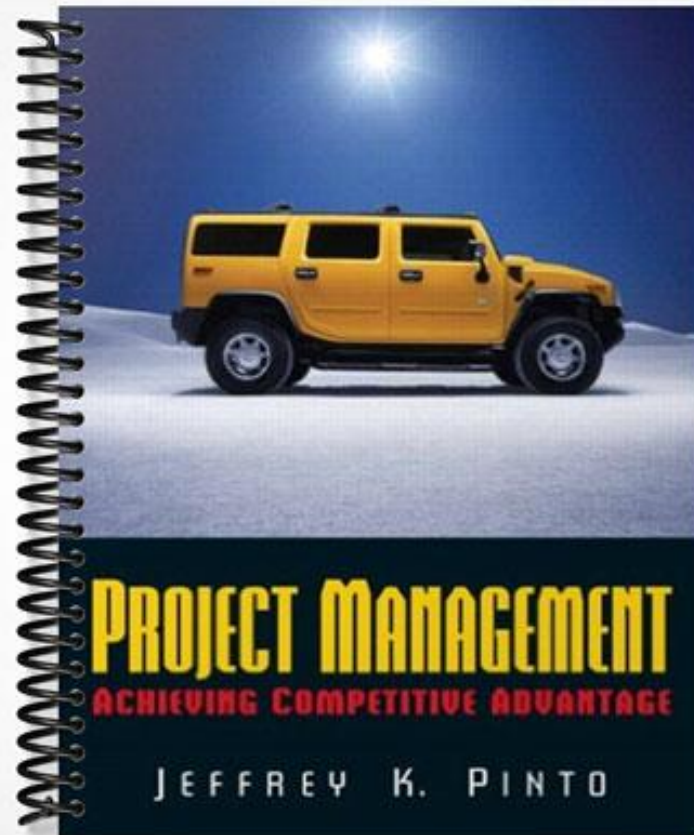


SOLUTIONS MANUAL



PROJECT MANAGEMENT

ACHIEVING COMPETITIVE ADVANTAGE

JEFFREY K. PINTO

CHAPTER TWO

PROJECT PROFILE: Reorganizing at Microsoft

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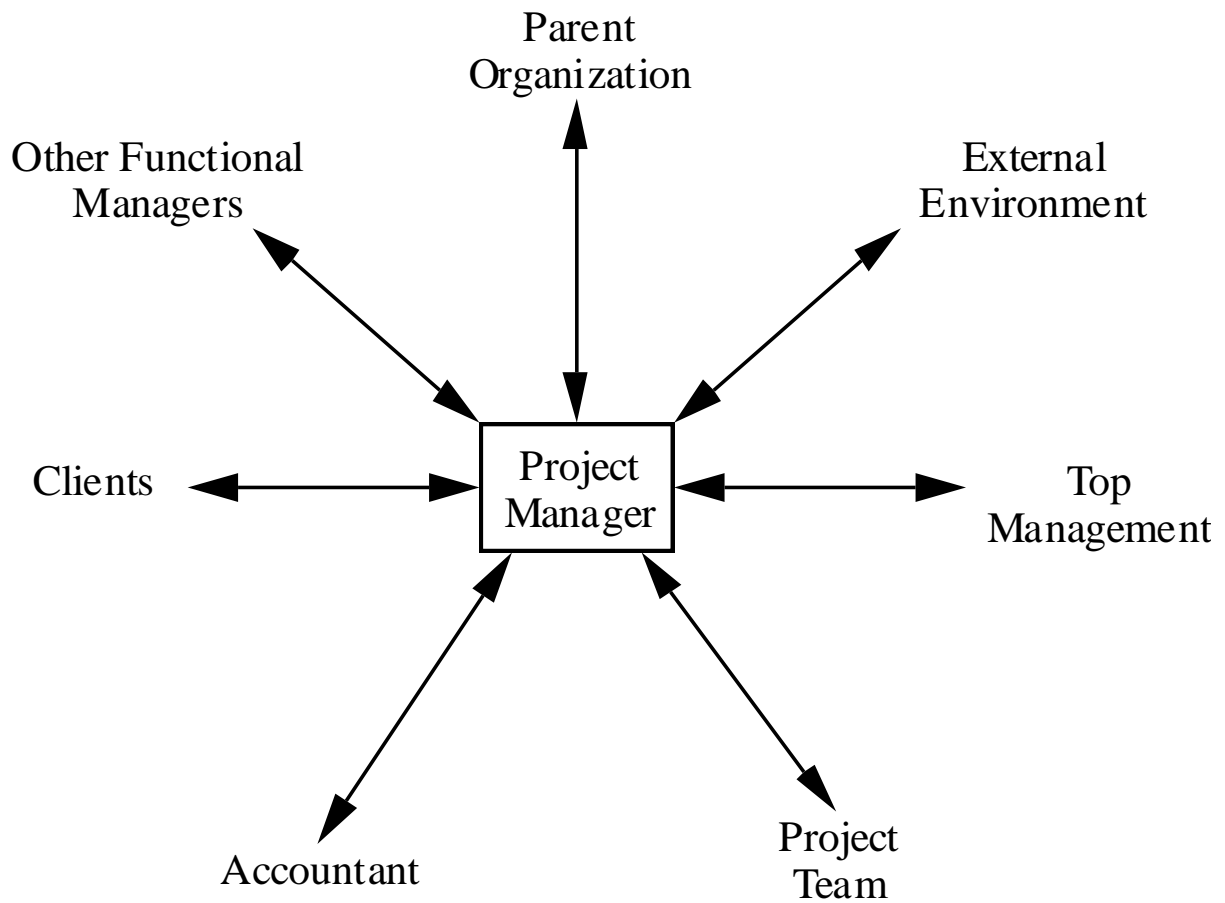
TRANSPARENCIES

