through the project. Competitors may release new products that dictate crashing project deadlines. Working relationships among project participants may break down, requiring a reformulation of the project team. Ultimately, what was planned or expected in the beginning may be very different from what was accomplished by the end of the project.

Project managers are responsible for integrating assigned resources to complete the project according to plan. At the same time they need to initiate changes in plans and schedules as persistent problems make plans unworkable. In other words, managers want to keep the project going while making necessary adjustments along the way. According to Kotter these two different activities represent the distinction between management and leadership. Management is about coping with complexity, while leadership is about coping with change.

Good management brings about order and stability by formulating plans and objectives, designing structures and procedures, monitoring results against plans, and taking corrective action when necessary. Leadership involves recognizing and articulating the need to significantly alter the direction and operation of the project, aligning people to the new direction, and motivating them to work together to overcome hurdles produced by the change and to realize new objectives.

Strong leadership, while usually desirable, is not always necessary to successfully complete a project. Well-defined projects that encounter no significant surprises require little leadership, as might be the case in constructing a conventional apartment building in which the project manager simply administrates the project plan. Conversely, the higher the degree of uncertainty encountered on a project—whether in terms of changes in project scope, technological stalemates, breakdowns in coordination between people, and so forth—the more leadership is required. For example, strong leadership would be needed for a software development project in which the parameters are always changing to meet developments in the industry.

It takes a special person to perform both roles well. Some individuals are great visionaries who are good at exciting people about change. Too often though, these same people lack the discipline or patience to deal with the day-to-day drudgeries of managing. Likewise, there are other individuals who are very well organized and methodical but lack the ability to inspire others.

Strong leaders can compensate for their managerial weaknesses by having trusted assistants who oversee and manage the details of the project. Conversely, a weak leader can complement his or her strengths by having assistants who are good at sensing the need to change and rallying project participants. Still, one of the things that makes good project managers so valuable to an organization is that they have the ability to both manage and lead a project. In doing so they recognize the need to manage project interfaces and build a social network that allows them to find out what needs to be done and obtain the cooperation necessary to achieve it.

Managing Project Stakeholders

First-time project managers are eager to implement their own ideas and manage their people to successfully complete their project. What they soon find out is that project success depends on the cooperation of a wide range of individuals, many of whom do not directly report to them. For example, during the course of a system integration project, a project manager was surprised by how much time she was spending negotiating and working with vendors, consultants, technical specialists, and other functional managers:

> Instead of working with my people to complete the project, I found myself being constantly pulled and tugged by demands of different groups of people who were not directly involved in the project but had a vested interest in the outcome.

Too often when new project managers do find time to work directly on the project, they adopt a hands-on approach to managing the project. They choose this style not because they are power-hungry egomaniacs but because they are eager to achieve results. They become quickly frustrated by how slowly things operate, the number of people that have to be brought on board, and the difficulty of gaining cooperation. Unfortunately, as this frustration builds, the natural temptation is to exert more pressure and get more heavily involved in the project. These project managers quickly earn the reputation of "micro managing" and begin to lose sight of the real role they play on guiding a project.

