
Chapter 2

The Manager, the Organization, and the Team

This chapter overviews the roles of the project manager and contrasts these roles with those of the traditional manager. The chapter emphasizes the need to adopt the systems approach to managing decisions and discusses the problem of suboptimization. The chapter also overviews the PM's responsibilities to the project as well as important criteria to consider in selecting a project manager, and project management as a profession. In terms of fitting projects into the parent organization, the chapter discusses pure project organizations, functional project organizations, and matrix project organizations. Finally, the chapter concludes with a discussion of the project team including the characteristics of effective team members and sources of intrateam conflict.

Cases and Readings

Some cases appropriate to the subject of this chapter are:

Harvard: 9-687-001 Plus Development Corp. (A) This 17-page case highlights the difficulty of managing a fast-paced, high-technology development project that includes international elements and intense competitors. The project manager must lead an American-Japanese development project where the procedures and cultures of each side are in dramatic conflict.

Harvard: 9-483-098 Mat MacGregor (A) In this case, a marketing-engineering project is in trouble with many conflicts and a new project manager must be found.

Harvard: 9-192-151 Concordia Casting Co. This 12-page case describes the change in leadership of a major information systems conversion project that is found to be a year behind schedule. Involves issues of organizational change, conflict, management style, and human resource policies

Harvard: 9-195-141 Oticon A/S: Project 330 This 17-page case describes the reorganization of a Danish hearing aid manufacturer around projects, knowledge, and personal development. Details the implementation process and threats from early losses.

Harvard: 9-689-035 Honeywell Residential Control Division: New Product Development This long (38-page) case illustrates the organization of three different product development projects in the Residential Controls Division. Considerable information on the different approaches to product development depending on the market and environment. Also discusses the issue of evolutionary change versus cold-turkey change in organizations and procedures.

Harvard: 9-390-012 Fan Pier This 19-page case concerns an entrepreneurial start-up involving fraud and how to resolve the problem. Includes conflicts with bureaucracy and public relations problems.

Harvard: 9-181-018 Pathfinder Engineering and Construction Co. This case concerns a new project manager in a bid estimating group beset with multiple conflicts.

Some readings appropriate to the subject of this chapter are:

H.K. Bowen, et al. Make Projects the School for Leaders (*Harvard Business Review*, Sept.-Oct. 1994, pp. 131-140). Relates the role of leadership to outstanding product development projects. Many examples of where leadership made a difficult project successful. Stress is on top management's support for the project manager's role more than on the characteristics or actions of the project manager.

M.A. Cusumano. How Microsoft Makes Large Teams Work Like Small Teams (*Sloan Management Review*, Fall 1997, p. 9-20). Describes Microsoft's approach to software development. This approach keeps the team creativity and autonomy typical of small groups through synchronizing and stabilizing continuous design changes.

J.R. Adams and L.L. Adams. The Virtual Project: Managing Tomorrow's Team Today (*PM Network*, January 1997). This article addresses a new phenomenon in the increasingly global competitive environment – geographically dispersed project teams. The competitiveness of global firms is often facilitated by new electronic technologies and these technologies are also useful to the success of globally dispersed project teams. Other aspects of such dispersed teams are more problematic, however, and this article illustrates these, as well as approaches used by project managers for circumventing them. Finally, some of the advice given in the article should be useful as well for project teams that are not geographically dispersed.

R.J. Burke. Methods of Resolving Interpersonal Conflict (*Personnel Administration*, July-August 1969). This classic article describes a number of methods for negotiating and handling conflicts. Effective and ineffective methods are identified ranging from withdrawal to forcing. Each method is illustrated with a number of examples. Finally, the most effective method, Confrontation-Problem Solving, is described in terms of its many characteristics.

Kaulio, M. Project leadership in multi-project settings: Findings from a critical incident study. (*International Journal of Project Management*, 26, 338-347, 2008.)

This reading identifies and analyzes critical incidents that project leaders who are working in multi-project settings encounter on an almost daily basis. The most frequent issues that leaders deal with are: technical difficulties, dyadic leadership and group dynamics, followed by consultant, client, and peer relations.

Answers to Review Questions

1. Why is it important for the project manager to adopt the systems approach?

Projects are systems composed of tasks (subsystems) and also are part of larger systems (e.g., programs and organizations). As is the case for all systems, effective management requires an understanding of how the parts of the system are interrelated. Failure to recognize these interdependencies can lead to suboptimization of the overall system as each subsystem is managed and optimized independently.

