

## FORESIGHT, A TOOL FOR STRATEGIC MANAGEMENT ON THE BASE ENVIRONMENTAL CHANGES (PRESENTING THE INTEGRATING MODEL)

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### ABSTRACT

**N**owadays, organizations face with many challenges and crises in encountering the turbulent conditions and increasing environmental changes; the managers could not easily navigate the ship without mapping a landscape, strategy and map fitted to current situations and the current of environmental changes and the necessity to updating with these changes, eventually has induced a movement toward new methods of management, including strategic management as a requisite for organization survival. This paper deals with rather new concepts of the strategic management, i.e. foresight. Today, foresight has gained much attraction and consideration by senior managers for compiling the landscape and strategy of the organization. This paper attempts to present a comprehensive set of models by studying the proposed models in the field of foresight with in recent decade, that is, the third millennium and the integrating model should be presented at the end. Managers by studying it could arrive at a more thorough understanding of the foresight tool and each manager could adopt an applied model according to his organization needs.

**Keywords:**

*Foresight, Strategic management, Environmental changes, Organization*

## 1- INTRODUCTION:

It is not long that new tools such as foresight have been entered into the management issues; there was no optimism around this newly entered thing in the beginning and managers were skeptical about the results of foresight activity and even its advantages were mostly ignored; however, the founders of this thought through continuous efforts in recent decades could present rational explanation for utilizing it in the major activities of the organization senior managers.

One of the ideals attracting the minds of most of senior managers of the organizations in today's complex world is decision-making in the uncertain environmental conditions and depicting a landscape for the organization which not only guarantees the organization survival against complexities and changes in the external environment of the organization but also demonstrates the development landscape over years and maps the progress path and shows the way of arriving at a superior position compared to rivals. Meanwhile, foresight has been capable of finding a good place in decision-making task especially in the field of programming toward the goals explained by strategy.

The conducted studies indicate that the achievement and long-run advantage brought for the organization by using foresight tool in the field of strategic management are caused by recognition of the latent environmental chances and threats confronting the organizations and planning for hunting when confronting with these chances and threats makes organization dynamic in updating with environmental changes and in its turn passing the development path. This paper attempts to illustrate more strongly than ever the place of foresight tool in planning and strategic management against the increasing changes.

## 2- Research literature

### - Strategic management

Strategic management is a process which involves analyzing, deciding and committed proceedings of the organization for establishing and maintaining the comparative advantage with a long-run attitude and the approach of organization's objective determination. Implementing this process in an organization requires carrying out three stages: analyzing the factors and selecting among choices, taking decisions and actions and finally controlling the achievements of the process. Factor analysis includes studying the vacation and the current objectives of the organization and also external and internal environment of the organization. In the decision-making process, questions will obsess the managers' minds as who are our rivals? Or how would we like to compete in the market (moving in front or following behind)? In the final stage of this process, the organization should not take necessary measures for applying the strategies. This requires leadership in proper allocating of the resources in practice according to the plan proposed (Dess, Lumpkin, Marilyn, 2005). the whole process could be outlined as following (figure 1).

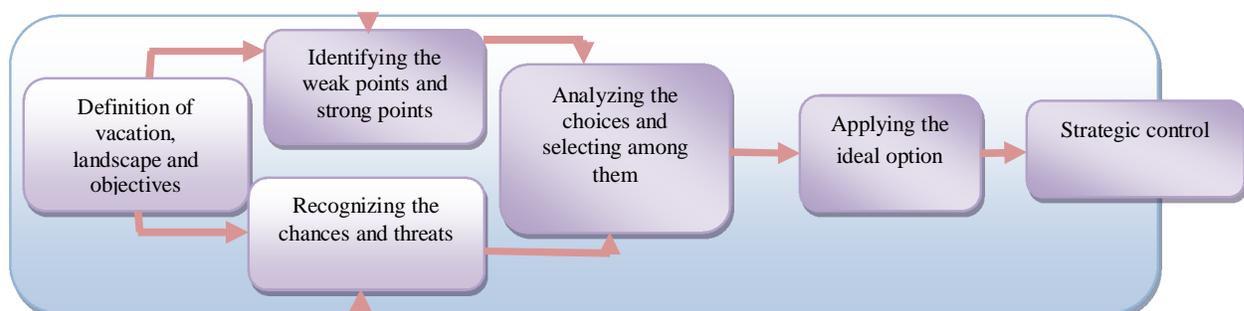


Figure 1: The process of strategic management (Pollard, 2006)

