

A MODEL FOR ENTERPRISES' ENVIRONMENTAL SCANNING

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Abstract:

Today's environment determines companies to use scanning activities in order to seize the opportunities and to avoid the threats. Individual factors and organizational factors influence the scanning behavior. The examination of the environment can be presented in a model based on environment analyzability and organizational intrusiveness.

Brown and Weiner (1985) define environmental scanning as "a kind of radar to scan the world systematically and signal the new, the unexpected, the major and the minor". Aguilar (1967), in his study of the information gathering practices of managers, defined scanning as the systematic collection of external information in order to (1) lessen the randomness of information flowing into the organization and (2) provide early warnings for managers of changing external conditions. More specifically, Coates (1985) identified the following objectives of an environmental scanning system:

- detecting scientific, technical, economic, social, and political trends and events important to the institution,
- defining the potential threats, opportunities, or changes for the institution implied by those trends and events,
- promoting a future orientation in the thinking of management and staff, and
- alerting management and staff to trends that are converging, diverging, speeding up, slowing down, or interacting.

Fahey and Narayanan (1986) suggest that an effective environmental scanning program should enable decisionmakers to understand current and potential changes taking place in

their institutions' external environments. Scanning provides strategic intelligence useful in determining organizational strategies. The consequences of this activity include fostering an understanding of the effects of change on organizations, aiding in forecasting, and bringing expectations of change to bear on decisionmaking.

The companies scan the environment in order to find and to understand the external forces that affect or can affect their activity so that they can respond with adequate solutions in order to improve their competitive position. Also, the enterprises scan the environment in order to seize the threats and opportunities, to obtain the competitive advantage and to improve their production capacities. Scanning the environment includes information getting and information analysis.

Environmental scanning is one of four activities comprising external analysis. As illustrated in Figure 1, external analysis is the broader activity of understanding the changing external environment that may impact the organization. In describing external analysis, Fahey and Narayanan (1986) suggest that organizations *scan* the environment to identify changing trends and patterns, *monitor* specific trends and patterns, *forecast* the future

direction of these changes and patterns, and assess their organizational impact. Merged with **internal analysis** of the organization's vision, mission, strengths, and weaknesses, external analysis assists decisionmakers in formulating strategic directions and strategic plans.

The goal of environmental scanning is to alert decisionmakers to potentially significant external changes before they crystallize so that decisionmakers have sufficient lead time to react to the change. Consequently, the scope of environmental scanning is broad.

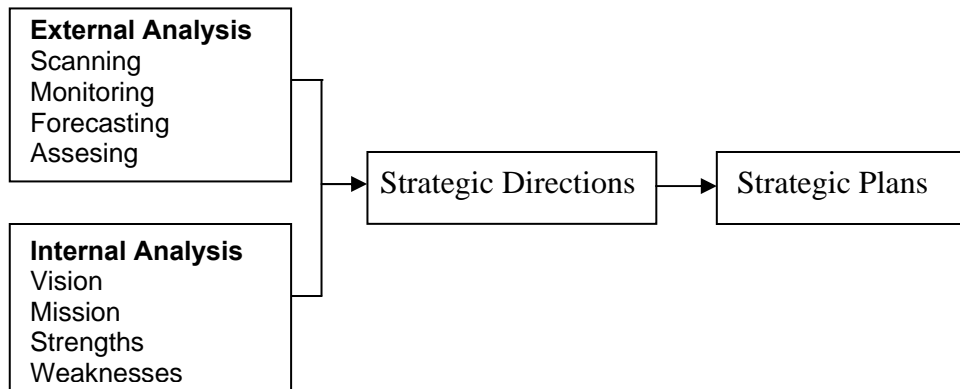


Figure 1. The Role of External Analysis in Strategic Planning

The question that arises is that if a formal process of environmental scanning leads to an improvement of the economic activities of the enterprises. Many studies show that there is a direct connection between the two elements. The scanning activity performed in an isolated manner cannot have sound effects; the surveillance must be correlated with the strategy of the firm. A positive effect is that this lead to a discussion forum between the members of the enterprises regarding the future.

The information obtained as a consequence of the scanning and analysis process is widely used in the strategic planning activity, by enterprises and public organism.

The factors that influence the environmental scanning

The environmental scanning behavior is influenced by many factors that can be grouped in two categories: individual factors and organizational

factors. The individual factors relates mostly to the attitudes toward information and exposure to information.

The attitude toward information relates to the importance that the subject of information feels about this activity. It implies both the responsibility for the environmental scanning and the communication skills of the managers. The studies performed show that the managers consider the environmental scanning as a mix between personal monitorization and dissemination of information to colleagues.

The exposure to information shows the frequency of contacts with well informed persons or sources with high-potential. The exposure to information is determined by the degree of openness of the organization: the activity performed by some enterprises offers more chances to come in contact with well informed persons. Also, the exposure differs in accordance with the function from the enterprise: the

marketing vice-president come across more information than the financial vice-president or than the administrative vice-president. The exposure to information also varies in accordance with information climate of the respective organization, which differs in rapport with the condition of access and utilization of information by the employees.

The organizational factors that influence the environmental scanning relates to information climate and the degree of organizational openness.

The information climate represents the set of conditions that determines the access to available information and their use in an organization. The emergence of the concept information climate relates to the increasing role of organizational culture regarding the creation of a cult for information within the enterprises. In the companies with a developed information climate there are specialized persons in collections and interpretations of information; more than that the members of the organizations have an organizational culture that allow them to treat any information with maximum attention.

