CHAPTER FOUR

THE EXTERNAL ENVIRONMENT

CHAPTER OVERVIEW

The purpose of this chapter is to develop a framework for assessing environments and how organizations can respond to them. First, we identify the organizational domain and the sectors that influence the organization. Then, we explore two major environmental forces on the organization: the need for information and the need for resources. Organizations respond to these forces through structural design, planning systems, and attempts to adapt to and influence elements in the external environment.

The Organization's Environment

Organizational environment includes all the elements that exist outside the boundary of the organization and have the potential to affect all or part of the organization.

Environmental domain is the chosen territory of action defining the niche and external sectors with which the organization will interact to accomplish its goals. **Sectors** are subdivisions of the external environment that contain similar elements.

Task Environment

Task environment includes sectors with which the organization interacts directly, including:

- Industry sector
- Raw materials sector
- Market sector
- Human resources sector
- International sector

General Environment

General environment includes those sectors that may not have a direct impact on the daily operations of the firm but that influence the industry or economy in general ways that in turn indirectly influence the organization. Often included are:

- Government sector
- Socio-cultural sector
- Economic conditions
- Technology sector
- Financial resources sector

International Context

The international sector can directly affect many organizations, and it has become extremely important in the last few years. The distinctions between foreign and domestic operations have become increasingly irrelevant. For example, Toyota is a Japanese corporation, but it has manufactured millions of vehicles in North American factories. The technology behind Intel's Centrino wireless components was born in a lab in Haifa, Israel.

The Changing Environment

Uncertainty means that decision makers have some degree of insufficient information about environmental factors, making prediction of external changes difficult. Characteristics of the environmental domain that influence uncertainty are the extent to which the external domain is simple or complex and the extent to which events are stable or unstable.

Simple-Complex Dimension

The **simple-complex dimension** concerns heterogeneity, or the number and dissimilarity of external elements relevant to an organization's operations.

Stable-Unstable Dimension

The **stable-unstable dimension** refers to whether elements in the environment are dynamic; the domain is stable if it remains the same over a period of months or years.

Framework

The two dimensions above are combined into a framework for assessing environmental uncertainty. E-commerce companies for example, are generally found in simple but unstable environments. In other words, there may be few elements to contend with, but they are difficult to predict and change unexpectedly.

Adapting to a Changing Environment

Organizations need to have the right fit between internal structure and the external environment. Internal structures can be adapted in many ways to better meet the external environment.

Adding Positions and Departments

As the complexity in the external environment increases, so does the number of positions and departments with the organization, which in turn increases internal complexity. Each sector in the external environment requires an employee or department to deal with it.

Building Relationships

Buffering roles or departments can absorb uncertainty from the environment by protecting the technical core from environmental changes and helping it function efficiently. However, a newer approach is to expose the technical core to the environment and make it more fluid and adaptable.

Boundary-spanning roles link and coordinate an organization with key elements in the external environment by bringing into the organization information about changes in the environment and sending information into the environment that presents the organization in a favorable light.

One recent approach to boundary spanning is **Business Intelligence** which refers to the high-tech analysis of large amounts of internal and external data to spot patterns and relationships that might be significant.

An **intelligence team** is a cross-functional group, led by a competitive intelligence professional, who work together to understand a specific business issue.

Differentiation and Integration

Environmental uncertainty leads to increased differentiation, which is "the differences in cognitive and emotional orientations among managers in different functional departments, and the difference in formal structure among these departments." With high differentiation, coordination between departments becomes difficult, creating greater needs for **integration**, which is "the quality of collaboration between departments."

Organic versus Mechanistic Management Processes

Organic rather than mechanistic management processes characterizes a looser, free flowing, and adaptive internal organization which fits with rapidly changing environments. A stable environment leads to a more mechanistic organization, which is more rigid, with a strict hierarchy, and more centralized vertical communication.

Forms Mechanistic

- Tasks are broken down into specialized, separate parts
- Tasks are rigidly defined
- There is a strict hierarchy of authority and control, and there are many rules
- Knowledge and control of tasks are centralized at the top of the organization
- Communication is vertical

Forms Organic

- Employees contribute to the common task of the department
- Tasks are adjusted and redefined through teamwork
- There is less hierarchy of authority and control, and there are few rules
- Knowledge and control of tasks are located anywhere in the organization
- Communication is horizontal

Planning, Forecasting, and Responsiveness

The importance of planning and forecasting increase as environmental uncertainty increases because managers need to predict and anticipate external changes. Planning keeps the organization geared for a coordinated, speedy response.