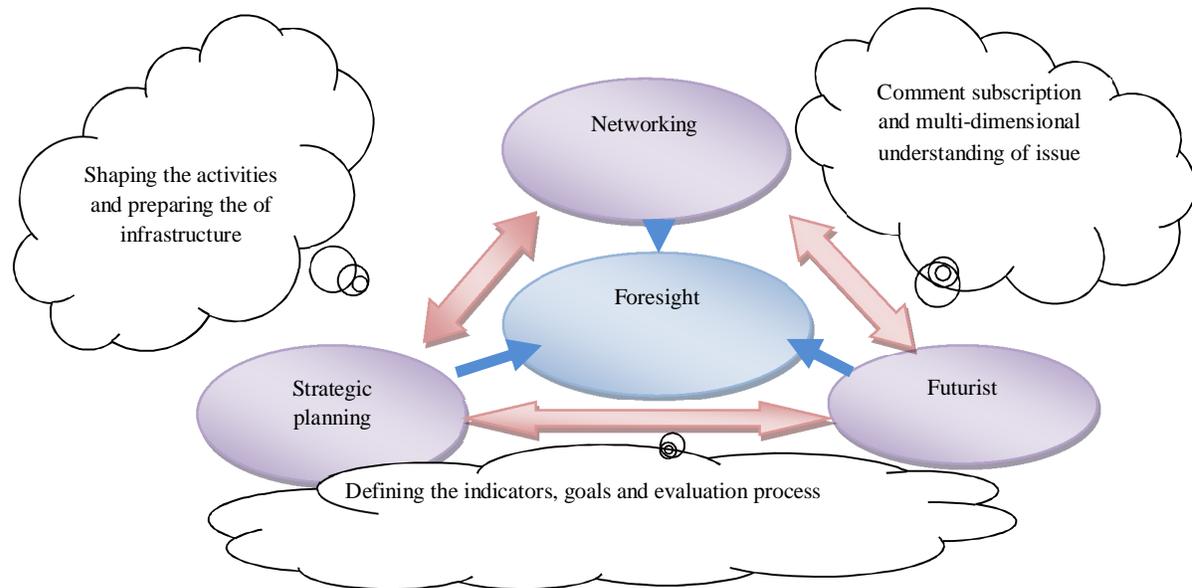
Any of the scholars in this field has explained this concept from different aspects and different theories have been proposed with this regard. Brief description of each theory is given in table 1:

Strategic theory	brief description	source
based on competition	In this attitude, the basic goal is to maximize the income profit in the long-run and develop solutions for comparative advantage against rivals and market	( Raduan & els, 2009)
based on the industrial organization	This attitude is based on external factors and somewhat field theory in which the industry structure is important. The features of the industry structure are the existence and the height of obstacles to entrance, the number of agencies and their relative size, existence and the degree of product grade in industry.	( Raduan & els, 2009, P. 3) (Leite, Galan Robert C, 2012) (Normann, Ruffle 2011)
Resource-based	In this attitude, special attention is paid on internal resources and capabilities of the organization and preventing inconsistencies within organization resources and the competitive status which involves physical resources, human resource and organizational resources, intelligent knowledge, organizational fame and ... which is valuable and rare and its replacement and imitation is costing.	(Williamson and Associates, 2012) (Raduan, 2009) (Tywoniak,2007)
based on the organization survival	In this attitude, organization is regarded as a live creature which for its survival just needs to adapt its conditions to the conditions in which it is acting.	( Raduan & els, 2009)
based on the dynamicity and probability	In this attitude, the factors of organizational strategic management and their probability should be identified at first. The point in this attitude is that factors should be identified so that they could be assessed in simulated tests.	( Raduan & els, 2009) ( Chew, Gottschalk,2009)

**Table1: Strategic management theories**

### - Foresight

This concept is widely used in decision making that According to the type and amount of information is available to decision makers. Deciding are in three branches Which includes (1) decide making under certainty, ( 2) decide under the risk, and (3) Deciding under uncertain conditions. In The first case is describes the situation in which the decision maker knows that it does can predict exactly what will happen in the future. In the second case, the decision maker can not see future enhancements but he is aware of the possible developments and knows how this development possible, In this case, Future as open concept but only defined in a certain range. In the third case, Decision maker only is knows that possible future developments but possibility is beyond the scope the second case. In this case, purpose decision makers will create relationships between the organization's current status and future developments (Seidl, Aaken, 2004). The third case, study is about the foresight (Anderson,1997). Foresight experts tend to be is formed from three distinct perspectives and result confluence these three areas the foresight (Miles, CRIC, 2002), in Figure2



This process has specific focus on cognitive mechanisms Senior Managers, Deciding to respectively through, Network, Achieve the collective understanding of the relative dimensions the topic, Reconstruction of the impact of each of these factors on each other and on the other main issue in the next and ultimately will facilitate the modeling. Based on offered model is done Strategic planning and steps necessary determined to implement the correct program in the time horizon (Bootz,2010 ).

#### - **Networking**

Output foresight process is anticipate better and shape the future the long-term. In between Is achieved the wide range of opinions and perspectives of experts in about each dimension the problem at hand review (Apšvalka, Donina, Kirikova, 2008). Networking component necessary prologue is the foresight process. The team begin their activities at this time, responsible to create and better manage network as for effectiveness communication among members is the the work. Members of the the network can be divided into two groups that they each have a significant impact on the decision. Industry experts which members of the, academics, craftsmen, government officials and senior scientific consultant. Is selected and The second group were consists of stakeholders and external policy makers which indirectly influence the decisions made by the the first group (Anderson,1997). There is no explicit legislation on how to choose the number of participants in the Network foresight Process and their number depends on the factors: the purpose size the project or plan, decision quality, time of data collection and resources are available. With the arrival of information technology in recent decades, the creation been networks among members of the development witness, Using this technology increases the speed of decision-making, increased effectiveness of communication and information exchange among members. New ways to create and facilitate communication between members of the network include:

1. Email tools is widely used to update members information and invite experts to attend the meetings and conferences.
2. The electronic portals to publish news about recent developments in technology, changes in customer demand and requirements, along with analyzes of the news
3. Create official website that provides access to a number of reports and notices foresight programs possible.
4. Web design for test market for facilitate communication between customers and other stakeholders to assess their needs and their ideas about products design according to customers demands
5. Establish a brainstorming international virtual community for company a large number of experts, customers and stakeholders to participate in an electronic survey, (Smith, Mason,2004).