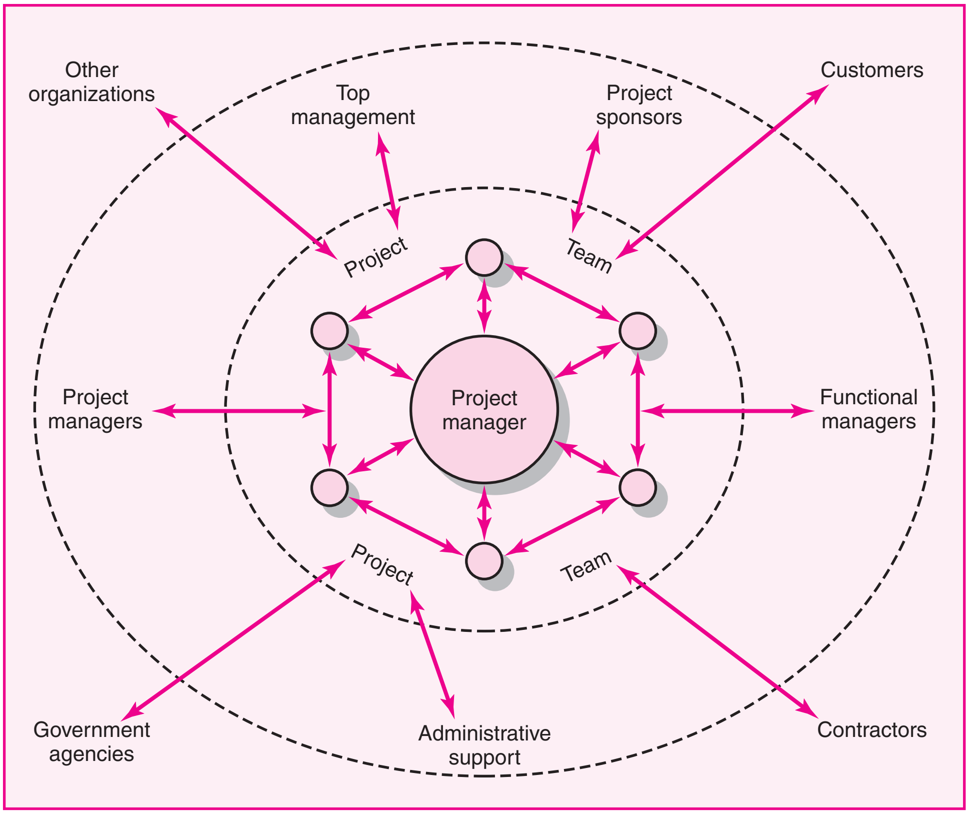
Some new managers never break out of this vicious cycle. Others soon realize that authority does not equal influence and that being an effective project manager involves managing a much more complex and expansive set of interfaces than they had previously anticipated. They encounter a web of relationships that requires a much broader spectrum of influence than they felt was necessary or even possible.

For example, a significant project, whether it involves renovating a bridge, creating a new product, or installing a new information system, will likely involve in one way or another working with a number of different groups of stakeholders. First, there is the core group of specialists assigned to complete the project. This group is likely to be supplemented at different times by professionals who work on specific segments of the project. Second, there are the groups of people within the performing organization who are either directly or indirectly involved with the project. The most notable is top management, to whom the project manager is accountable. There are also other managers who provide resources and/or may be responsible for specific segments of the project, and administrative support services such as human resources, finance, etc. Depending on the nature of the project, there are a number of different groups outside the organization that influence the success of the project; the most important is the customer for which the project is designed (see Figure 10.1).

Each of these groups of stakeholders brings different expertise, standards, priorities, and agendas to the project. **Stakeholders** are people and organizations that are actively involved in the project, or whose interests may be positively or negatively affected by the project. The sheer breadth and complexity of stakeholder relationships distinguish project management from regular management. To be effective, a project manager must understand how stakeholders can affect the project and develop methods for managing the dependency. The nature of these dependencies is identified here:

- The **project team** manages and completes project work. Most participants want to do a good job, but they are also concerned with their other obligations and how their involvement on the project will contribute to their personal goals and aspirations.

FIGURE 10.1
Network of Stakeholders



- **Project managers** naturally compete with each other for resources and the support of top management. At the same time they often have to share resources and exchange information.
- **Administrative support** groups, such as human resources, information systems, purchasing agents, and maintenance, provide valuable support services. At the same time they impose constraints and requirements on the project such as the documentation of expenditures and the timely and accurate delivery of information.
- **Functional managers,** depending on how the project is organized, can play a minor or major role toward project success. In matrix arrangements, they may be responsible for assigning project personnel, resolving technical dilemmas, and overseeing the completion of significant segments of the project work. Even in dedicated project teams, the technical input from functional managers may be useful, and acceptance of completed project work may be critical to in-house projects. Functional managers want to cooperate up to a point, but only up to a certain point. They are also concerned with preserving their status within the organization and minimizing the disruptions the project may have on their own operations.
- **Top management** approves funding of the project and establishes priorities within the organization. They define success and adjudicate rewards for

accomplishments. Significant adjustments in budget, scope, and schedule typically need their approval. They have a natural vested interest in the success of the project, but at the same time have to be responsive to what is best for the entire organization.