2. What is “micromanagement?”

Micromanagement occurs when a supervisor too closely supervises and over-controls the activities of his or her direct reports.

3. What is a virtual project?

A virtual project is one where the project teams are geographically dispersed.

4. Explain what is meant by the project manager having credibility.

Credibility means the PM is believable. The two areas where the PM must be believable are technical credibility and administrative credibility.

5. Contrast pure project organizations, functional project organizations, and matrix project organizations.

In pure project organizations work is organized on the basis of projects and employees from a variety of functional areas are dedicated to the project. In a functional project organization, projects are housed within a given functional department. In a matrix project organization, resources are assigned from the functional departments to support project work.

6. What are the advantages and disadvantages of a matrix project organization?

Advantages:

- Flexibility to access all of parent organization’s technology
- Can tap resources from all functional areas
- Functional departments can support projects in a way that is most efficient for the department
- Less duplication of expertise
- Strong focus on the project

- Advantages of pure and functional projects

Disadvantages

- Violation of the Unity of Command principle (project team members having two bosses)
- Political infighting among project managers for resources (which can further lead to suboptimization)
- Intrateam conflict may be especially contentious given nature of transdisciplinary team
- Team members have other commitments beyond the project

7. What is the project management office (PMO) and what purpose does it serve?

The PMO is like a functional group or center of excellence. The PMO may act as staff to some or all of an organization's projects. It may also handle some or all of the budgeting, scheduling, reporting, compliance with corporate governance, and risk management. It also serves as a repository for project documents and histories.

8. What are the important characteristics of project team members?

- Technically competent
- Politically sensitive
- Strong problem orientation
- Goal orientation
- High self-esteem

9. Explain why the systems approach is necessary to manage projects.

Projects are systems composed of tasks (subsystems) and also are part of larger systems (e.g., programs and organizations). As is the case for all systems, effective management requires an understanding of how the parts of the system are interrelated. Failure to recognize these interdependencies can lead to suboptimization of the overall system as each subsystem is managed and optimized independently.

10. Explain the meaning and implications of "projectitis."

Projectitis occurs when project team members form strong attachments to the project and the project begins to take on a life of its own. In such situations, the team members may:

- Actually become more loyal to the project and other team members than to the sponsoring organization.
- Stall as the project end nears.

Some key implications of projectitis include:

- Increased costs due to the delayed project completion.
- The delay of other projects that depend on the afflicted project.
- Subordination of overall organizational goals to the goals of the project.

11. Review the chapter and make a list of all the advantages and disadvantages of matrix project organization you can find.

Advantages of a matrix project organization:

- Flexibility.
- Access to all of the organization's technologies.
- Functional departments able to optimize their contributions to any project.
- The ability to share expertise with several projects during a limited time period.
- A strong focus on the project.
- Close contact with functional groups (which mitigates projectitis), and
- The ability to balance time, cost and performance across several projects.

Disadvantages of the matrix organization include:

- Project team members having to report to two bosses.
- The difficulty in carefully managing the full set of projects.
- Possible infighting between project managers as they battle for key resources, and
- [Perhaps] more intrateam conflict.

Additional advantages of the matrix form would be the potential to use the matrix structure as a stepping stone or intermediate step to a permanent process-centered organizational structure and also to preserve an organization's ability to develop competencies in particular areas.

12. What is meant by "micromanagement?" Why is it such a managerial sin?

Micromanagement occurs when a supervisor too closely supervises and over-controls the activities of his or her direct reports. This causes a number of problems:

- It gives people the impression that they are not to be trusted or are not capable of performing the work.
- It eliminates opportunities to develop the workforce through delegation, and
- It takes away from time the micromanager has to do his or her own job.

13. List five reasons to organize a new product development project as a functionally organized project in the parent firm's Marketing Department.

The Marketing Department would/will be:

1. In better touch with the customer than other functions and thus know their needs.
2. A good liaison between R&D and manufacturing.
3. Best know the opportunity window for product launch.
4. In the best position to deliver sales of the new product to appropriate customers.
5. Have the depth of skills needed on a new product development project.

As a result, the drawbacks of pure, cross-functional projects (such as projectitis) will be avoided.

14. List five reasons to organize a new product development project as a transdisciplinary, matrix-organized project.

Among the reasons for organizing a new project development project as a transdisciplinary, matrix-organized project would/will be:

1. The task of developing a new product requires input and impacts multiple functional areas.
2. Enhance flexibility.
3. Provide access to all of the organization's technologies.
4. Provides the functional departments with the opportunity to optimize their contributions to the project.
5. Functional experts could contribute their expertise to several ongoing projects.
6. Provides a strong focus on the project.
7. The close contact with functional groups mitigates projectitis.
8. Facilitates balancing time, cost, and performance across several projects.