#### - **Futurist**

Futurist could be activity short term, but continuous and the other hand, the main process of foresight to define that putting together these sub-activities, the general trend is the result of foresight. Including features which by the way garnering foresight , scientific validity, being systematic, macro perspective than problem, continuous activity, a cause-effect framework, a tool for knowledge transfer, less attention on human resources and actors and efforts to improve formation of on how to consensus among members (Technology Foresight for Organizers, 2003).

#### - **Planning**

One of the messages that have the foresight for managers and most experts emphasized, it has not been requires a detailed knowledge of the future, just be prepared for the future. The message clearly expresses strategic management practices required for planning process. The main approach to strategic management is on based identify the factors affecting on objective and organization performance over a long period, analyze and determine the probability impact of each of these factors on organization's mission and finally create Organization development perspective based on transformation seen in these factors. Strategic thinking looking for discover assumptions underlying and is pursue the trend factors of now into the future to achieve develop coordinate the variations (Jackson,2011)

#### - **Strategic foresight**

The meaning of strategic foresight

For dealing with the environmental uncertainty that organization managers confront in strategic management and having a long-run idea about factors concerning the organization (Fidler, 2011), they need to use techniques and tools by which they can recognize the factors influencing the future activities of the organization and obtain lots of capabilities in the competition field (Vecchiato, 2012).

Van der heijden emphasizes correctly on the necessity of using foresight tool for initiating and developing the strategy and assumes foresight as the heart of strategic negotiations. Grant focuses on the feature of this tool in its use for determining organizational strategy in sharing, integrating and forward direction of the opinions of members who have different attitudes (Schwarz, 2009). Loasby mentions three reasons for the necessity of implementing the process of strategic foresight for large organizations with a long-run horizon of programming which includes: necessity of looking at the future for better application of the current decisions, understanding the events that will happen in the future and finally motivating and facilitating of having a systematic view of the future (MacKay, 2009).

Strategic foresight is the process of predicting the events and requirements of the organization. This process defines the desired goal and future landscape among the choices presented by the members through making a compromise of the opinions of managers, beneficiaries and customers and delineates the paths toward that goal and establishes the organization strategy on the basis of these goals and the roads to it. Strategic foresight pays special attention to the information resources outside the organization boundaries. This information is categorized in the areas of technology foresight, economic changes, changing of the cultural and political models. The kind of prediction in this process is not of a simple random sort. Also, historical information obtained from different sources is directed only toward members' better perception of the present problem (Costanzo, MacKay, 2010).

In an environment with abundant changes and decreased cognitive scope of decision-makers, this process more than stressing on the result of the mentioned process focuses on learning aspect through studying the trend of changes in the future; so that it could present a structure allowing senior managers to come to an ideal understanding of the nature of problem about each dimension of the problem having strong arguments and take systematic decisions. The mentioned process involves different methods of realizing tasks which regarding the type and size of the problem, a method or a combination of methods might be used. The strategic foresight process primarily analyzes the future consistent changes and in the second place plans toward the organization vacation for power of responding to these changes and in the third place looks for increased organizational capacity and necessary flexibility (Heger, Rohrbeck, 2012).

Shell's Planning Department believes that using the process of strategic foresight not only determines the orientation of strategy for organization but through power of group thinking increases the collective learning and commitment to the determined goals. As we know, foresight tool is often used in national and major plans and if we would use it in the organization level, two dimensions of strategic orientation – mobilization level (using foresight) must be especially concerned. In the matrix (figure 3), the place of strategic management in the foresight process is illustrated schematically (Bootz, 2010, p.5).

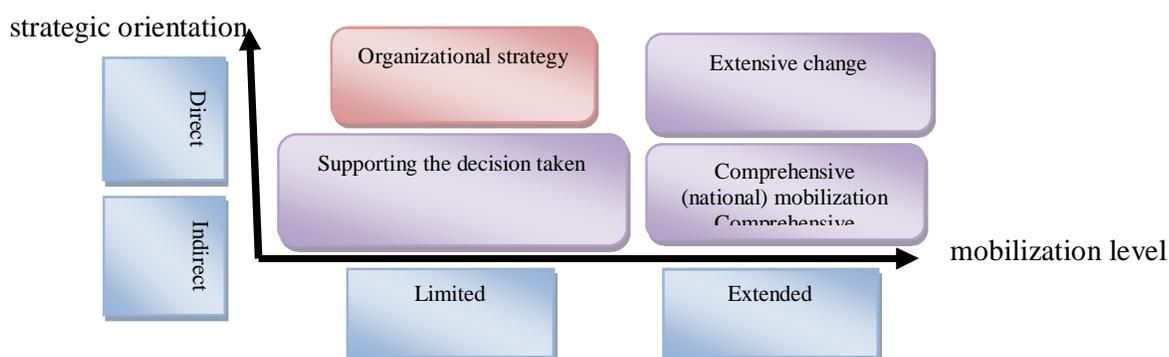


Figure 3: types of foresight methods (Bootz, 2010)