2.1 PROJECTS AND CORPORATE STRATEGY

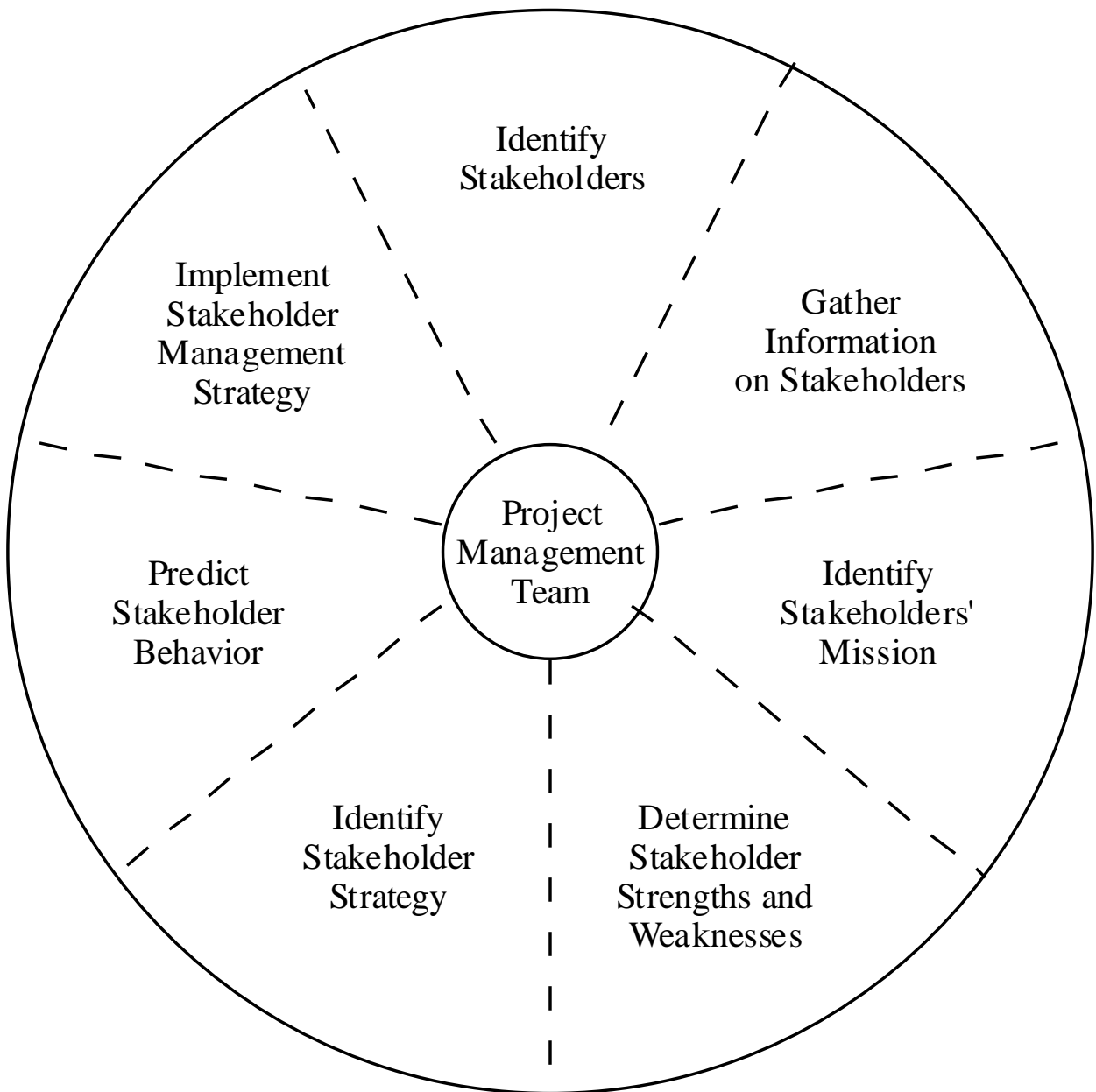


Figure 6-1. Relationship of strategic choice elements.

