Chapter

1

Strategic Planning

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Biographical Sketch . . .

Dr. David I. Cleland, is Professor Emeritus in the School of Engineering, University of Pittsburgh, Pittsburgh, PA. He is a Fellow of the Project Management Institute (PMI) and has received PMI's Distinguished Contribution to Project Management Award three times. Dr. Cleland has been described as "The Father of Project Management" and has been honored through the establishment of the annual David I. Cleland Excellence in Project Management Literature Award sponsored by PMI. He is the author/editor of 36 books in the fields of Project Management and Engineering Management. His current research interests are in the evolution of project management and the strategic context of projects in the management of enterprises.

Projects are the building blocks in the design and execution of strategies for an organization. Projects provide an organizational focus for conceptualizing, designing, and creating new or improved products, services, and organizational processes. Failure to create and maintain a portfolio of projects in the strategic management of an organization means the decline and ultimate failure of that organization. The successful organization maintains a portfolio of projects centered around the operational and strategic needs of the organization.

The changes organizations face today have no precedent. Companies must keep up with legal, social, economic, and technological changes as well as changes brought about by competitors' advances and new needs of customers. The organization must offer extraordinary modifications in products and services to ensure survival in the competitive marketplace.

Senior managers, who have the most direct responsibility for the future of the organization, must develop the ability to assess opportunities, eval-

uate risk and uncertainty, and make informed decisions concerning which strategies and projects best prepare the organization for its future.

In a successful organization, the portfolio of projects is under constant change. Some projects are preliminary ideas, some are under development, and some are nearing completion to join the inventory of products and services maintained by the organization as well as to provide supporting organizational processes such as manufacturing, engineering, and marketing. As the preliminary project ideas are evaluated, some will survive and undergo development; others will fall by the wayside.

Why Projects Fail

A project may fail for reasons such as the following:

- Inadequate senior management oversight
- · Ineffective planning
- Inappropriate organizational design
- · Lack of well-defined and delegated authority and responsibility
- Inefficient system for monitoring, evaluating, and controlling the use of resources on the project
- Ineffective contingency planning
- Limited team member participation in the making and execution of decisions on the project
- Unrealistic cost and schedule objectives
- · Lack of customer commitment to project
- Limited customer oversight
- Inadequate management information system

Senior managers must maintain surveillance over the portfolio of projects, develop insight into the probable success or failure of individual projects, and determine whether projects support the strategic and operational purposes of the organization. Several considerations can guide such surveillance.

Project Evaluation Considerations

As senior managers maintain surveillance over the adequacy of the project portfolio, answers to the following questions need to be considered:

- Are the project results innovative and effective?
- Do the project results reflect state-of-the-art technology?
- Does the cost of the resources used on the project permit the company to competitively price the results?
- Are there customers for the expected project results?

- How do the project results compare with identified customer needs?
- What unique customer attributes and benefits will the project results reinforce?
- How do these unique attributes and benefits compare to what the competitor is likely to provide?
- Do the project results reflect the unique strengths and capabilities of the organization?
- Does the organization have the resources—both human and nonhuman—to develop, produce, and market the project results?
- What is the probability that the project results can be successfully achieved in time to support organizational strategic purposes?
- Will the project results provide a suitable return on investment for the organization?

Senior managers can use this evaluation guide to gather data that will sharpen their insight into which projects are the most promising, which are likely to survive, and which might best be terminated. As senior managers conduct their regular review of the ongoing projects and deal with the issues likely to arise in seeking answers to questions in the guide, an important message will be sent throughout the organization: Projects are important in the design and execution of competitive strategies in this organization.

There are other performance standards by which to judge organizational project management.

Performance Standards

An organization can also employ other performance standards to determine how its project and other resources are being used. Key strategic performance standards are listed in Figure 1–1.

Vision: A Picture of the Future

A vision for the organization sets the stage for performance standards and all that follows. Vision, according to Jonathan Swift, is the art of seeing things that are invisible to others. Senior managers with foresight, competence, and discernment have the opportunity to develop a vision for the strategic direction of the organization along with its supporting projects.