Suggested Answers to Discussion Questions

- 1. The Chapter mentions that regular functional managers are moving from their classic authoritarian style to a facilitative, participative style because it is more effective. Do you think it took managers 200 years to learn this, or is something else driving the change?**

Historically, managers have used the style of management appropriate to the environment of the time. However, in many if not all industries, the marketplace is becoming increasingly competitive as markets become increasingly global and the pace of technological advancements accelerates. As a result, managers are beginning to realize that techniques that worked well in the past are not as effective in these more dynamic environments.

One of the areas where this is particularly evident is the shift in style of management. Much of this shift is related to:

- The trend toward flatter organizations.
- A recognition of the critical flaws associated with the traditional functional organizational structure.
- The need for flexibility in more dynamic environments.
- The increased mobility of labor which makes it necessary to use a managerial style that is consistent with high labor retention (e.g., participative management).

2. There is a danger in letting the client “visit” the project operation too frequently, not the least of which is “scope creep” or informal changes to the project’s performance specifications. What other dangers might arise? How might the danger of scope creep be monitored and controlled?

Other dangers include micromanagement by the client and delays in completing the project due to the continuous interruptions.

One way scope creep can be monitored is by tracking the number of change orders to the project and summarizing these change orders by the source of the request for the change.

3. How should a PM decide which problems (or potential problems) deserve being reported to management and which are not worth the trouble when attempting to “never surprise the boss.”

Any problem that will likely impact the project’s completion date, budget, or performance should be reported to management.

However, problems that can be resolved internally by the project manager and project team that will not impact the project’s completion date, budget or performance need not be reported formally.

4. Discuss how you would go about getting competent staff from a functional department.

When negotiating with functional managers for competent staff, it is important to look at it from the functional manager’s point of view and point out how releasing key personnel will benefit the functional manager and his or her department. Such benefits may include:

- Increased visibility with senior management.
- Professional development of the employees, and
- [Perhaps] more work for the department if the project succeeds.

It may also be worthwhile to communicate to the functional manager the importance of the project to the overall organization and the relationship between the overall organization's health and the functional manager's department.

- 5. Another trade-off PMs have to make is between team process and progress – the purpose being to keep the peace, give the team an occasional rest, protect the larger organization or other projects, and so on. What might happen if the PM does not anticipate these trade-offs?**

Project managers that do not appropriately trade-off process and progress often end up with burnt out teams. We are all familiar with the fable of the man who killed the golden goose. Moreover, teams need some variety and breaks from a hectic schedule which, if not recognized, can lead to projectitis, personality conflicts, arguments with other project teams over resources and personnel, and other such dysfunctional behavior.

- 6. Usually projects involving high levels of technological uncertainty are quite complex. Yet Shenhar says to use a *flexible* management style with high-uncertainty projects, but a *formal* style with complex projects. Explain.**

Professor Shenhar found that as the level of technological uncertainty of a project went from "low tech" to "very high tech, the appropriate management style (while being fundamentally participative) went from "firm" to "highly flexible." In addition, he found that the complexity of the project, ranked from "simple" to "highly complex" called for styles varying from "informal" to "highly formal."

So, this suggests that projects which (a) involve high levels of technological uncertainty and (b) are also complex require a project manager that is not only open to new ideas and experimentation but who can also provide a relatively structured environment that is important in keeping uncertain, complex projects on track. For simpler projects where the requirements are clear, the formality of close monitoring and control works fine.

- 7. In many project-oriented organizations, even routine processes are treated as projects. Why do you think this happened? How is it accomplished?**

In the early 1990s proponents of reengineering argued that functional organizational structures be abandoned in favor of organizing work on the basis of specific value-creating processes. From this process perspective, it becomes clear that most projects are actually processes that are executed on an *ad-hoc* basis.

The reason for treating routine processes as projects is that it facilitates the formation of cross-disciplinary teams and is often easier than implementing a true process-centered organization. Thus, one way routine processes can be treated as projects is through the formation of cross-disciplinary teams.

Another explanation is that top management liked the results of project management in terms of schedule and budget. Thus, they started applying it to normal activities by creating artificial deadlines and budgets.

8. A matrix organization is difficult to manage all by itself. What do you think the problems would be in managing mixed organizational systems?