As it is seen, strategic foresight is placed in a dimension of the matrix in which the scope of foresight program is limited and strategic orientation is direct. In this dimension, the focus of foresight program is on the variables and dimensions which have considerable influence on the strategy and future landscape of the organization. Of course, this should be taken into account that too much limitation of foresight scope and its activity field for compiling the strategic program of the organization sometimes causes some variables to be ignored that may possibly play a key role in this situation and this leads to the error of limited rationality among the senior managers of the organization and could not recognize all the possible solutions and thus our selection in most cases is not fully correspondent to the optimal choice wanted and is placed in a lower level (Ortiz, Sch'ule, 2011, p.4).

### - the strategic foresight models

Many studies have been done about using the process of strategic foresight in organizations .The outcome of these studies is the presentation of several models for best explanation of the components of this process. In this section, a few models in this field are introduced. It should be noted that the order of introducing models is according to their date of publication.

### - Voros model

Voros presented a framework for strategic foresight project which was incorporated in the program of state universities of Australia (Voros (a), 2003, p.8). In this framework, the outputs of the foresight process are regarded as valuable inputs for strategic development and programming. The framework proposed by Voros includes four stages: input stage, main stage of foresight, stage of outputs and finally the stage of strategy compiling. This model could be seen in figure 4.

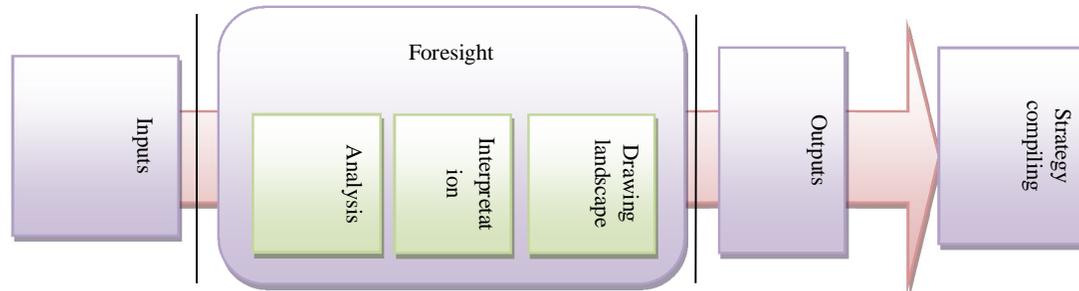


Figure 4: The conceptual model of strategic foresight: Voros, 2003

The first stage or the stage of inputs is the stage of collecting information. The emphasis is on collecting environmental information (social, international, cultural and etc.) of the organization. The second stage or the main stage of foresight involves in its turn three distinct stages of analysis, interpretation and prospection. In the analysis section, the collected information is analyzed. In the interpretation section, deeper analyses are performed in order to understand the structures and in the prospection section which is the stage of actual establishment of attitudes about future, different attitudes concerning alternative futures are developed explicitly. The third stage is the stage of outputs divided into two categories of tangible and intangible outputs. In the end of the third stage, the foresight project will have successfully established an extensive understanding of the available strategic choices. Finally, outputs are entered into the stage of strategy compiling. In this stage, decision makers use outputs for taking decision and navigating the strategic actions in order to apply the outputs. This model has permanent feedback from strategy compiling stage to the stage of collecting environmental information (Voros, (b), 2003).

### - strategic-foresight model for the section of industry- trade:

In the traditional method of assessing the performance of the strategy, organization was continuously looking for the answer to this question "whether the applied strategy is consistent with the current situation or not?" but today the organizations managers by new approaches independent of the current strategy, dynamicity in compiling the strategic program and introducing the extra-organizational factors into this important issue, have adorned their activities with thinking about the future. Therefore, they have welcomed the strategic foresight process. A brief description of the model components are presented in figure 5.