- **Project sponsors** champion the project and use their influence to gain approval of the project. Their reputation is tied to the success of the project, and they need to be kept informed of any major developments. They defend the project when it comes under attack and are a key project ally.
- **Contractors** may do all the actual work, in some cases, with the project team merely coordinating their contributions. In other cases, they are responsible for ancillary segments of the project scope. Poor work and schedule slips can affect work of the core project team. While contractors' reputations rest with doing good work, they must balance their contributions with their own profit margins and their commitments to other clients.
- **Government agencies** place constraints on project work. Permits need to be secured. Construction work has to be built to code. New drugs have to pass a rigorous battery of U.S. Food and Drug Administration tests. Other products have to meet safety standards, for example, Occupational Safety and Health Administration standards.
- **Other organizations,** depending on the nature of the project, may directly or indirectly affect the project. For example, suppliers provide necessary resources for completion of the project work. Delays, shortages, and poor quality can bring a project to a standstill. Public interest groups may apply pressure on government agencies. Customers often hire consultants and auditors to protect their interests on a project.
- **Customers** define the scope of the project, and ultimate project success rests in their satisfaction. Project managers need to be responsive to changing customer needs and requirements and to meeting their expectations. Customers are primarily concerned with getting a *good deal* and, as will be elaborated in Chapter 11, this naturally breeds tension with the project team.

These relationships are interdependent in that a project manager's ability to work effectively with one group will affect her ability to manage other groups. For example, functional managers are likely to be less cooperative if they perceive that top management's commitment to the project is waning. Conversely, the ability of the project manager to buffer the team from excessive interference from a client is likely to increase her standing with the project team.

The project management structure being used will influence the number and degree of external dependencies that will need to be managed. One advantage of creating a dedicated project team is that it reduces dependencies, especially within the organization, because most of the resources are assigned to the project. Conversely, a functional matrix structure increases dependencies, with the result that the project manager is much more reliant upon functional colleagues for work and staff.

The old-fashioned view of managing projects emphasized directing and controlling subordinates; the new perspective emphasizes managing project stakeholders and anticipating change as the most important jobs. Project managers need to be able to assuage concerns of customers, sustain support for the project

SNAPSHOT FROM PRACTICE The Project Manager as Conductor

Metaphors convey meaning beyond words. For example, a meeting can be described as being difficult or "like wading through molasses." A popular metaphor for the role of a project manager is that of *conductor*. The conductor of an orchestra integrates the divergent sounds of different instruments to perform a given composition and make beautiful music. Similarly, the project manager integrates the talents and contributions of different specialists to complete the project. Both have to be good at understanding how the different players contribute to the performance of the whole. Both are almost entirely dependent upon the expertise and know-how of the players. The conductor does not have command of all the musical instruments. Likewise, the project manager usually possesses only a small proportion of the technical knowledge to make decisions. As such, the conductor and project manager both facilitate the performance of others rather than actually perform.

Conductors use their arms, baton, and other nonverbal gestures to influence the pace, intensity, and involvement of different musicians. Likewise, project managers orchestrate the completion of the project by managing the involvement and attention of project members. Project managers balance time and process and induce participants to make the right decisions at the right time just as the conductor induces the wind instruments to perform at the right moment in a movement. Each controls the rhythm and intensity of work by managing the tempo and involvement of the players. Finally, each has a vision that transcends the music score or project plan. To be successful they must both earn the confidence, respect, and trust of their players.

at higher levels of the organization, quickly identify problems that threaten project work, while at the same time defend the integrity of the project and the interests of the project participants.

Within this web of relationships, the project manager must find out what needs to be done to achieve the goals of the project and build a cooperative network to accomplish it. Project managers must do so without the requisite authority to expect or demand cooperation. Doing so requires sound communication skills, political savvy, and a broad influence base. See the Snapshot from Practice: The Project Manager as Conductor for more on what makes project managers special.

Influence as Exchange

To successfully manage a project, a manager must adroitly build a cooperative network among divergent allies. Networks are mutually beneficial alliances that are generally governed by the **law of reciprocity.** The basic principle is that "one good deed deserves another, and likewise, one bad deed deserves another." The primary way to gain cooperation is to provide resources and services for others in exchange for future resources and services. This is the age-old maxim: "Quid pro quo (something for something)." Or in today's vernacular: "You scratch my back, I'll scratch yours."

Cohen and Bradford described the exchange view of influence as "currencies." If you want to do business in a given country, you have to be prepared to use the appropriate currency, and the exchange rates can change over time as conditions change. In the same way, what is valued by a marketing manager may be different from what is valued by a veteran project engineer, and you are likely to need to use different influence currency to obtain the cooperation of each individual. Although this analogy is a bit of an oversimplification, the key premise holds true that in the long run, "debit" and "credit" accounts must be balanced for