The organizational openness refers to the ability of the company to face the frequent in the changes of environment, the adaptability to external influences and the capacity to influence the environment. The environment and bigger size companies that show a good financial status engage in collaboration actions in order to influence the legislative regulations.

Regarding the degree of environment analysis and organizational implications, Daft and Weick (1984) appreciate that the companies differ in their action to collect and interpret the information about the environment, taking into account the perception of management on the possibilities to analyze and the direction for action of the enterprise. An organization that sees the environment as offering analyzing possibilities, that is an

environment in which the events and facts can be evaluated, will want to find their proper interpretation through systematic and continuous information. In the same way an organization that considers the environment as offering less room for interpretation will act in conformity with what it thinks as adequate.

The degree of environment analysis differs in accordance with the possibility to implement a system for data collection and interpretation. In certain economic sectors data is gathered on a regular basis about products, markets and competition. As a consequence the information that is available at a low cost offer the possibility for a complex reports that can help the decision-making process and thus creating the idea that the environment can be analyzed.

The organization interacts actively with its environment when it deploys substantial resources in order to test or manipulate the variables of the environment. A passive organization is the one that considers as sufficient for its own needs only one information and, consequently, the environment is analyzed only by this information. Daft and Weick (1984) consider that the differences regarding the organizational implication depend on the existence of a conflict among the enterprise and its environment. When the environment is perceived as hostile or the activity of the company largely depends of its environment, then the company spends more cash on environmental scanning.

The organizational implication varies according to the general strategy of the firm. A company that follows a certain strategy (for example: differentiation, the domination at the level of costs or the focalization strategy) will deepen the content of scanning, in order to obtain information that will sustain the respective strategy.

The organizational implication is influenced also by other factors such as: the size of the firm, its attitude toward

scanning, the presence or the lack of resources, the experience in the process of scanning.

In spite of its importance, the theoretical understanding of the concept “environmental scanning” remains limited. We can differentiate two dimension of the environmental scanning: *the environmental*

analyzability and the degree of organizational involvement that is *the organizational intrusiveness*.

Beginning from the analysis of the possibility to analyze the environment and organizational involvement, we can elaborate a matrix model of environmental as shown in the next table:

Table 1

A model for environmental scanning

Organizational approach	Passive	Undirectionated Scanning	Conditioned Scanning
	Active	Testing Scanning	Active Scanning
	Cannot be analyzed		Can be analyzed
The possibility to analyze the environment			

Source: Adapted from C.W. Choo 2001

Undirectionated scanning comes into being when the enterprise perceives the environment being hard to analyze therefore it doesn't interact with the environment for understanding it. Information need is slight define and unclear but a great part of information is getting from accidental actions. While the environment is considered hard to analyze the organization is satisfied with few information and it doesn't want to obtain more information. An example of undirectionated examination is the case of a firm which collects information from a little number of persons especially from costumer representatives or suppliers. The better information is understood the more relevant it will be considered. The fact that enterprise doesn't allocate resources for the environment scanning

represent an advantage of undirectionated scanning, but the enterprise can be caught off guard.

Environment conditioned scanning comes into being when the firm considers the environment being analyzable but its attitude concerning the information getting and influence of the environment is a passive one. Information need consists of a little number of elements, considered the most interesting for the firm. Searching information becomes standard on the basis of internal and external sources: internal reports, database, sectorial analysis. In this case, the examination is limited because it refers to searching documents, reports, publications and informational systems which appeared over the years. Because the environment is considered to be known

the necessity of vagueness decrease is reduced.

Concerning this examination, the results are based on pre-requisites, so that, the firm has several precise conceptions about external environment which are accepted by all participants from economic field. Decisional process is often standardized: the great majority of decisions are organized in agreement with previous standard results. Conditioned scanning activity comes into being when the firm uses the necessary information considered to be important in the environment. Structure procedures of the scanning activity can be an advantage but sometimes this standard can't detect new technology and life style (Choo 2001).

Testing scanning is realized when the firm considers environment being less analyzable or hard to analyze, but in spite of all this the firm has an active attitude with a view to influence events and results. It requires strong actions and best firm positions. Searching information is made from channels created by the firm. Active firms build own external environment.

Obtaining information is made in the following way: the firms launch a new type of behavior and after it they follow what happens. These firms make testes and new experiments, ignoring the previous rules and traditional way of action. An important example is the influence of a firm which launch a new product over the unknown environment being uninterested of the market study results and market demand. Therefore information analysis is made by acting. The organization builds new scripts and afterwards interprets them. Information analysis depends on the person ability and talent - person who make the analysis (Choo 2001).

Realizing an action course is a sequential process: the firm management decides the direction and if doesn't work that direction will be changed. Thus the firm management approaches a new type of behavior and establishes new objectives and methods.

Active scanning comes into being when the firm considers the environment being analyzable and interacts with it for obtaining precise dates. Searching objectives are detailed, specific and wide enough. Firm is ready for the new discoveries. The organization is looking for the actual and precise information often obtained from market studies. The firm can have own environment scanning department for point out marketing analysis, market trends and activity reports.

Between active and conditioned scanning are many differences. On the one side, searching information concerning conditioned scanning is reduced to some routine subjects based on previous results. On the other side in active scanning searching is detailed and there is based on a continuous improvement knowledge process. Decisional process follows a logical procedure with systematic analysis and quantitative techniques.

The presented model of environment scanning refers at two elements: detailed grade of environment analysis and organizational involvement. In a complex environment of the present-day society the organizations must manage the dilemma: firstly the firm environment is less analyzable because its density and fast installment of changing. Secondly the organizations are aware that they must be proactive and flexible in order to adapt to the environment and influence it.

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