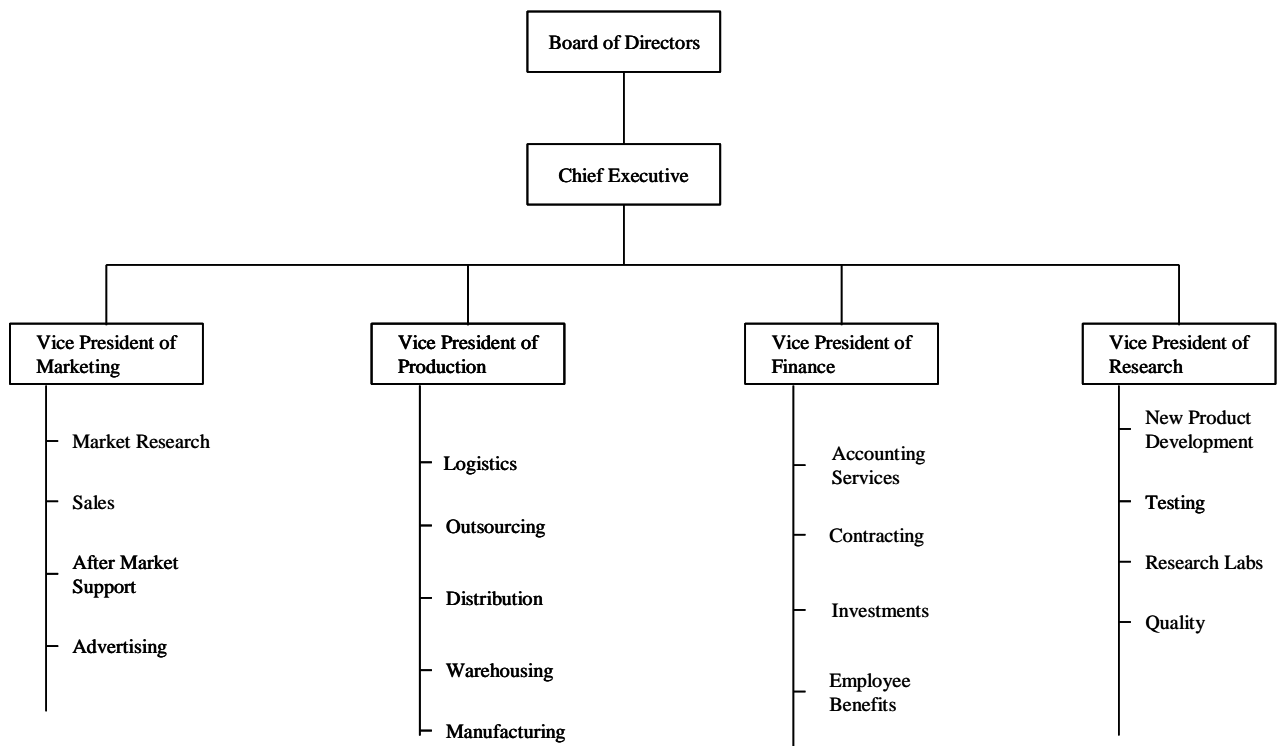
2.2 PROJECT STAKEHOLDER RELATIONSHIPS



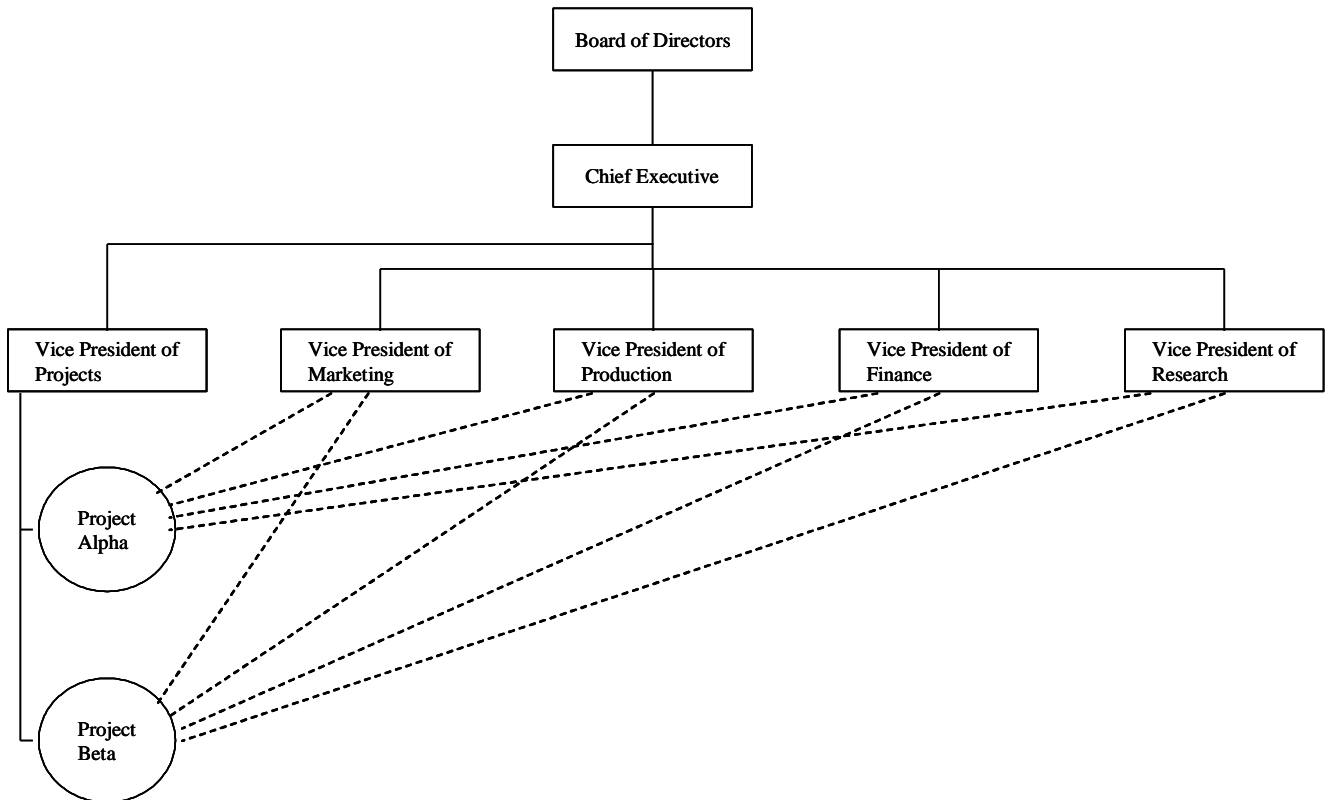
2.3 PROJECT STAKEHOLDER MANAGEMENT CYCLE