Mixed organizational systems (i.e., functional, matrix and pure project) would have all the problems of the organizational systems used in addition to the problems of managing and coordinating a diverse set of organizational systems.

9. Can you think of any circumstances where deferring conflict might be a wise course of action?

It might be wise to defer conflict when emotions are high and a cooling-off period would allow a more rational discussion of the issues.

10. Give an example of a case in which project management could be important in your personal life. Explain why, as well as how and why you might organize such a project.

Planning a wedding is a typical example given by students. Project management is particularly appropriate for planning a wedding because:

- Weddings involve a large number of interrelated activities.
- There is a clear due date, and
- [Typically] a clear budget.

Other examples might include finding a new job, having a baby, or going back to graduate school.

11. Explain the reasons for the growth and decay of each source of conflict in Figure 2.6, and for the Total as well.

- Project priorities ... these are highest in the start and early phases due to arguments over the priorities of key elements of the project. They decline somewhat in the main and late stages but continue to be a major area of conflict throughout the project.
- Administrative procedures ... these conflicts are also highest during the first two phases. However, most such issues have been resolved by the beginning of the main phase and relatively few occur during the late phase.

- Technical trade-offs ... these conflicts are relatively limited in the start and late phases. However, more conflicts occur in the early and main phases when decisions with regard to these trade-off issues have to be resolved.
- Staffing ... the conflicts over staffing tend to remain largely constant over the life of the project, when staff come and go, especially in situations where staff is being drawn from functional areas.
- Support cost estimates ... these tend to be a relatively minor source of conflict and remain relatively constant throughout the project.
- Schedules ... this is the number one source of conflicts. Scheduling conflicts increase to a peak in the main phases of the project and remain high through the late phase as there is continual pressure (and thus conflict) to ensure that the project moves forward and meets its due date.
- Personalities ... to the extent that the same individuals are involved in all stages of the project, the number of conflicts (as one would expect) remain relatively constant throughout the project.
- Total ... scheduling is the major source of conflict throughout the project's life with project priorities a close second, particularly in the first two stages of the project's life. Staffing and technical trade-offs are the next major sources of conflict. The largest number of conflicts occur in the early stage of a project and the smallest number during the late phase by which time many of the sources of conflict have been resolved.

12. What are the potential ramifications of not utilizing integration management techniques or parallel tasking while planning and implementing a project?

Team members will not recognize their dependencies on each other and being co-members of a team is not sufficient to cause them to associate with one another. Without integration management techniques, the team is unlikely to function as a team. Without parallel tasking, the project will probably miss its due date.

13. Can you think of any other desirable characteristics for team members than those listed in Section 2.6?

In addition to being technically competent and politically sensitive, and having a strong problem orientation, goal orientation, and high self esteem, other desirable characteristics include being:

- Team players rather than individuals.

- Oriented to communication among peers, both speaking and listening.
- Comfortable in a social group, extroverted, good followers.
- Flexible, can “roll with the punches.”

14. Exactly why were projects in the pharmaceutical company mentioned in Section 2.5 in the PMO subsection always late and over budget?

For their part, the project-manager scientists:

- Had no information about budgets and schedules.
- No responsibility for any aspect of their projects except scientific results, and.
- Thus had no incentive to manage either schedules or budgets but did have a strong incentive to extend their projects in any way they thought might yield better or more extensive scientific results.

On the other hand, the project office:

- Had no authority to control any aspect of project design or scope, and
- Therefore, had no way of exerting any control over budget or schedule.

15. Why would the members of a “NOT” work independently if they were members of a designated team? What does independently” mean in this context?

Members of a “NOT” (Name-Only Team) would work independently primarily because they are discipline oriented and the only person from their discipline or team on the project. Thus, they find no one else to talk to and work with.

In this context, it means not coordinating your efforts with others on the team to complete the project. Any project requires some independent work but it must be coordinated with the team efforts in both performance and time.

16. Why do so many “self-directed teams” perform poorly? What can be done to improve their performance?

The research tends to show that the success or failure of empowerment teams probably has more to do with the way in which the team program is implemented than with the team itself. When empowerment team programs are implemented with a well-designed plan for involvement in solving actual problems, and when the teams have full access to all relevant information plus full support from senior management, the results seem to be quite good. When those conditions are not present, the results are mediocre at best.

Some students will give answers based on their personal experience in teams, like conflicts between the team members, but the answer from the book will illustrate that personality discord is not the usual reason for failure. This gives the instructor an opportunity to emphasize the four common reasons: well-designed, actual problem, support of administration, and data.