Framework for Responses to Environmental Change

Change and complexity dimensions are combined in a quadrant format to illustrate four levels of uncertainty, ranging from low uncertainty environment which is simple and stable and usually calls for an organization with few departments and a mechanistic structure to a high uncertainty environment which is complex and unstable and usually calls for an organization that has many departments with personnel assigned to coordination and integration, yet is organic. In between the extremes, in a low-moderate uncertainty environment (stable and complex), some departments are needed along with more integrating roles to coordinate the departments, and some planning and imitation may be needed. In a high-moderate uncertainty environment (unstable and simple), structure is usually organic and decentralized, with planning and imitation emphasized.

Dependence on External Resources

Organizations depend on the environment for resources, yet attempt to be independent of it by acquiring control over resources.

Resource dependence means that organizations depend on the environment but strive to acquire control over resources in order to minimize their dependence.

Influencing External Resources

Establishing Interorganizational Relationships

There are many techniques for dealing with resource dependence, such as:

- Acquire an ownership stake
- Form joint ventures and partnerships
- Lock in key players
- Recruit Executives
- Use Advertising and Public Relations

Influencing Key Sectors Controlling Environmental Domain

Another strategy is to change the environment, which can be done by changing where you do business, engaging in political activity and influencing government regulation, uniting with others, and even engaging in illegitimate activities such as payoffs to foreign governments or promotional gifts.

Organization-Environment Integrative Framework

One theme illustrated is that the amount of complexity and change in an organization's domain influences the need for information and therefore the uncertainty felt within an organization. Greater information uncertainty is

resolved through greater structural flexibility and the assignment of additional departments and boundary roles. The second theme is that the more dependent an organization is on other organizations for scarce resources, the more important it is to establish favorable linkages or control entry into the domain.

Design Essentials

- Change and complexity in the external environment have major implications for organization design and management action.
- Organizational uncertainty is the result of the stable–unstable and simple–complex dimensions of the environment. Resource dependence is the result of scarcity needed by the organization.
- Organizations try to survive and achieve efficiencies in a world characterized by uncertainty and scarcity.
- The concepts in this chapter provide specific frameworks for understanding how the environment influences the structure and functioning of an organization.
- When risk is great or resources are scarce, the organization can establish linkages through acquisitions, strategic alliances, interlocking directorates, executive recruitment, or advertising and public relations that will minimize risk and maintain a supply of scarce resources.
- Two important themes in this chapter are that organizations can learn and adapt to the environment and that organizations can change and control the environment. Such organizations can adapt when necessary but can also neutralize or change problematic areas in the environment.

DISCUSSION QUESTIONS

 Define organizational environment. Would the task environment for a new Internet-based company be the same as that of a large government agency? Discuss.

ANSWER: The organizational environment is all elements existing outside the boundary of the organization that have the potential to affect all or part of the organization. The external environment is infinite, so for analysis the environment should be limited to elements that are relevant to the organization. Including only elements that actually interact with the organization would probably be too narrow. The definition above includes elements that have the potential to affect the organization, which is somewhat broader and includes everything that may be important to the organization.

The task environment for a new Internet company would most likely be simple and unstable, while the environment for a large government agency would most likely be complex and stable.

2. What are some forces that influence environmental uncertainty? Which typically has the greatest impact on uncertainty--environmental complexity or environmental change? Why?

ANSWER: Uncertainty is usually composed of two dimensions--complexity and stability. Forces that influence environmental uncertainty include complexity or the number and dissimilarity of external elements relevant to an organization's operations, and instability or the extent to which environmental elements shift abruptly. Environmental instability (change) has the greatest impact on manager uncertainty. You can actually see this on the framework which shows that unstable environment alone leads to high or high moderate uncertainty, but that complexity alone leads to low or low moderate uncertainty. The reason stability has the greatest effect on uncertainty is because the organization can gradually adapt to and understand a complex environment, but rapid change requires new learning and adaptation.

3. Name some factors causing environmental complexity for an organization of your choice. How might this environmental complexity lead to organizational complexity?

ANSWER: The terrorist attack of September 11, 2001 made the environment for the United States far more complex. The U.S. government responded by adding the Department of Homeland Security which hired many internal specialists with special training. A complex environment means that many elements affect the organization. To deal with these elements the organization creates positions and departments with the responsibility for exchanging information, resources, and the like with each element. These departments may buffer the technical core of the organization from some environmental complexity, and span the boundary to each external element. As the organization deals with more different and complex external sectors, it may need to have internal specialists with special training or education prepared to deal with those external sectors. Thus the organization needs a complex structure to cope with a complex environment.