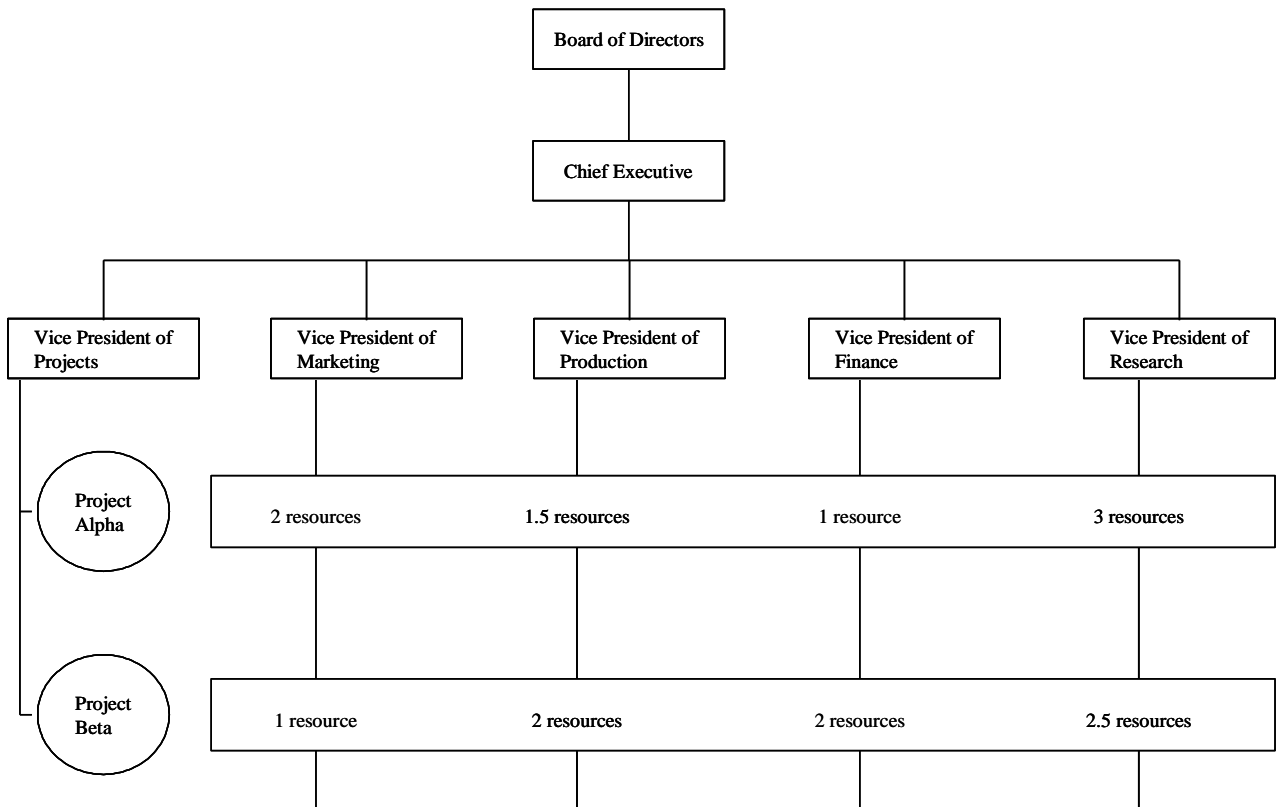
2.4 EXAMPLE OF A FUNCTIONAL ORGANIZATIONAL STRUCTURE



