LESSON 18: ENVIRONMENTAL ANALYSIS

Learning objectives

On completion of this chapter you should be able to:

- **You shall understand the nature of environment in which an organisation operates and the role of its analysis in strategy formulation.**
- **You shall understand the changing nature of Indian business environment and its implications for strategy formulation.**
- **You shall appreciate the concept of environmental analysis and the Role of environmental analysis**
- **Concept of environment - Nature of environment & Impact of environment**
- **You will have a complete understanding of Environmental factors**

Environmental Analysis

Environmental analysis is a part of SWOT analysis. SWOT is' acronym of strengths, weaknesses, opportunities, and threats. While opportunities and threats are external to an organisation, strengths and weaknesses are internal to the organisation. Though the analysis of these has spread in five chapters because of their vital role in strategy formulation, here, these are merely described as follows:

1. **Opportunity**
   - An opportunity is a favorable condition in the organization’s environment, which enables it to strengthen its position.

2. **Threat**
   - A threat is an unfavorable condition in the organization’s environment, which causes a risk for, or damage to, the organization’s position.

3. **Strength**
   - Strength is an inherent capability of the organisation, which it can use to gain strategic advantage over its competitors.

4. **Weakness**
   - A weakness is an inherent limitation or constraint of the organisation, which creates strategic disadvantage to it.

   Though SWOT analysis should be taken as an integrated process in strategic management, here, it has been broken into two parts because the types of information required and techniques adopted in both these parts are quite different. These parts are environmental analysis for identifying opportunities and threats and organizational analysis for identifying strengths and weaknesses. Further, environmental analysis has been divided into three chapters, each of them dealing with general environmental factors, more specific factors in the form of industry and competition analysis, and techniques of environmental analysis respectively.

Concept of Environmental Analysis

Environmental analysis, also known as environmental scanning or appraisal, is the process through which an organisation monitors and comprehends various environmental factors and determines the opportunities and threats that are provided by these factors. Thus, there are two aspects involved in environmental analysis:

1. Monitoring the environment, i.e. environmental search and appraisal, is the process through which an organisation monitors and comprehends various environmental factors and determines the opportunities and threats that are provided by these factors. Thus, there are two aspects involved in environmental analysis:
2. Identifying opportunities and threats based on environmental monitoring, i.e. environmental diagnosis.

On the basis of the above concept, following features of environmental analysis may be identified:

1. Environmental analysis is a **holistic exercise** in which total view of environment is taken rather than viewing trends piecemeal. Though for environmental analysis, the environment is divided into different components to find out their nature, function, and relationship for searching opportunities and threats and determining where they come from, ultimately the analysis of these components is aggregated to have a total view of the environment. This is necessary because some elements of the environment may indicate opportunities while others may indicate threats.

2. Environmental analysis is a heuristic or **exploratory process**. While the monitoring aspect of the environment is concerned with present developments, a large, part of the process seeks to explore the unknown terrain, the dimensions of possible futures. Since futures are unknown, the analysis emphasizes on ‘what could happen and not necessarily what will happen.’ The emphasis must be on alternative futures, seeking clarification of the assumptions about the future, speculating I systematically about alternative outcomes, assessing probabilities, and drawing more rational conclusions.

3. Environmental analysis must be a **continuous process** rather than being an intermittent scanning system. In this process, there is continuous scanning of the environment to pick up the new signals or triggers in the overall pattern of developing trends. Detailed studies are undertaken to focus closely on the track of previously identified trends which have been analyzed and assessed and found to be of particular importance to the organisation.

Role of Environmental Analysis

Role of environmental analysis in strategic management is quite crucial. Ian Wilson has compared the role of environmental analysis with function of a radar. If a ship is sailing on a sea of uncertainty, there are two essential requirements for a successful voyage. There has to be a star to steer the ship. Secondly, there must be radar to signal the existence of rock, reefs, and clear
water in the uncharted sea. Similarly, a business firm operating in an uncertain environment must have a vision of the business (a guiding star) and a system of environmental analysis (the radar).

Many of the research studies also suggest that those organizations, which undertake systematic environmental analysis, perform better than those, which do not take such an exercise. For example, Danny and Friesen’s research study shows high relationship between environmental analysis and success of the firms.2 Even in our country, Reliance Industries Limited gives very high priority to environmental analysis and the result is that the company has achieved highest growth rate in Indian corporate sector. The role of environmental analysis in strategic management can be seen in the following ways.

1. The environment changes so fast that new opportunities and threats are created which may result disequilibria into organization’s existing equilibrium. Therefore, the strategists have to analyze the environment to determine what factors in the environment present opportunities for greater accomplishment of organizational objectives and what factors in the environment present threats to the organization’s objective accomplishment so that suitable adjustment in strategies can be made to derive maximum benefits.