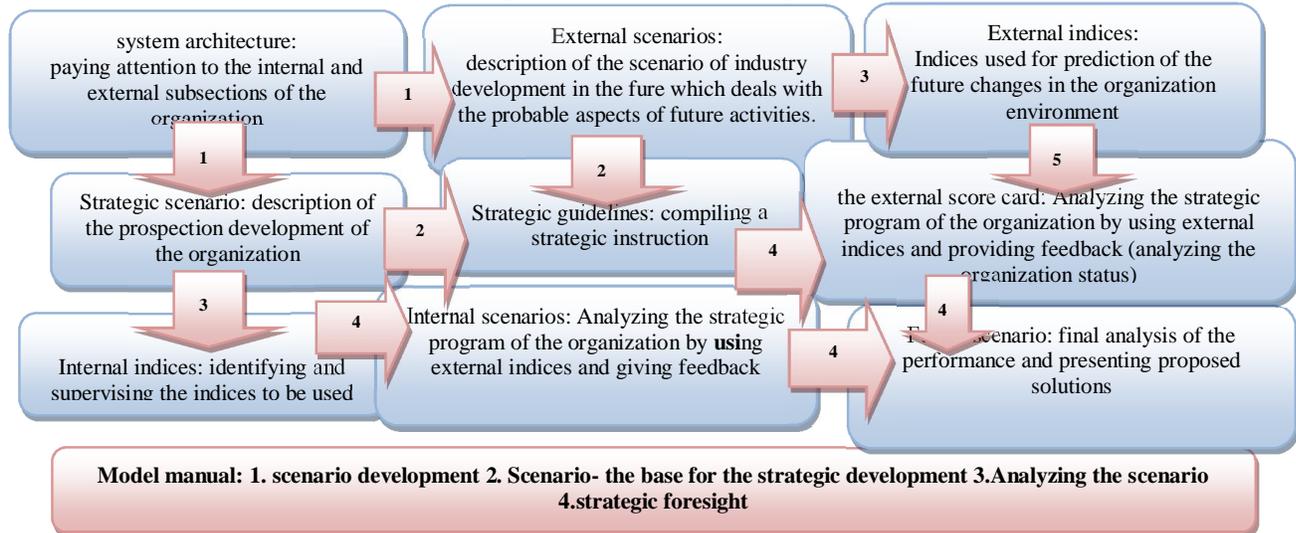


Figure 5: strategic – foresight (Fink and Associates, 2005)

The strategy compiled by this process is put into practice and is analyzed once more by internal and external indices of the organization and the information obtained by results of this analysis are used in the next processes ((Fink and Associates, 2005, p21).

### - The strategic-foresight model in R&D section:

This model is a challenge to the future development which is capable of increasing the capacity for analysis in R&D section which is mostly focused on the simulation process and forming the knowledge network; this capability leads to knowledge synergism among the members. The phases of this model could be seen in table2.

PRE-ACTIVITY	
ACTIVITY	DESCRIPTION
phase 1: analyzing the procedure of research, development and progress of technology	1. Analysis in the research and development field, 2. Technological analysis, 3- recognizing the capabilities and ...
phase 2: analyzing research literature (quantity is the case)	1. Scientific analysis, 2. Analyzing models and 3. Analyzing the capabilities
phase 3: validating prioritized choices of the previous phase	through interview
phase 4: analyzing the choices in terms of environmental factors	investigating strengths, weaknesses, chances and threats through interview
phase 5: recommendations for compiling strategy	

Table2: strategic-foresight model in R& D section (Canongia, 2006)

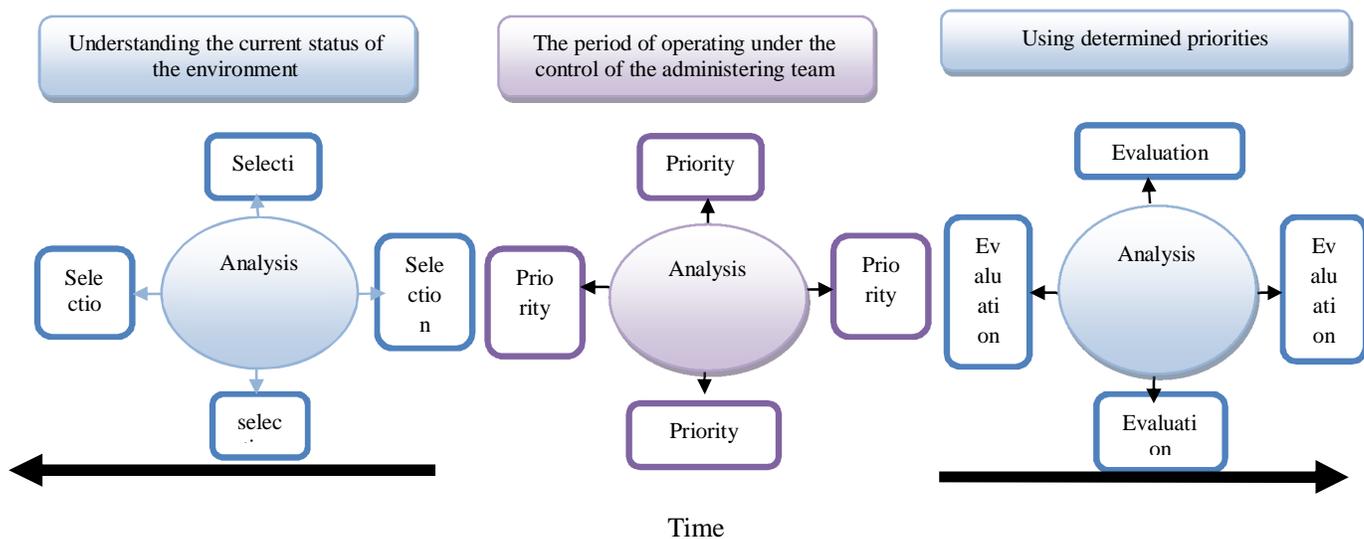
The pre-activity section in this model is directed to the necessary infrastructure for performing the choices proposed and recommended by this process. In phase1, the trend of research, development and progress of the technology is studied so that information are taken from two databases and displays the behavior of variables automatically via algorithms such as cluster analysis and fuzzy logic.

The operation of the second phase complements the analyses made by the previous phase; however, in this phase, data are evaluated analytically. In phase three, semi-structured interview is employed for collecting opinions and communicating with numerous actors in the area of study. The aim of this phase is collecting attitudes and obtaining new knowledge.

