

lish a specific objective through a set of interrelated, specialized tasks. Characteristics of a project are:

Well-defined objective: An expected result or product is the objective of a project. If the innovation is process oriented, then the expected result is the type of increased efficiency. If it is product oriented, a new or improved product is the desired objective.

Series of interdependent tasks: A project requires a number of interdependent sequential tasks.

Resources: There must be resources available to carry out the tasks. Although not all of the resources need to be dedicated (allocated to only one project), there does need to be a clear understanding of who and what will be available for a project at designated times within the process.

Specific time frame: A project has a finite life span—a start time and a designated time for accomplishing the objective. In his famous 1961 speech, President John F. Kennedy stated that the United States would have a man walk on the moon by the end of the decade. In July 1969, the United States met that goal. Thus, the timeframe was designated by Kennedy and that shaped many of the resulting decisions.

Customer orientation: The customer of a project may be internal or external to the organization. For example, an engineering department may do a design project for operations (internal focus). However, in a consumer products company, many projects are devoted to improving or creating products for the marketplace (external focus).

Degree of uncertainty: At the beginning of the project the firm uses the best knowledge and information available. As a base starting point certain assumptions and estimates are made for the project budget, schedule, scope, and availability of resources. Because these are assumptions and estimates, there is a degree of uncertainty.

The reasons an organization would want to use a project-based approach should be relatively clear from the definition of the characteristics of a project. The biggest advantage to using an innovation project approach is that it can help *bring order out of chaos* by creating a “road map” for the project. A project-based approach shows who, what, when, where, and how the project should happen.

PROJECT MANAGEMENT

Figure A2.1 presents a seven-step framework for innovation project management. The firm may have in place systems, policies, and procedures to encourage innovation, but each new product or process implementation is a new project. In an innovation project, the commitment of resources will increase over time. As a result, it is critical to develop early planning and understanding of the project. If there are problems in the project, the early identification of these problems will help limit the expenditure of resources on unfruitful projects.

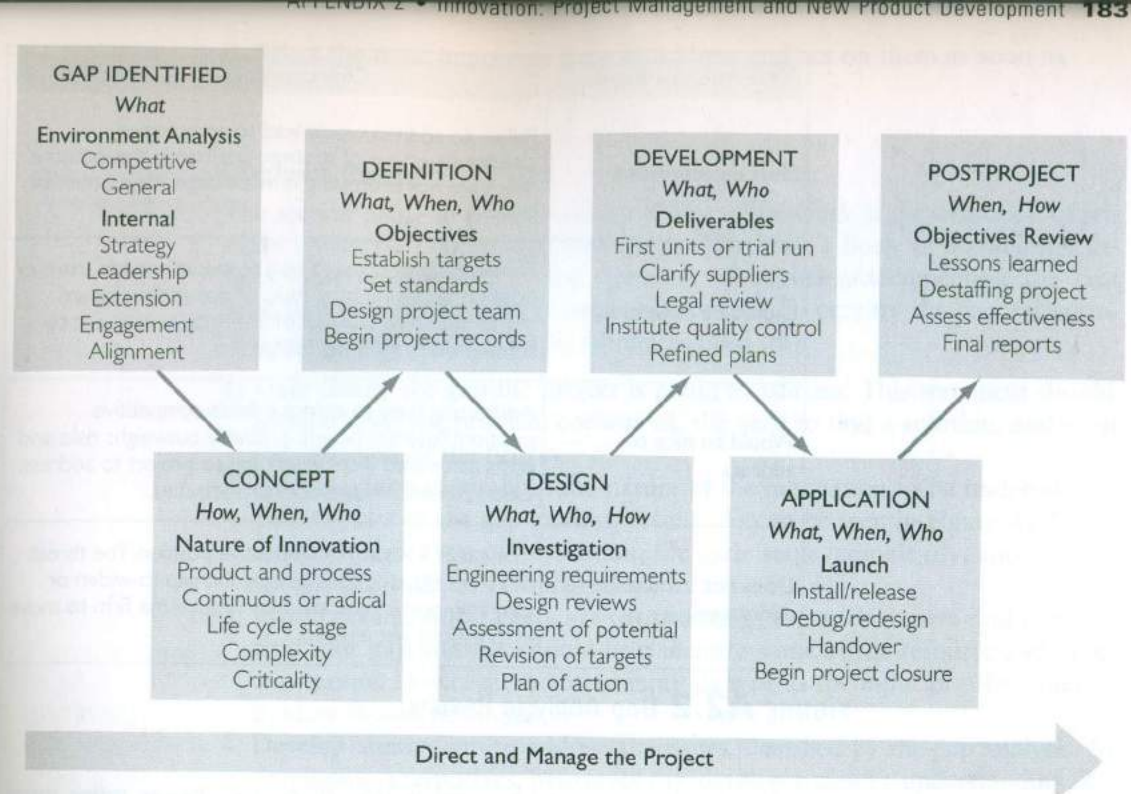


FIGURE A2.1 Innovation Project Framework

Once the firm makes a decision to undertake an innovation, the resources required to fulfill that decision escalate and the risks for the firm increase. Therefore, the identification of where the organization is, plus the conceptualization and definition of what is to be done are critical to setting the direction for the innovation project. For example, Sun Microsystems initially determines what its strategies and goals are, and then a committee meets weekly to prioritize the projects in its portfolio of projects. The committee uses about 20 variables to rank projects in its rating matrix.¹ This is how Sun begins and moves through the steps in innovation project management. We discuss each of the seven phases of this framework in more detail next. This framework is a good format for any project management effort.

Gap Identification Phase

As stated in Chapter 5, gap analysis is an important evaluation tool for those undertaking an innovation strategy. The gap identification process compares where the organization is to where it wants to be, as well as where the firm's competitors are. The gap can be process oriented or product oriented; however, once a gap is identified, the firm needs to address it or face the risk of being at a competitive disadvantage.

The environmental and internal systems analysis should help the organization identify a number of potential gaps. However, in managing innovation