assessment of all relevant far (global) environment factors that could be identified and then grouped and ranked into four categories:

Certain factors, which in this case have low relevance degree and low/none uncertainty degree;

Risks factors, which have high relevance, but low degree of uncertainty;

Uncertainty 1 factors, having high degree of relevance and uncertainty;

Uncertainty 2 factors with low degree of relevance and high degree of uncertainty.



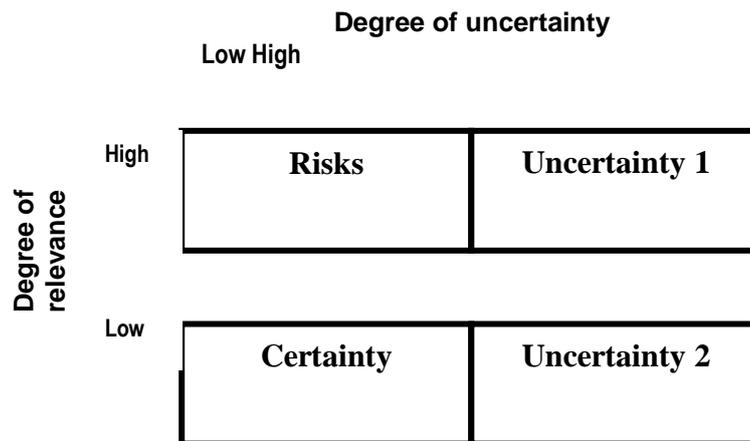


Fig.1 The relevance-uncertainty matrix

Depending on the technique applied to evaluate these factors, they are separately analyzed.

3. The scenario as a management tool

Usually the scenarios are used to anticipate hypothesis regarding the population increase, resources availability, technical innovation, and economic growth. The method consists in the observation of the present course of actions and establishing several alternatives in which the economic processes or phenomena may evolve in the future. These alternatives or options are called scenarios.

In essence, the possible futures, expressed in the pessimistic and optimistic options, are identified, considering the risk and uncertainty factors that may disturb the processes and phenomena. “Scenarios are a powerful tool in the strategist’s armoury. They are particularly useful in developing strategies to navigate the kinds of extreme events we have recently seen in the world economy. Scenarios enable the strategist to steer a course between the false certainty of a single forecast and the confused paralysis that often strike in troubled times” (Roxburgh, 2009).

The scenarios are mostly considering the uncertainty, rather than risks. “Scenarios have three features that make them a particularly powerful tool for understanding uncertainty and developing strategy accordingly, i.e. expand thinking, uncover inevitable or near-inevitable futures and allow people to challenge conventional wisdom” (Roxburgh, 2009).

Whether the risks may be assessed, even mostly subjective, by using the likelihood methods, the uncertainty is based on stories. “Scenarios are not predictions about the future but rather similar to simulations of some possible futures. They are used both as an exploratory method

or a tool for decision-making, mainly to highlight the discontinuities from the present and to reveal the choices available and their potential consequences” (JRC, 2016). The use of stories contributes to the organizations’ learning from past experiences and thus the progress in the future is facilitated. “Corporations, like human beings, act on the basis of an agreed-upon reality—which is, in essence, a story. Stories of the past and the present can be based on facts, but a story of the future is *just* a story. The problem is that the stories we most commonly tell about the future simply extrapolate from the present. Perhaps the greatest power of scenarios, as distinct from forecasts, is that they consciously break this habit. They introduce discontinuities so that conversations about strategy—which lie at the heart of any organization’s capacity to adapt—can encompass something different from the present.” (Wilkinson & Kupers, 2013).

The scenarios are useful for managers in different fields, such as: task analysis in human–computer interaction (Diaper, 2002), training and education (Ramirez et. al., 2015; Abeles, 2016) and more useful in the planning (Manktelow, 2016).

The scenarios’ functions identified by (Bood & Postma, 1997, p7) are:

- Evaluation and selection of strategies;
- Integration of various kinds of future-oriented data;
- Exploration of the future and identification of future possibilities;
- Making managers aware of environmental uncertainties;
- Stretching of managers’ mental models;
- Triggering and accelerating processes of organizational learning.