A vision is in a sense a dream of what the future should be for the organization—the general direction in which the organization should travel to be what the leaders want it to be. The expressions of vision by senior managers offer a dream of what the future of the organization should be. For example:

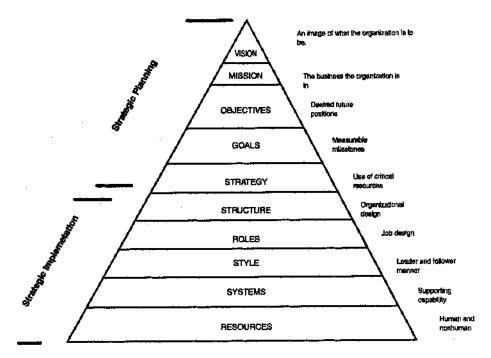


Figure 1-1 Key Strategic Performance Standards

- "A corporation that will look gigantic but have the dynamics of little teams" (Motorola, Inc.).
- "PP&L will be he energy supplier of choice" (Pennsylvania Power & Light Company).
- "A vision for growth based on critical mass in large product categories, geographic diversity, brand leadership, and marketing nnovation" (H. J. Heinz Company).

How important is it for an organization to have a vision? One study that benchmarked the performance of business teams found compelling evidence on the importance of a vision for high-performance project teams. Team members stated that it was the most important factor for high performance.²

Mission: The Strategic Purpose

The mission statement declares what business the organization is in. It is a broad declaration of the overall strategic purpose toward which all organizational resources are directed and committed. An organization's mission is the final strategic performance standard for the enterprise. All organizational

activities have to be judged on how well individual activities ultimately contribute to the mission.

Some examples of mission statements by contemporary organizations include the following:

- "To be the number one aerospace company in the world and among the premier industrial concerns in terms of quality, profitability, and growth" (The Boeing Company).
- "Our mission is to develop, manufacture, market, and sell and distribute a broad line of high quality generic drug products at competitive prices" (Marsam Pharmaceuticals Inc.).

Objectives: What Must Be Achieved

Organizational objectives pinpoint what must be achieved to ensure the accomplishment of the mission. These objectives are stated in quantitative or qualitative terms, or in a combination of both. Examples of objectives follow:

- "Providing customers with quality goods, and making the goods available when and where customers want them" (Wal-Mart).
- "Meeting or exceeding the state-of-the-art of competitors in machining capability" (Machine tool builder).

Attaining objectives provides strong evidence that progress is being made toward accomplishing the organizational mission. An organization's goals provide milestones for evaluating whether that organization reached its objectives.

Goals: Measurable Milestones

Goals are milestones in meeting organizational objectives. Projects play an inescapable role as the building blocks for accomplishing those goals. For example, an auto-parts manufacturer established a goal for the enterprise to "conceptualize, design, build, and put in operation an automated factory on a green-field site by December 31, 2002." Another example of a goal, by an electronics company, includes "attaining financial performance capability of fifteen percent return on investment by the end of 2001."

An example of how a project team attained a goal is provided by Fiat in Italy. In the agricultural region of Basilicata in southern Italy, this auto maker used project teams to design, build, and open a \$2.9 billion plant designed to eliminate traditional, inefficient work practices. A major \$64 million program was launched to train workers and engineers to operate in independent, multiskilled project teams. Factory workers and office staff worked together under the same roof. Top-down decision-making was eliminated

so that problems and opportunities were explored by teams actually working on specific problems in areas such as manufacturing, purchasing, marketing, and customer service.³

In the strategic management of an enterprise, executives find the concept of objectives easy to accept. However, when dealing with a time-sensitive goal, many executives are uncomfortable making a commitment. Failure to reach a goal could be the basis for criticism as well as an unfavorable performance rating. Nevertheless, goals can provide effective criteria to measure progress in the strategic management of an enterprise. Goals evaluation also tests whether the strategy for the organization is working.

If a project lags behind schedule, accumulates overrun costs, or is unlikely to attain its expected results, then the goal of the enterprise will be impaired.