In the fourth phase, the focus of interviews is on the economic and technological aspects of the plans. In the fifth phase, based on the results obtained from previous phases, strategic recommendations are made in order to overcome the weak points and threats, also enhance the strong points and chase the opportunities for economic, social and technological aspects (Canongia, 2006)

**- strategic - foresight in the profit section:**

In this model, the strategic foresight process is explained within three phases. The first phase involves collecting, integrating and summarizing the available information and consequently producing foresight knowledge. Phase two involves translating and interpreting this knowledge for providing a profound insight of the future. Phase three involves using and evaluating the achievements of the previous phase for compiling the strategy in a specific organization. Each phase in this process establishes a value higher than previous ones. This process provides the organization with a general outlook of the future which is presented in two stages of behavioral and practical in the comparative advantage area. The stages of this model could be seen in figure6.



**Figure 6: strategic foresight in the profit section (Amsteus, 2008)**

In the behavioral section, the focus is on six general aspects of perceiving, analyzing, consequence of evaluation, information search, implementation and time as hidden aspect of the process. These aspects permanently form the relevant process until arriving at the desired result.

It is necessary to mention that time and information analysis are recognized as two main aspects in this process, and in the practical stage, purposefulness, derivability and non-repetitiveness of the results are important. The systematic nature of the process explains its purposefulness. Summing up the results of foresight activity carried out in each section of the organization leads to drawing strategic landscape (Amsteus, 2008, p.6).

### - foresight model of competitive strategy:

This model has been introduced as a special method for compiling the strategy and presenting the competitive landscape. This model was tested in a research project in the Water and Wastewater Company in Sweden that for its successful implementation, proceedings such as extracting the information related to environmental uncertainty through environmental mapping, intervention of potential advantages of individuals in their work quality in this process and utilizing the obtained results in decision-makings are necessary. This model could be seen in figure 7.

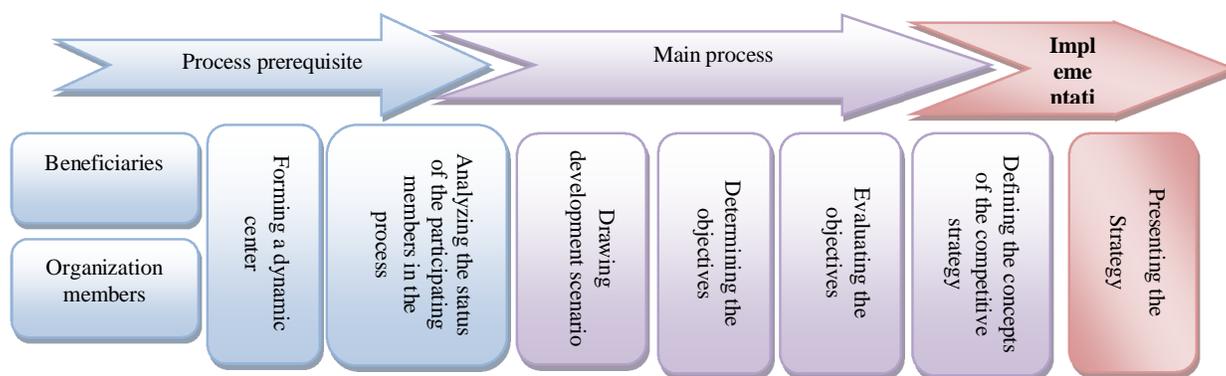


Figure 7: foresight model of the competitive strategy (Störmer.E and associates, 2009)

In the prerequisite phase of this process, for employing the members, the number of people is determined according to the level and type of the problem. This number is divided into two equal groups; the first group consists of the internal experts and members of the organization and the second group are beneficiaries which have close relationships with the related problem. For analyzing the status of participators in terms of their roles, goals, interaction power, influence on each other and etc. , methods such as constellation method are used.

After establishing a workshop for both groups and evaluating the performance of these workshops, their results will be informed to senior managers for taking future decisions. In the main process, via interview with individuals in the organization and asking the beneficiaries, the organization chances, threats, the strong and weak points are recognized. After identifying cases in which there is uncertainty for the organization future, we begin to divide the members of two above-mentioned groups based on the identified factors. Each group is called the specialized core of scenario-writing; any of these cores draws a scenario for the year 2030. After primary evaluation of each of these scenarios, they merge into each other and the target is defined and a general evaluation is made (Störmer and Associates, 2009). The results of general evaluation are considered as criteria for compiling the strategy for the organization.

**- Applied model of strategic foresight:**

This model is of an applied type which is presented according to the case study of Doglong & .. .

First stage: prerequisites: prerequisites of this process include implementation of the process, providing facilitations for implementing the process of foresight fitting to the status within the organization and employing the foreign consultants, persuading the organization heads and state policy-makers.

Second stage: communication and education: communication and education both result in preparing and forming necessary motivation among the organization members and beneficiaries and this will make the context ready for better acknowledging the future changes and profit obtained through these changes.

Third stage: project teams and educational workshops: in this stage, a high-level analysis of the actual problems of the organization is carried out in the strategic management field. After finishing the analysis, much information is obtained about the components of the system under study which facilitates a better understanding of the system and its performance.