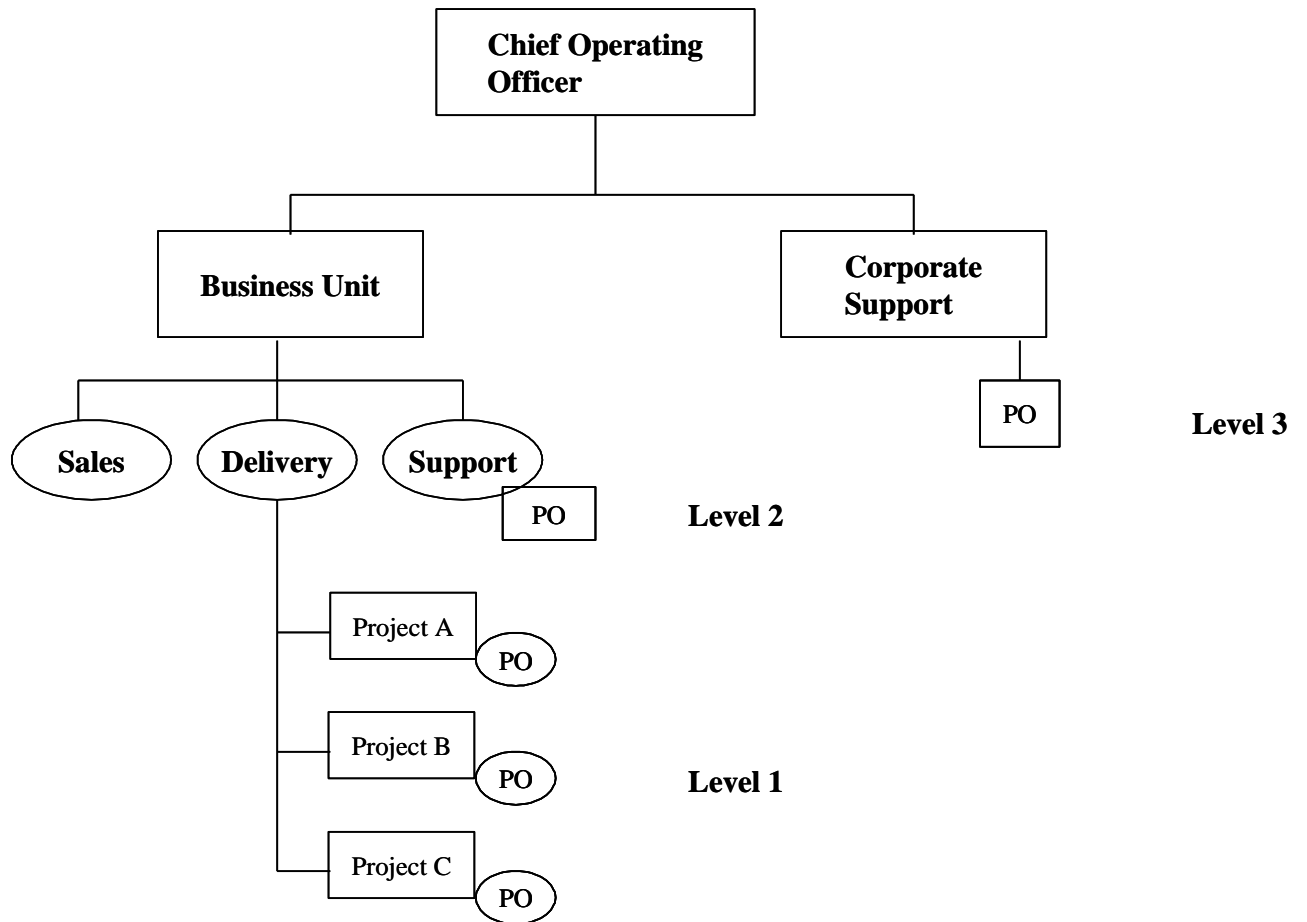
2.5 EXAMPLE OF A PROJECT ORGANIZATION STRUCTURE



2.6 EXAMPLE OF A MATRIX ORGANIZATION STRUCTURE



2.7 ALTERNATIVE LEVELS OF PROJECT OFFICES



DISCUSSION QUESTIONS

1. The chapter suggests that a definition of strategic management includes four components:
 1. Developing a strategic vision and sense of mission
 2. Formulating, implementing, and evaluating
 3. Cross-functional decisions
 4. Achieving its objectives

Discuss how each of these three sub-elements is important to understanding the challenge of strategic project management. How do projects serve to allow an organization to realize each of these three components of strategic management?

Strategic management involves a complex system of establishing a vision, formulating strategies and achieving objectives. Strategic management decisions are highly unique to each company – strategy for one company may be in exact opposition to strategies of another. Due to this, there is no predetermined “best way” to implement project management in every organization. Given the variety of corporate size and organization, the main challenge of strategic project management is figuring out how to best implement project management within the specific organizational structure of each company.