Incidents for Discussion Suggested Answers

Samuel's Approach to Project Management:

The key points in this incident are that:

- Six weeks after the project is underway, Joe will probably feel pleased since he has assigned defined objectives and tasks for each member of the project team.
- From the perspective of the team members, they have been given work assignments and agreed to try to do it – that's all.
- Joe has not really used any of the empowerment approaches in this project (i.e., involving the team members in deciding how to attack the task and solve it) ... and certainly does not have the commitment of the team members.
- His new approach (i.e., individual "contracts" for each team member as opposed to being the overall baby-sitter) will be no more successful than his previous approach.

HardTech, Inc.:

The key points in this incident are that:

- Even though the executives are more comfortable with the traditional functional organizational structure, this is not the best structure for the three new projects.
- Ryan's points are well taken. Each department would work separately on each piece of the project and there is no guarantee of communications across the departments. The department's priority would not likely be the projects. The departments have had one product and one client since they started up. It would be more appropriate to set up project teams to complete the new projects.

- The firm is too small and it would be too costly to set up a pure project structure. When a project staff was not assigned to a task, they could be idle. A matrix project structure would be most appropriate. The firm could assign project teams for each initiative, while keeping them in their home departments. This way the development, design and sales people could work together from beginning to end on the project instead of working separately on each piece.
- Also, when a resource has down-time on the project, they could be assigned to other work in their home department. This would enable optimizing the entire project as opposed to suboptimizing each task.

Suggested Case Analyses and Solutions

Friendly Assisted Living Facility – 2

1. Comment on the pros and cons of the CEO, Dr. Splient, as the Project Manager.

The good aspects of the CEO as Project Manager is the commitment he will have to making the project a success. He'll also be able to provide the resources and the loyalty of his upper managers to foster the project in times of trouble. However, as CEO he has many other important duties and his attention may be distracted at critical times in the project. And he may not react well to evidence that later appears indicating this was not a good idea, or that major changes in the project are needed. Bear in mind that the project was selected as a sacred cow.

2. Who is the funder of the project? Who is the sponsor? Who is the project owner?

Friendly Medical Center is the funder and Dr. Splient is currently both the project owner and sponsor of the project. It may well happen that Splient will have to appoint someone else as project owner who has the time, knowledge, and skills to take on this responsibility. Since this is mostly an internal project, the project owner would probably also be the sponsor, but there may also be an external sponsor in the construction firm overseeing the physical building of the facility.

3. List all the potential stakeholders in this project?

Clearly, the Board of the Center, Dr. Splient, and the Project Steering Committee are active stakeholders. The contractors involved in building the facility, the Friendly staff involved in the project, the Friendly staff whose duties will change due to the new facility, potential new employees of the Center, the future patients and residents of the new facility, and the local community are all potential stakeholders.

- 4. This initiative consists of a variety of separate efforts from a lot of different groups and individuals. What are the advantages and disadvantages of structuring it as a program consisting of a set of separate projects? Would you recommend this, under the circumstances?**

This could be set up as a program with individual projects concerning the staffing, the building, the grounds, the financing, etc. but the timeline is tight and except for the construction subcontractor, the major stakeholders are all associated with the Center, so keeping it as a project with Splint as the project owner probably makes the most sense.

Quantum Bank

Teaching Purpose: This case provides students with the opportunity to apply the selection criteria discussed in the chapter for a project manager to oversee a mobile app enhancement project. Given the technical nature of this project, a key point of discussion is related to the issue of how much technical expertise the project manager needs to effectively manage this project.

1. *Whowould you recommend Stacey Thomas select to serve as project manager? Why?*

- The only dimension that Bill Fence would seem to dominate on is the technical expertise. However, from the case, it appears that Andy has sufficient expertise to manage the project. Given the backgrounds of the two candidates, it is likely that Bill would focus more on technical issues while Andy's focus would likely be on the bigger picture, particularly given his MBA and the fact that he spent a year rotating through various departments at the bank. Of course, Bill's tenure at the help desk likely exposed him to a variety of departments, but at a different level.
- In terms of the criteria listed in the book, Bill would obviously have strong technical credibility, while Andy would likely have adequate technical credibility. Furthermore, the description of Bill's desk and the fact that Andy was always seen carrying his planner suggests that Andy would likely have more administrative credibility.
- Also, the description of Andy suggested the requisite sensitivity required of a PM. Finally, Andy's experience with large process improvement projects, his natural tendency toward viewing things as systems, and his solid communication skills would serve him well as the PM of this project.