Fourth stage: strategy development: The purpose of doing this stage is to identify key issues in the internal and external environment, strategy development for encountering new situations, optimal use of the results of strategic foresight process and knowing the development trend of strategic program.

Fifth stage: translating the results of current process into organizational language: Results of the strategic foresight process achieves its actual meaning when finds a practical application. Therefore, it is necessary to incorporate efficiently the designed scenario into the current trend of the organization activity (implementation of strategic foresight, 2011, p.8).

**- the strategic - foresightmodel of the marketing section:**

This model is of an applied type and includes twenty consecutive stages and six distinct phases; it begins with getting a series of basic information in the beginning and entering this information into the foresight cycle as input and at last successfully compiles the strategy fitting to all the effective factors on the marketing section of the organization. It should be noted that the process employed in this model is an integration of several methods of foresight. The advantage of this model is its better understanding; all the stages of process implementation are illustrated schematically for each stage in table 3.

phase	description	the method of doing task
phase 0: input	The product idea, experimental explanation of the product and the advantages of the target market	1,7,9
phase 1: definition of the product	1. Defining the customer demand	8,9
	2. Identifying the features of the customer demand	1,7
	3. Recognizing the constituting parts of the product	4
	4. Validating the above-mentioned cases	1
phase2: analyzing the rivals	5. Knowing rivals	1,5
	6. Discovering the dependencies between rivals	5,6
	7. Defining the chain network of value	3,5
	8. Knowing the key strategic contexts and relevant objectives	1,5,6
	9. Evaluating the state of rivals regarding these objectives	4
	10. Investigating the influence of rivals on each other	4
phase 3: analyzing the environment	11. Interpreting and developing concepts and recommendations related to this phase	2,3
	12. Identifying areas (time, activity scope and ...)	3
	13. Recognizing key factors	4
	14. Developing the predictions	4
phase 4: estimation of the target	15. Explanation of the factors	3
	16. further identification of customer needs	1,3
	17. Estimating the potential markets and related costs	3,5,6
	18. Separation of costs	1,3
phase 5	19. Developing the concepts and recommendations related to this phase	2,4
	20. Investigating the status, target market and deciding over product development	1

**Table3: strategic-foresight model of the marketing section (Heger, Rohrbeek, 2012)**

The information collected in phase 0 are from sources like: basic documents of technology, published articles in relevant scientific and non-scientific journals, published reports and studies by research and general institutions and internal studies conducted by the members of this project. Other phases have been well explained in the model (Heger, Rohrbeck, 2012).

### 3- Features and disadvantages

It is suitable for reader's better recognition of these models, to mention the features and disadvantages of each of them in table4.

model	feature	deficiency
1	<ul style="list-style-type: none"> <li>➤ Analysis of the environmental factors of the organization before initiating the process</li> <li>➤ analyzing and determining the priorities based on the internal and external factors of the organizations (strong and weak points, chances and threats)</li> <li>➤ emphasizing the evaluation aspect and giving permanent feedbacks to the strategic foresight process</li> </ul>	<ul style="list-style-type: none"> <li>➤ Neglecting the process pre-requisites</li> <li>➤ Having a crude view of the foresight process</li> <li>➤ Lacking a specific methodology for implementing the process</li> <li>➤ Forgetting The programming issue</li> </ul>
2	<ul style="list-style-type: none"> <li>➤ regarding the prerequisites of the process</li> <li>➤ analyzing the environmental factors and giving permanent feedback to organization</li> <li>➤ identifying the indices related to each of internal and external sections of the organization separately</li> <li>➤ evaluating each of internal and external sections of the organization separately</li> <li>➤ presenting a certain methodology</li> <li>➤ presenting the guidelines suitable for the organization status</li> </ul>	<ul style="list-style-type: none"> <li>➤ The complexity of model in terms of understanding the trend of process implementation in the first look</li> <li>➤ Brief explanation of the model components and the methodology</li> <li>➤ Forgetting The programming issue</li> <li>➤ Non-Integrated use of foresight method (scenario-writing method is only used.)</li> </ul>
3	<ul style="list-style-type: none"> <li>➤ regarding the prerequisites of the process</li> <li>➤ Synergy of knowledge among the members</li> <li>➤ analyzing the trend of technology progress</li> <li>➤ analyzing the capabilities of the organization in the research and development field</li> <li>➤ scientific study of models in the first step and adapting them to the conditions of the relevant organization</li> <li>➤ presenting a certain methodology</li> <li>➤ considering the economic, social and technological aspects</li> <li>➤ analyzing and identifying the priorities based on the internal and external factors of the organization (strong and weak points, chances and threats)</li> <li>➤ offering recommendations for compiling the strategic program in the research and development section</li> </ul>	<ul style="list-style-type: none"> <li>➤ Not determining The indices related to each of internal and external sections of the organization separately</li> <li>➤ Non-integrated use of foresight methods (only interview method is used.)</li> <li>➤ Lack of emphasis on the aspect of evaluating and continuous feedback to strategic foresight process</li> </ul>
4	<ul style="list-style-type: none"> <li>➤ purposefulness, derivability and non-repetitiveness of the process</li> <li>➤ perceiving the current status of the environment through analysis</li> <li>➤ emphasizing over the temporal dimension of the process</li> <li>➤ summing the results of the foresight activity of the sections results in drawing the organization landscape</li> <li>➤ emphasis on the evaluation aspect and giving feedback</li> </ul>	<ul style="list-style-type: none"> <li>➤ Neglecting prerequisites of the process</li> <li>➤ Lacking a specific method for the implementation of the process</li> <li>➤ neglecting the intra-organization factors fitted to environmental changes</li> <li>➤ Too much emphasis on analyzing the historical data</li> </ul>
5	<ul style="list-style-type: none"> <li>➤ regarding the prerequisites of the process</li> <li>➤ extracting information related to environmental uncertainty via environmental mapping</li> <li>➤ Integrated use of foresight methods (environmental mapping-scenario-writing)</li> <li>➤ presenting a certain methodology for implementing the process</li> <li>➤ identifying the positions of the participating members in the process</li> </ul>	<ul style="list-style-type: none"> <li>➤ Paying little attention to the issue of analysis of priorities</li> </ul>
6	<ul style="list-style-type: none"> <li>➤ regarding the prerequisites of the process</li> <li>➤ educating and an efficient communication between members</li> <li>➤ Arriving at a deep understanding of the status by exact analysis of the status</li> <li>➤ Providing a better perception of the internal and external environment of the organization</li> <li>➤ Applying the results obtained by the process and evaluating its performance</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lacking a certain method for implementing the process</li> </ul>
7	<ul style="list-style-type: none"> <li>➤ Analysis of the environmental factors of the organization before starting the process</li> <li>➤ Having a definite methodology</li> <li>➤ super-integrative use of foresight methods</li> <li>➤ Analysis of the status of rivals and customers' demands in target market</li> <li>➤ Emphasis on the evaluation aspect and giving continuous feedbacks to any of subsections of the strategic foresight process.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The complexity of the model in terms of process implementation understanding in first look</li> <li>➤ lack of attention to the internal factors of the organization</li> </ul>