While it may at first seem difficult to successfully integrate project management into an organization, its presence in a corporation may enable effective execution of strategy and objectives. To begin with, projects may be designed around and driven by priorities and objectives derived from corporate mission and vision statements. Beyond the overarching guidelines of a mission or vision, projects may be used to implement specific strategic initiatives quickly and effectively. Also, by breaking objectives down into projects, progress may be more easily monitored by management.

Another aspect of strategic management is that it involves input and resources from various departments throughout the organization. Project teams enable the company to

create cross-functional working groups that transcend organizational structure and allow for interdepartmental cooperation. All of the above mentioned aspects of strategic project management permit organizations to break objectives and strategies into manageable pieces that can be focused on accomplishing specific objectives.

2. Discuss the difference between organizational objectives and strategies.

Organizational objectives are broader than strategies in that they are derived from the company mission or vision and establish what the company desires to accomplish. On the other hand, strategies are more specific ideas that outline how the company plans to realize these objectives.

3. Imagine that your company is planning to construct a nuclear power plant in Oregon. Why is stakeholder analysis important as a precondition of the decision whether or not to follow through with such a plan? Conduct a stakeholder analysis for a planned upgrade to a successful software product. Who are the key stakeholders?

In the case of building a nuclear plant, stakeholders may not only cause disruptions in the planning and construction, but may altogether block the project from being completed. Very powerful government, environmental, legal and community stakeholders may intervene in the creation of the plant. Performing a stakeholder analysis could identify potential obstacles and stakeholder objections to building the plant. By identifying these obstacles in advance, it may be possible to prevent them. If prevention is not possible, assessing them beforehand may allow management time to create an alternate plan prior to resources being invested in the current project.

Key stakeholders in a software upgrade would include suppliers, competitors, project team members, top and functional management and clients. Suppliers of the software would be influential in success implementation and maintenance of the system. In the

event of a successful implementation, competitors would be affected by potential loss of market share. In the event of a failure, competitors would not only possibly gain new business, but may also learn from the shortcomings of the project and avoid such mistakes for themselves. Project team members would have direct impact on the success of the upgrade and as such would also stand to reap benefits or detriments from the outcome. Top management may be evaluated on the outcome of the project and may feel significant pressure to see that the project is a success. Ultimately, clients would stand to gain from a successful implementation in the areas of faster transactions or better service, etc. (depending on the type of software).

4. Consider a medium-sized company that has decided to begin using project management in a wide variety of its operations. As part of their operational shift, they are going to adopt a project management office (PMO) somewhere within their organization. Make an argument for the type of PMO they should be adopting (weather station, control tower, or resource pool). What are some of the key decision criteria that will help them determine which model makes most sense?

The company should adopt a control tower PMO. Since widespread project management is new to the organizational structure, the control tower will offer it the necessary monitoring (sets standards) and maintenance (improvements and problem solving) for a successful transition into a project organization. It will provide support for employees and will help to focus on improvement and problem solving as the company works through the stages of implementing project management. When determining which model is best for the organization it is important to consider the structure and size of the current organization, the role of projects within the company, resources available to the PMO and the chain of command.

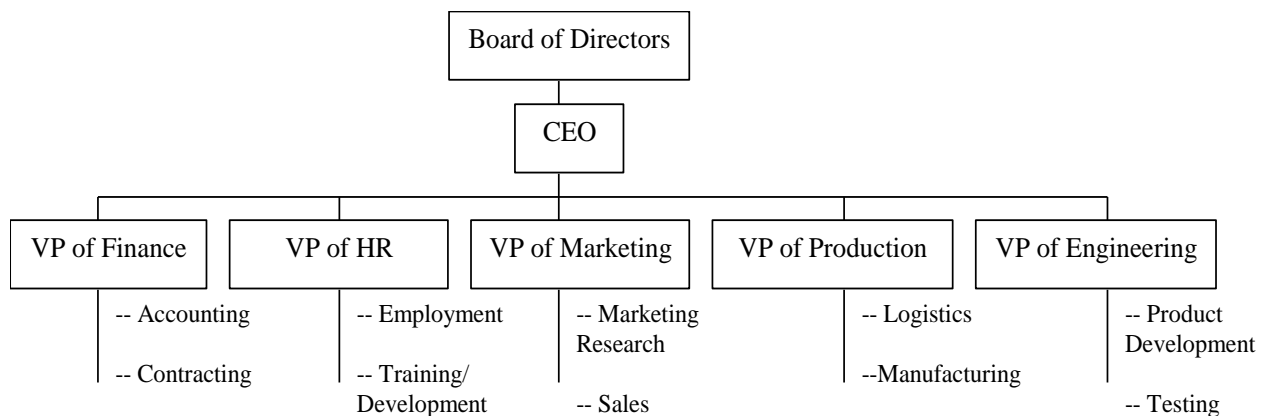
5. What are some of the key organizational elements that can affect the development and maintenance of a supportive organizational culture? As a consultant, what advice would you give to a functional organization that was seeking to move from an old, adversarial culture, where the various departments actively resisted helping each other, to one that encourages “project thinking” and cross-functional cooperation?