The use of scenario in the planning implies five steps, according to the Mind Tools Editorial Team (Manktelow et al., 2016):

Define the problem: what to be achieved and the time horizon to look at.

Gather data: identify the key factors, trends based on secure foundations, and uncertainties that may affect the story and identify the key assumptions on which it depends. A PEST (political, economical, social and technological factors) analysis is useful. In identifying trends, the assessment has to be based on evidence rather than supposition.

Separate certainties from uncertainties: list uncertainties in priority order, with the largest, most significant uncertainties at the top of the list, because some assumptions may be confident and some trends may be considered certain; also some factors may or may not change.

Develop scenarios: starting with the top uncertainty, take a moderately good outcome and a moderately bad outcome, and develop a story of the future around each that fuses the certainties with the chosen outcome. Then, the same has to be done for the second most serious uncertainty.

Use the Scenarios in the planning.

Another approach of scenarios process is stressed by Bood and Postma (1997, p.5) who identified six steps: problem identification, current situation analysis and relevant factors identification, evaluation and selection of the scenarios' elements, scenarios construction, scenarios' selection and interpretation and decision-making with scenarios.

A 'walk through the process' divided in six steps (JRC, 2005) develops also six steps in scenario building: identify the focal issue (the "setting" for the scenarios), identification and analysis of the drivers, rank by importance and uncertainties, selecting scenario logics, fleshing out the scenarios and implications of scenarios.

Other literature references about the scenarios might be found in the Von der Gracht's book (2008) which reveals 37 publications related to scenarios.

Strategy design management

Using the ideas selected from the literature and the matrix of relevance-uncertainty presented below, a model of strategy design management by scenarios in the context of the global risks and uncertainty may be conceptualized as in the figure 2.

The model is built on the basis of four steps of strategy design in the context of the global risks, as the followings: the global environment scanning and analyses, the scenarios assumptions setting and analyzes, the scenarios design and selection and the strategy design.

The organization's management has to lead the entire process of the strategy design having in view the organization's vision and the stakeholders' strategic objectives in the context of the global risks and uncertainty.