2. Environmental analysis allows strategists time to anticipate opportunities and plan to take optional responses to these opportunities. Similarly, it helps to develop an early warning system to prevent the threats or to develop strategies which can turn the threats to the organization’s advantage.

3. Environmental analysis helps strategists to narrow the range of available alternatives and eliminate options that are clearly inconsistent with forecast opportunities of threats. The analysis helps in eliminating unsuitable alternatives and to process most promising alternatives.

Thus, it helps strategists to reduce time pressure and to concentrate on those, which are more import.

**Concept of Environment**

Before we go through the mechanism of environmental analysis, it is desirable to understand the nature of environment, its impact on the organisation, and various factors, which constitute environment. An organisation, being a system, operates in some contexts, which lie outside it, and is called as external environment or simply environment. Thus, environment consists of all the conditions, circumstances, and influences surrounding and affecting art organisation in its totality or any of its subsystems. The environmental factors are quite broad. For example, Barnard has defined environment as follows:

“Environment consists of atoms and molecules, agglomeration of things in motion, alive, of men and emotions, or forces and resistances. Their number is infinite and. they are always present; they are always changing.

This is quite a broad description of the environment. In order to be more precise, an organisation has to find out the relevant environment, which directly affects it. However, the concept of relevance is a matter of perception, which may differ from organisation to organisation and from strategist to strategist, in the same organisation. In order to define and identify the relevant environment, let us go through the exogenous nature of environment, which has been presented in the Figure

![Figure: Exogenous nature of environment](image)

The basic implication of the figure is that farther away an environmental variable exists from the firm, less impact it has over the firm’s operations.

Based on the nature of this impact, various environmental factors are grouped into two categories: general and specific.

**General Environment**

General environment, also known as societal, remote, macro or indirect-action environment, consists of those factors, which affect the business of a country, and, therefore, they have homogenizing effect. In the general environment, we can include natural and ecological factors at the first level. Natural factors are important to the economic activities of a country because either they provide opportunities or threats to the economic system. For example, agriculture depends on nature (rainfall, climatic conditions, etc.); manufacturing depends on physical inputs; mining and drilling depend on natural deposits; transportation and communication depend on geographical factors; and so on. In the same way, ecological factors like environmental pollution, wildlife, greenery, and other factors are matters of concern for all organizations.

At the second level, comparatively, more influential factors come in the form of economic, political-legal, technological, and social-cultural factors. Taken together, they set forth the framework for organizations’ operations and determine the inputs which organizations can take from the environment, process these inputs in the form of outputs, and export these outputs back to the environment. Various characteristics of such factors may be favorable or unfavorable to the growth of organizations. Besides these factors, which exist within a country, international factors also become important because of globalization of economy of a country.
Specific Environment
Specific environment, also known as task, operating, micro or direct-action environment, affects individual organizations differently. Since a particular organization operates in an industry or limited number of industries, the nature of industry concerned and the type of competition prevailing therein directly affect it. Thus, the specific environment includes those forces lying outside the organization directly relevant to decision making about input acquisition, transformation process, and export of output. However, it does not mean that an organization should take the analysis of its specific environment only; it has to analyze general environment too because it ultimately shapes the specific environment.

Nature Of Environment
Environment provides both, opportunities and threats. In order to know whether there is an opportunity or threat, we have to look at the nature of environment in terms of its complexity and variability.

Environmental Complexity
Environmental, complexity is referred to the heterogeneity and range of activities which are relevant to an organization’s operations. Thus, more diverse the relevant environmental activities and more these are, the higher is the complexity. The heterogeneity relates to the variety of activities in the environment affecting the organization. Complexity or non-complexity of environment is a matter of perception. Starbuck states that ‘the same environment one organisation perceives as unpredictable, complex, and evanescent, another organisation might see as static and easily understood’.

Organizations dealing with non-complex environment have one advantage in the sense that there are fewer critically important information categories necessary for decision-making. When the environmental sectors are same and limited, the organizations are not required to process complex information for their actions. Moreover, the volume of information processed is low though there might be large sector of environment. As against this, organizations working in complex environment have to process a large variety of information.

Environmental Variability
The degree of environmental variability is an important determinant of organizational functioning. In fact, the environment, being dynamic, changes over the period of time, but it is the rate of change, which is a matter of concern. There can be low or high change rate, though again it is matter of perception. Both low and high change rates can be dichotomized further into stable and unstable rates. Stable rates occur in a situation where most of the important factors influencing a situation are changing predictably in value and where set of critical factors remains constant. Unstable rates take place when a situation is loose and erratic. Here, both the value of important variables-independent and intervening-and the kind of relevant variables in the set are changing unpredictably. Child refers to environmental variability as “the degree of change that may be seen as a function of three variables:
   i. The frequency of change in relevant activities
   ii. The degree of difference involved at each, and
   iii. The degree of irregularity in the overall pattern of change.