4. Discuss the importance of the international sector for today's organizations, compared to domestic sectors. What are some ways in which the international sector affects organizations in your city or community?

ANSWER: The international sector can directly affect many organizations, and it has become so important that the distinctions between domestic and foreign companies have become increasingly irrelevant as the effects of distance and time diminish. Therefore, the international sector has possibly changed more rapidly than any other sector in recent years. In most communities, students can point to companies with saturated domestic markets that have experienced growth because of the international marketplace.

5. Describe differentiation and integration. In what type of environmental uncertainty will differentiation and integration be greatest? Least?

ANSWER: Differentiation is the difference in cognitive orientations, goals, structure and interpersonal orientation that occur among managers in different departments. Integration is the quality of collaboration that is achieved between those departments.

Differentiation is greatest in highly uncertain environments, and integration will follow if the departments are interdependent. Departments become specialized and highly tailored to the needs of their individual external subenvironments. Extensive integration is required to coordinate the changes taking place in various subenvironments. Differentiation and integration are lowest in the low uncertainty environment.

How do you think planning in today's organizations compares to planning twenty-five years ago? Do you think planning becomes more important or less important in a world where everything is changing fast and crises are a regular part of organizational life? Why?

Organizational planning is emphasized when the environment ANSWER: changes and presents a threat to the organization. Since there is more environmental uncertainty today than twenty-five years ago, planning has become more important Surveys of multinational corporations have found that as environments become more turbulent, managers increase their planning activities, particularly in terms of planning exercises that encourage learning, continual adaptation, and innovation. Planning, particularly contingency planning, is emphasized most heavily in an unstable environment. In a world where everything is changing fast and crises are a regular part of organizational life, planning can soften the adverse impact of external shifts. Planners scan environmental elements and analyze potential moves and countermoves by other organizations.

7. What is an organic organization? A mechanistic organization? How does the environment influence organic and mechanistic structures?

ANSWER: An organic structure is a loose, collegial, free flowing organization. Tasks are continually redefined. There is little hierarchy of authority and few rules. Communication is lateral and the organization is decentralized.

A mechanistic organization is more rigid and bureaucratic. Tasks are specialized, separate, and carefully defined. There are many rules and a strict hierarchy of authority. Communication tends to be vertical with control centralized to the top of the organization.

Environmental change and stability should influence organizational form. A mechanistic structure is suitable for a stable environment while an organic form is suitable for an unstable environment. A mechanistic structure quickly becomes outdated in a rapidly changing environment, but enables an organization to achieve efficiency in a stable environment. An organic form enables the

organization to continuously redefine itself to fit and survive in a changing environment.

8. Why do organizations become involved in interorganizational relationships? Do these relationships affect an organization's dependency? Performance?

ANSWER: Interorganizational relationships have instrumental value for the organization. The organization can get things done by selling, buying, or exchanging resources with other organizations. Another reason is that the government mandates coordination between not-for-profit organizations that provide services to citizens.

An organization may avoid resource scarcity when it has interorganizational relationships. But a large number of these relationships reduces the dependency on any one organization so uncertainty can be kept low. Nevertheless, autonomy is lowered. The performance of organizations can be enhanced by interorganizational relationships because it helps the organization to get things done more efficiently. A synergistic effect can influence both organizations.

9. Assume you have been asked to calculate the ratio of staff employees to production employees in two organizations--one in a simple, stable environment and one in a complex, shifting environment. How would you expect these ratios to differ? Why?

ANSWER: The ratio of staff employees would be much smaller in the simple, stable environment. Fewer employees would be needed to deal with external elements. The ratio of staff employees would be very high in a complex, unstable environment because staff employees would be needed to interact with environmental elements and to coordinate diverse activities within the organization.

10. Is changing the organization's domain a feasible strategy for coping with a threatening environment? Can you think of an organization in the recent news that has changed its domain? Explain.

ANSWER: Yes, an organization can change its domain. It can gradually develop a new market, use a different technology to produce different products, enter a different industry, find new suppliers, or turn over its human resources. An organization may try to find a set of domains where there is less competition, less government regulation, high customer demand, and many suppliers. This is often an effective way to reduce uncertainty. Google acquired a number of companies to expand its domain beyond Internet search, including the \$1.65 billion acquisition of YouTube.