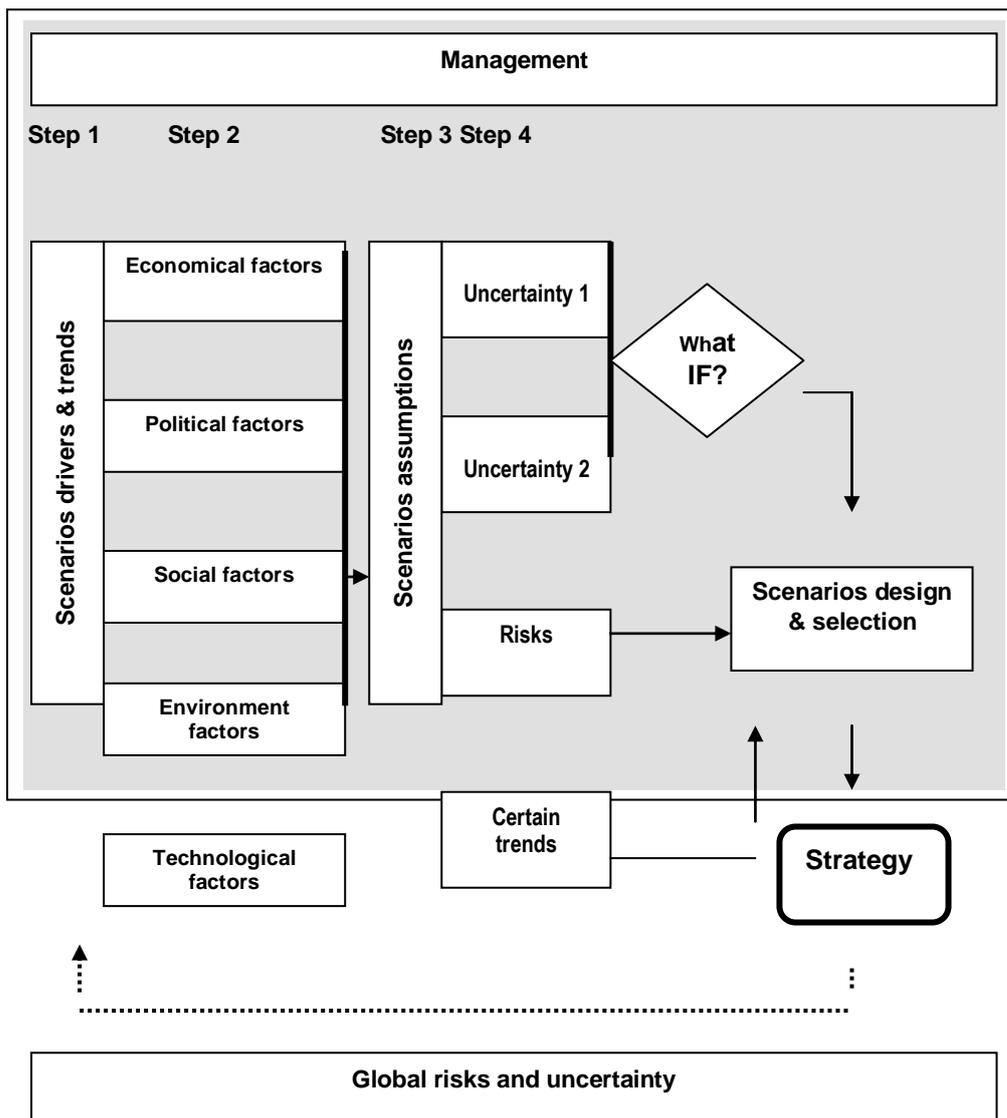


Fig.1 The model of strategy design management by scenarios

Step 1: the global environment scanning and analyses

Firstly, the critical drivers that are relevant within the external global environment have to be selected and analyzed. In this respect the factors with the significant impact on the organization's strategy have to be observed and their trends anticipated. Then, the significant factors of the five groups of the far external environmental factors (geopolitical, economical, environmental, social and technological factors) have to be ranked.

Step 2: the scenarios assumptions setting and analyzes

The setting of the scenarios assumptions are based on the use of the Matrix of relevance-uncertainty presented below. The certain factors are forming the basics of the scenarios. They are followed by the risky factors that might be evaluated by using the math techniques. Finally the most two relevant uncertain factors are selected and used in at least two scenarios: a pessimistic one based on the uncertainty 1 assumptions and an optimistic one, based on the uncertainty 2 assumptions. The number of the scenarios are not limited and may be facilitated by the "what if" analyses, usually used in the projects sensitivity analyses. The What-if scenario analysis (WISA) is a proper tool to be used in balancing the inputs according to the desired outputs of the strategy, because the strategy might be affected by switching from the uncertainty 1 to the uncertainty 2 scenarios.

Step 3: the scenarios design

In what is concerned the scenario process elaboration any of the guides referred on in chapter 3 or others that may be found in the literature may be used, depending on the scenario subject.

Step 4: the strategy design

The strategy has to be design accordingly with the organization aims and the activities, such as: entering or developing the market shares, R&D, investment, acquisition, environment protection actions, and others.

Moreover, as the global risks increase the uncertainty embrace new forms so that the organizations have to continually update their strategies.

Conclusions

This paper is considering the far external environmental factors of any organization that is running activities internationally in the context of increasing risks and uncertainty.

Explaining the concept of the global risk there are given examples of several important risks associated to these factors. The grouping and ranking of the factors that are infusing risks and uncertainty in many strategies may be analyzed by using the relevance-uncertainty matrix proposed.

It is underlined that scenarios could be considered a useful tool for the organizations' management to anticipate the effects of the global risks on their strategies.

The literature is offering ideas about the concept of scenario and also guides regarding the process of scenarios construction.

Using the ideas collected from the literature and the judgment, a model of strategy design management by scenarios in conditions of global risks is proposed to be another useful tool for the organizations and their management.

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