There are four types of environmental movement: low-stable change, high-stable change, low-unstable change, and high-unstable change—all having different effects on an organization.

The degree of variability in the environment affects the organizational functioning by affecting the task performance. More is the variability in the environment, more will be the uncertainty in the task performance. Galbraith, observes that ‘greater the task uncertainty, the greater the amount of information that must be processed among decision-makers during task execution in order to achieve a given level of performance’.

Taking both dimensions of the nature of environment-complexity and variability, environment may be seen in terms of a continuum ranging from turbulent to simple with varying degree of complexity and variability as shown in the figure.

![Figure: Continuum of environmental complexity and variability](image)

**A Turbulent Environment has following Characteristics**
1. Growth does not extrapolate.
2. Historical strategies are suspect.
3. Profitability does not follow growth.
4. The future is highly uncertain.
5. The environment is full of surprises.

The above characteristics of environment may be because of high rate of change which may not be predictable, e.g. sudden change in Government policies, technological breakthroughs, threats for, or actual, war, change in prices of any product at international level (like the substantial increase in crude oil prices by OPEC in 1973), etc.

**A Simple Environment has the following characteristics**
1. The rate of change is quite slow and, therefore, predictable.
2. Historical strategies work though some minor modification may be required.
3. The rate of growth for the industry may be extrapolated.
4. Profitability is linked with growth.
Impact Of Environment
As pointed out earlier, every organisation has to work within a framework of certain environmental forces and there is a continuous interaction between the organisation and its environment. The interaction suggests a relationship between the two. This relationship can be analyzed in three ways. First, the organisation can be thought of as an input-output system. It takes various inputs-human, capital, technical-from the environment. These inputs are transformed to produce outputs-goods, services, profits-which are given back to the environment. Thus, the organisation merely performs the function of input-output mediator. In this process, the environment in its interaction with the internal factors of the organisation will determine what kind of inputs should be taken or outputs given. Second, the organisation can be taken as the central focus for realizing the contributions of many groups, both within and outside the organisation. When these groups contribute to the well being of the organisation, they must have a legitimate share in organizational outputs. These groups may be employees, consumers, suppliers, shareholders, movement, and the society in general. Thus, the organizational functioning will be affected by the expectations of these groups and the organisation has to take these factors into account. Third, the organisation can be treated as operating in environment presenting opportunities and threats to it. Thus, how an organisation can make the best use of the opportunities provided or threats imposed is a matter of prime concern for it.

Any single approach by itself is insufficient to explain the complex relationship between the organisation and its environment. Moreover, these approaches are not inconsistent to each other; they are complementary. Thus, an organisation will be affected by the environment in which it works. Such effect will be on the various aspects of strategic management, as presented in figure 1.

Figure: Environment-Organisation Interaction

The environment-organisation interaction has a number of implications from strategic management point of view.

1. The environmental forces may affect different parts of the organisation in different ways because different parts interact with their relevant external environment. For example, the technological environment may affect the organization’s R & D department. Further, these forces of the environment may have direct effect on some parts but indirect effect on others. For example, any change in the fiscal policy of government may affect the finance department directly but it may affect production and marketing indirectly because their program may be recasted in the light of new situation, though not necessarily.

2. The environmental influence process is quite complex because most things influence all other things. For example, many of the environmental forces may be interacting among themselves and making the impact on the organisation quite complex. Moreover, the impact of these forces on the organisation may not be quite deterministic because of interaction of several forces. For example, the organisation structure will be determined on the basis of management philosophy and employee attitudes. But the organisation structure becomes the source for determining the employee attitudes. Thus, there cannot be direct and simple cause-effect relationship rather much complexity is expected.

3. The organizational response to the environmental forces may not be quite obvious and identical for different organizations but these are subject to different internal forces. Thus, there is not only the different perception of the environmental forces but also their impact on the organisation. Key factors determining responses to environmental impact may be managerial philosophy, life cycle of the organisation, profitability, etc.

4. The impact of environmental forces on the organizations is not unilateral but the organizations may also affect the environment. However, since the individual organizations may not be able to put pressure on the environment, they often put the pressure collectively. Various associations of the organizations are generally formed to protect the interest of their members. The protection of interest certainly signifies the way to overcome unilateral impact of the environment on the organizations. The nature of organisation-environment interaction is such that organizations, like human species or animals, must either adjust to the environment or perish.