The key elements that affect a supportive organizational culture are departmental interaction, employee commitment, project planning and performance evaluation systems. Departmental interaction can create supportive relationships between functional and project managers. It promotes information sharing and increasing likelihood of project success. Employee commitment to goals is important in keeping workers motivated. When employees feel personally committed to company goals they are will to work harder (and possibly longer) which leads to success. When planning out resource constraints for a project, it is important to create trust and understanding among managers and employees. Managers are often responsible for approving use of resources from their department and also consult on time requirements for specific tasks. If managers are made an active part of the planning process they are more willing to allocate resources and give accurate forecasts of time. Workers also need to feel as though they will not be punished if time frames are not met (as long as this is not a persistent problem) otherwise they (or their managers) may exaggerate the forecasted amount of time to complete a task. Finally, a performance evaluation criterion needs to encourage initiative and risk taking in a project environment. Additionally, rewards need to be consistent with the goals of the project.

A functional organization that desires to move from an adversarial culture to a supportive, interactive one needs to consider several factors. First, the company should begin by establishing a corporate wide vision that aims at uniting and motivating workers. Next, they have to create a reward/punishment system in line with that vision. Lastly, they will need to establish unambiguous policies on (short) lines of authority and communication. This will help provide fast and efficient decision-making.

6. You are a member of the senior management staff at XYZ Corporation. You have historically been using a functional structure set up with five departments: finance, human resources, marketing, production, and engineering.
- Create a drawing of your simplified functional structure, identifying the five departments.
 - Assume you have decided to move to a project structure. What might be some of the environmental pressures that would contribute to your belief that it is necessary to alter the structure?
 - With the project structure, you have four projects currently ongoing: stereo equipment, instrumentation and testing equipment, optical scanners, and defense communications. Draw the new structure that creates these four projects as part of the organizational chart.

a.



- Pressure may come from within the organization or from environmental or external sources. There may be pressure to be innovative or pressure from a rapidly changing market. Increased consumer demands or competition also put strain on a functional organization. These factors require quick response time, high innovation, speedy development and risk-taking. Functional organizations

may have difficulty meeting these needs, but project management can meet them by decreasing the chain of command and decision-making. Project management is then able to decrease time to make decisions, enable employee freedom to be innovative and take risks and get products/services to market quicker.

7. Suppose you now wanted to convert this structure to a matrix, emphasizing dual commitments to function and project or product line.
 - a. Recreate the structural design to show how the matrix would look.
 - b. What behavioral problems could you begin to anticipate through this design; that is, do you see any potential points of friction in the dual hierarchy setup?

CASE STUDIES

Case Study 2.1 – Rolls-Royce Corporation

Rolls-Royce is an example of a case based on new strategic opportunities and an organization's desire to capitalize on market and technological developments. As one of the premier manufacturers of jet engines of the commercial and military markets, Rolls-Royce is facing an opportunity to “piggy back” off Airbus's newest airframe design, the A-380, an enormous airplane capable of flying up to 750 people. The case also demonstrates the manner in which Rolls-Royce must identify and manage their key stakeholder group for maximum effectiveness.

Questions:

- 1) Who are Rolls' principal project management stakeholders? How would you design stakeholder management strategies to address their concerns?

Among the company's biggest stakeholders are its direct customer's, the commercial airframe manufacturers (Boeing and Airbus), as well as those supplying aircraft for military uses. Rolls-Royce also must work closely with national governments who subsidize their airlines by resorting to creative financing, long-term contracts, or asset-based trading deals. Among Rolls-Royce's other key stakeholders are its labor force, which must be highly trained, its competitors (technical advances by a competitors must be immediately matched by Rolls-Royce), suppliers of parts and equipment, and so forth. Students discussing this case can create a large and very diverse stakeholder list. It is useful to illustrate how the desires of some stakeholders may be in direct opposition to the needs or expectations of others, making the point that stakeholder management is often a creative juggling act.

- 2) Given the financial risks inherent in developing a jet engine, make an argument, either pro or con, for Rolls to develop strategic partnerships with other jet engine manufacturers in a manner similar to Airbus's consortium arrangement. What are the benefits and drawbacks from such an arrangement?

In answering this question, it is helpful to first identify the tremendous barriers to entry and risk factors associated with manufacturing jet engines. What would Rolls-Royce gain from a consortium arrangement? What could they potentially lose? The arguments can add up on both sides of the ledger so the instructor can steer this discussion to include issues of stakeholder management, corporate strategy, and even culture, by highlighting the problems with blending conflicting cultures under a consortium arrangement.

Case Study 2.2 – Paradise Lost: The Xerox Alto

The Xerox Alto is a fascinating story of a large organization's fumbling the biggest technological advance in the latter half of the 20th century. Xerox should have been poised to reap billions. It invested in an advanced research center (PARC), hired the best and brightest talent in this fledgling industry, and was first off the mark with a fully-functioning PC, including Ethernet, laser printing, word processing, spreadsheets, and so forth. Instead, this case also details how they managed to squander their opportunity through a moribund culture, and attitude of "playing it safe," and the inability to think creatively. In short, the Alto was simply too much for Xerox to know how to handle it.