Strategy: Use of Critical Resources

A strategy uses critical resources to reach goals and to accomplish the mission. The following are used in the design and execution of strategies: project plans, policies, procedures, resource-allocation schemas, organizational design, motivational techniques, leadership processes, and evaluation and control systems. To implement strategies, project teams use such things as benchmarks, new product and service development, facilities and equipment construction, enhanced procurement techniques, recapitalization, and information systems.

Some examples of strategies used by organizations include the following:

- "Concentrating on improved earnings from Kodak's core photography business and building a future with digital technologies such as allelectronic cameras, thermal printers, and image-storage devices" (Kodak Company).
- "Develop an interlocking computer/information support system augmented by a private satellite-communication system to video link connecting all stores, distribution centers, truck fleets, and corporate headquarters" (Wal-Mart).

Survival and growth must be deliberate and planned, not serendipitous. How human resources are aligned is critical.

Structure and Organizational Design

Corporate America is implementing many changes that affect the use of human resources. These changes include reduction of staff, new boundaries for individual jobs, employee empowerment, closer relationships with suppliers and customers, improved information systems, better telecommunications capabilities, new organizational structures, and globalization of products and services.

Another innovation, organizing around project teams, has had a noted impact on the access of companies. For example, *Fortune* magazine reports, "The ability to organize employees in innovative and flexible ways and the enthusiasm with which so many American companies have deployed self-managing teams [are] why U.S. industry is looking so competitive."

As project teams evaluate new technologies and resources, they gain insight into the need for making changes. Projects provide a central point where new knowledge, skills, and attitudes can be developed. A revisit to the definition of a project is required.

Project Defined

A project is any undertaking that has a defined objective, a cost parameter, and a time element for its development. A project can be defined as a cluster of activities that are pulled together to deliver something of value to a customer. The use of a project to define the cluster of activities needed to develop a new product or service has particular appeal, because a key characteristic of a project is the creation of something that does not currently exist, but is needed to create something of value for the organization—a new product, service, or organizational process.

A project is a miniature of the complete organization composed of team members from different disciplines of the organization, including customer representatives and suppliers. In some cases, representatives from unions, the local community, and other interested and relevant stakeholders may be team members. Project teams provide for the integration of the disciplines, technologies, and resources needed to take a project from concept through to delivery of the results to the customer. Through the workings of the project team, the use of resources, management systems, strategies, values of the whole enterprise, and so forth are studied and pulled together.

Why Projects Benefit the Organization

Some of the advantages projects provide in preparing the organization for its future include the following:

- An organizational and stakeholder focal point for integrating the resources required to bring to pass something for the organization that does not currently exist
- A strategic pathway element for the commitment of people and resources dedicated to creating value in future products and processes

- A learning opportunity for the development of knowledge, skills, and attitudes needed to support future organizational purposes
- A model through which progress can be measured in positioning the organization for its future

Teams can reduce the number of management layers. Traditional management levels, according to Peter Drucker, manage nothing. Instead, they merely amplify faint signals coming from the top and the bottom of the infrastructure. Drucker points out that every relay doubles the noise and cuts the message in half. According to Drucker, most management levels neither manage nor make decisions—they serve only as relays. In the future, Drucker believes, few businesses will have more than two or three layers.⁵

Individual Roles

No longer can individuals perform their work without giving thought to how they are expected to work with other people, many of whom can be outside of their local organizational environment. Organizations fail or succeed because members of the organization fail or succeed in their work. If people are unclear about what is expected of them, the chances for difficulties or even failure exist. In cases where employees have control, authority, and responsibility to do their jobs, employees' roles must be specific. People will do a good job if they know what is expected of them and receive feedback on how well they are doing their jobs.

Management Style

The most important variable in the strategic management of an organization is the leadership, which develops a vision, marshals resources, and provides direction for the organization. Style has to do with the overall excellence, appearance, skill, and grace in performing the leadership role. A manager's style can be autocratic, dictatorial, democratic, participative, empathetic, caustic, friendly, or abusive. Followers tend to unknowingly emulate the manager's style. Some significant examples of leadership style follow:

- "People at Goodyear headquarters say that CEO Stanley Gault's presence 'permeates' the corporate headquarters. . . . He is perceived as seldom giving orders, but everyone knows what he wants done. . . . He runs the company based on trust."
- At Siemens Company in Germany, "the management style is tailored to Germany's consensus-style corporate culture. . . . Rigid hierarchy is out and an entrepreneurial drive is in."