Table4: Features and disadvantages

#### 4- Conclusion and suggestions

In the contemporary world, full of changes, there are lots of informed and prospective managers and strategic programmers who instead of waiting to welcome the future in taking long-run decisions, transfer their programming idea to the future by Time Machine and by attending the favorable future, through a retrospective approach from future to the present, indicate strategic development paths and draw policies to arrive at that favorable future. As mentioned earlier, using tools such as foresight in the strategic programming is one of the most efficient and useful methods of welcoming the future, confronting with threats, weak points and recognition and hunting the strong points and the opportunities of the organization. Therefore, this branch of management more than stressing on the theoretical aspect has found a practical aspect in the recent decade. Consequently, for better recognizing the method of using foresight in strategic management it is necessary to investigate the presented applied models. The authors of this paper attempted to present a comprehensive set of applied models by studying the works of other scholars of this area. At the end, presenting the integrating model in table 5 .

Phases	Steps	Explanation
The formation of dynamic core First Phase:	Selecting the members	Inviting the stakeholders, organization's members and external advisors with respect to the level and type of problem, each member has his own unique role
	Communication and training	Establishing relationships among members and establishing workshops, which leads to the preparation and motivation among members and eventually the formation of a dynamic core
Field and information and indicators Second Phase:	System Architecture	Identifying the internal and external environments of the organization
	Evaluating the trend of changes	Studying the development trends and environmental changes and determining the cases where there is uncertainty to the future of the organization. Algorithms such as cluster analysis and fuzzy logic show the behavior of the variables.
	Evaluating the mission and goals of organization	To identify the structure, foundation and general policies of the organization, we are in need of obtaining information on the organization's mission and objectives. This information is considered as a primary pattern in which fundamental changes are applied.
	Determining the organization's internal and external indicators	Evaluation criteria are obtained based on the analysis of data obtained from the mission, goals and behaviors of environmental variables. The indicators are the basis of prioritizing the strategic options in the next steps.
main process Third Phase:	Identifying the key strategic areas and the relevant objectives	This step is the beginning of the main process of foresight. The quantity of options is preferred over their quality. The early judgments of members on the proposed options prevents raising their quantity thereby it is recommended to avoid challenging the options at this stage.
	Analyzing and prioritizing the strategic options	The study of options in terms of environmental factors under the control of the executive team and filtering options that have not achieved the minimum score of assessment.
	Developing the forecasts	Developing a scenario for strategic options that have obtained a minimum score of assessment. At this stage, the remaining options become practical.
	external and internal scorecard	Evaluating the scenarios using internal and external indicators for selecting the most appropriate option from the available options
Implementation Fourth Phase:	Strategic development	Developing Future scenario based on the optimal strategy options, suggesting strategies and continuous feedback to the whole process of forecasting

Table 5: integrating model

It should be noted that the training commensurate with the type of problem, being away from the error of "limited rationality" among the members and giving regular feedback to all stages and phases of the process are very important for the successful implementation of the foresight processes.

#### Suggestions for further researches

- The impact of using foresight tool in compiling the organization strategy on other levels (mid-term and operational) could be studied.
- The study of the extent and type of impact of using this tool on the organizational resources especially human resources is of importance.
- The analysis of trend of Information Technology development and its role in facilitating tasks related to strategic foresight

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