Questions:

- 1) Do you see a logical contradiction in Xerox's willingness to devote millions of dollars to support pure research sites like PARC and then refusing to commercially introduce the products produced?

Absolutely. This contradiction is one of the compelling points in the story. Discuss the difference between research for its own sake and the need to bring it to market. Also, did the Alto and the culture that created it violate Xerox's strategic mission at the time, which seemed designed to play it safe and stick with simple, incremental products, rather than attempting to take quantum leaps forward.

- 2) How does Xerox' strategic vision work in favor or against the development of radical new technologies such as the Alto?

Xerox had allowed their culture to become moribund and hence, their strategic focus was on making incremental improvements. The irony, as instructors may wish to bring up, is that the original Xerox innovation, the model 900 copier, was a radical innovation for its time and led to huge profits for the company. Thus, an organization which made its fortune and reputation on a highly successful and radical innovation, could not bring themselves to do the same thing a decade later with the Alto opportunity.

- 3) How did other unforeseeable events combine to make Xerox's executives unwilling to take any new risks, precisely at the time that the Alto was ready to be released?

Over the five years after the development of the Alto, a series of ill-timed acquisitions, lawsuits, and reorganizations rendered the PC a casualty of inattention. What division would oversee its development and launch? Whose budget would support it and PARC in general? By leaving those tough decisions unmade, Xerox wasted valuable time and squandered their technological window of opportunity.

- 4) "Radical innovation cannot be too radical if we want it to be commercially successful." Argue either in favor of or against this statement.

This question can lead to an interesting discussion regarding the advantages and disadvantages of radical innovation. Arguments can be made for both radical change and

“logical incrementalism” in new product development and introduction. One important factor to consider is the nature of the industry in which the organization is operating. For example, it could be argued that office products and information technology, which is the setting in which Xerox competed, requires a willingness to make the radical changes that would not be as necessary in other settings, facing less frequent or serious technical changes.

Case Study 2.3 – Project Task Estimation and the Culture of “Gotcha”

This short case is based on a true and common practice in which the culture of the organization encourages an “inauthentic” relationship to develop between project managers and those who serve on their teams. Authenticity is signaled by the relationship that develops between the leaders and the followers as they develop either a cooperative or combative working relationship. The project manager sets the tone; when they create an atmosphere of distrust, it is much safer for team members to protect themselves by fudging their work estimates.

Questions:

- 1) How does the organization’s culture support this sort of behavior? What are the pressures the manager faces? What are the pressures the subordinate faces?

The organization’s culture has created and, paradoxically, rewarded an attitude of self-preservation, competitiveness, and unwillingness to be truthful. In this situation, the project manager faces the pressure of getting the project done as quickly as possible. By subordinating everything to the need for speed, the project manager sends out the message that she only wants to hear good news. The subordinates’ pressures are different. If they are likely to be punished for missing their target estimates for the project, they will naturally over-inflate those initial estimates to give themselves

sufficient time to complete the assignment. It now becomes a game between the subordinate and the project manager in which neither is willing to provide authentic information to the other.

- 2) Discuss the statement, “If you don’t take my estimates seriously, I’m not going to give you serious estimates!” How does this apply in this example?

Subordinates are going to ensure that they protect themselves in the face of a project manager who distrusts them. As noted above, the key lies in authenticity. Where this is lacking, subordinates will assume an attitude of self-preservation. If they cannot trust their boss, they will take necessary steps to protect themselves. Thus, the statement, “If you don’t take my estimates seriously, I’m not going to give you serious estimates!”

Case Study 2.4 – Widgets ‘R Us

This case highlights a company experiencing a number of challenges that are directly related to their willingness to shift to a project-based approach. As the case notes, product life cycles have dramatically shortened; however, at the same time, products are slow to market. Many new innovations have passed right by WRU because the company was slow to pick up signs from the marketplace that they were coming. Internal communication is very poor. These are all signals of an organization that is now facing a very different strategic challenge than one they had been pursuing previously. In the face of these problems, they need to consider how a new, project-based approach will help them. Key to understanding this case is recognizing that the old, functional organizational structure they had used will no longer support their operations within a new, highly complex marketplace.

Questions:

- 1) You have been called in as a consultant to analyze the operations at WRU. What would you advise?

Students must recognize that many of the problems facing WRU are the result of its functional structure. In discussing the case, it is common for students at first to throw around a number of competing hypotheses as to why WRU is not competing well. Instructors should allow the discussion to continue to a point and then ask the question, “How does the firm’s structure add to the problems they are facing?”

- 2) What structural design changes might be undertaken to improve the operations at the company?

Students may want to consider moving the organization to either a matrix or a project organization. Ask them to draw sample organizational designs reflecting either of these shifts and compare them to see what type of structure seems to make the most sense.

- 3) What are the strengths and weaknesses of alternative solutions they could employ?

As the chapter discusses, there are a number of strengths and weaknesses of both the matrix and project organizations that students should consider. Will the overall result be positive in light of the new operating environment WRU finds itself facing? This is the key question that instructors should elicit from their students.