Systems and Resources

The systems and resources that support the organization, such as software, hardware, accounting, information, marketing, production, and design, also support ongoing projects. The technology offered by computer and information systems has changed the traditional role of managers and other employees. Technicians are becoming core employees. According to the Bureau of Labor Statistics forecasts, one of every four new jobs is going to a technical worker. Technicians are gaining new importance because of increasingly powerful, versatile, and user-friendly technologies. As companies become more dependent on these technicians, cultural support is required to keep them productive and satisfied with their work environment.

Project management can be defined in a systems context.

Key Elements of a Project-Management System

Several important subsystems are found in a project-management system. They include the following:

- *Matrix*. A matrix organization subsystem establishes the formal authority and responsibility patterns and reporting relationships among the general managers, the project manager, the project team members, the functional managers, and other key stakeholders of the project. In Chapter 16, the matrix organization is presented in detail.
- **Project-planning subsystem.** This begins with a work-breakdown structure (WBS) that shows how the total project is broken down into its component parts. In Chapter 8, the development of a WBS is presented, and in Section II, project-planning techniques and processes are described.
- *Information systems*. These systems may be informal or may involve the use of formal retrieval programs to determine the status of the project. Information provides those involved with a project the ability to plan, organize, and control the use of resources on the project. Project managers—and other key stakeholders—need information to determine the status of the project and to make informed decisions on how to plan and implement the use of resources on the project. Chapter 27 describes a project-management information system.
- *Project-control system.* The most basic standards for project evaluation include project cost, schedule, and technical performance. By comparing planned progess with actual performance, project managers can determine the need for corrective action. Because projects are linked to the goals of the organization, knowing the status of projects gives insight into how well or how poorly progress is being made to attain enterprise goals. Overall project monitoring, evaluation, and control means are described in Section IV.

• *Cultural ambience*. The emotional patterns of the social groups, their perceptions, attitudes, prejudices, assumptions, experiences, and values, all go to develop the project and cultural ambience of the organization. This ambience influences how people act and react, how they think and feel, and what they say and do concerning the project and the organization. There are no organizations without people—and project organizations are no exception. This field guide stresses the need to be aware of people issues when managing projects, as stated in Section III, Project Leadership, and in Section V, Team Management.

Summary

Throughout this book, the key topics involved in the mangement of projects will be identified and described. These topics are presented in the spirit of practical guides for those stakeholders associated with the management of projects in the enterprise's strategy. This chapter has set the stage for project management in the context of strategic planning for the organization.

ENDNOTES

- 1 Material on the strategic performance standards is stated in a somewhat different context in David I. Cleland and Lewis R. Ireland, *Project Management: Strategic Design and Implementation*, 4th Edition. New York: McGraw-Hill, 2002. Also, I have drawn additional material from my book, *The Strategic Management of Teams*. New York, John Wiley & Sons, 1996
- 2 Larson, Carl and LaFasto., Frank. What Must Go Right/What Can Go Wrong. Newbury Park, CA: Sage, 1989
- 3 Sasseen, Jane A., Neff, Robert, Hattangadi, Shekar, Sansoni, Silvia and bureau reports. The winds of change blow everywhere. *Business Week*, Special Report, October 17, 1994, p. 92
- 4 Jacob, Rahul. Corporate reputations. Fortune, March 6, 1995, pp. 54–64
- 5 Drucker, Peter. Infoliteracy. ForbesASAP, August 29, 1994, pp. 105-109
- 6 Nulty, Peter. The bounce is back at Goodyear. Fortune, June 29, 1992, pp.76–79
- 7 Schares, Gail E., et al. The new generation at Siemens. *Business Week*, March 9, 1992, pp. 34–39

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