2. How would you recommend this project be organized? Functional project? Pure project? Matrix? Why?

Matrix. Why?

- Because this project would require input beyond the IS department, organizing it as a functional project would not be appropriate.
- On the other hand, most of the work associated with this project falls into the hands of the IS department, and there would probably not be sufficient work to keep members from other functional areas busy over the entire project.
- Therefore, a matrix structure would be most appropriate where members from other functional departments could contribute to this project on an as needed and part-time basis.

3. Do you agree with Stacey's decision that the project should be staffed internally? What are the major advantages of staffing the project with Quantum employees? Are there any advantages to utilizing the services of an outside consulting firm?

- Given the likely strategic significance of the bank's online presence, staffing the project internally makes sense. Furthermore, staffing the project with internal employees ensures that all the learning associated with the project stays with Quantum.
- If the project was staffed externally, Quantum's competitors could develop similar capabilities simply by hiring the same consulting firm.
- Of course there are advantages to utilizing the services of outside consultants including perhaps their greater expertise, larger staffs, different perspectives, and so on.

Case: Southern Care Hospital

Teaching Purpose: This case provides students with an opportunity to experience the hands-on role of a project manager. Not only do they need to decide on their overall approach to the project but also how they are going to select their resources and handle the inevitable trade-offs.

Question 1: Explain how you would execute your roles as project manager of this project?

The chapter identifies a number of roles that a PM can play:

- Facilitator ... as opposed to a supervisor.
- Systems approach ... as opposed to micromanager.
- Communicator, and
- Convener and chair of meetings.

Given the expertise of the prospective team members (ten Green Belts and two Black Belts), your role as project manager should be one of facilitation rather than supervision. You should aim to employ a system's approach rather than falling into the trap of micromanagement. Further, you must provide the critical role as a communicator between both (a) the team members and (b) between the team and senior management. Finally, you need to act as the convener and chair of meetings (when essential to the progress of the project).

Question 2: As the project manager, how would you handle trade-offs?

As project manager, you are the key figure in making trade-offs between project cost, schedule, and performance. How you handle these trade-offs will depend on many factors having to with the project, the client, and the parent organization.

Of the three project goals, performance (specification and client satisfaction) is usually the most important so you are likely to emphasize these factors. However, in many projects, the schedule is critically important to the client and thus trade-offs (in terms of project costs and performance) may have to be made. In those situations where funding is strictly constrained, the client may place primary emphasis on the costs and thus trade-offs will have to be made in terms of both the schedule and performance.

Question 3: How would you recommend this project be organized? Functional project? Pure project? Matrix? Why?

Given that the proposed team members represent three different departments (radiology, special projects, and staffing), a purely functional project would seem to be impractical ... especially given the fact that the success of the project (in terms of the turnaround time) involves different departments.

A pure project organization would have the benefit that the team members could focus solely on the task of reducing the turnaround time. However, as shown in Table 1, the availability of potential team members ranges from 20% to 50% (i.e., none are available full-time) so none can relinquish their existing departmental responsibilities.

A matrix organization would appear to be the optimal structure for this project since it enables you to combine the functional skills (albeit it on a part-time basis) with the focus on the project itself.

Question 4: What criteria would you use in selecting resources to serve on your project team?

The Hospital's steering committee has granted you permission to select up to four team members from the available resource pool to staff the project. Furthermore, you are aware that conflict occasionally arises when more than one Black Belt is assigned to the same task. However, you have identified twenty distinct tasks so you should be able to use two Black Belts provided you keep them involved on separate tasks. They certainly provide the greatest average project savings.

Table 1 provides you with a number of criteria, namely:

- Education.
- Years of experience.
- Six Sigma ranking.
- Six Sigma experience.
- Number of Six Sigma projects.
- Average project savings.
- Hourly rate, and
- Project availability.

No specific budget has been assigned to your project so the hourly rate of individual would not appear to be a major criterion. Nor, from the description of the project, does education background appear critical. You may decide that availability is a critical factor along with Six Sigma experience, ranking, and average project savings (i.e., the following criteria):

- Project availability.
- Six Sigma experience.
- Six Sigma ranking.
- Average project savings.

Question 5: From the available resource pool, who would you select to be on your project team? Why?

Student answers will depend on (a) whether or not they decide to utilize both Black Belts on the project and (b) the criteria they use to select from the available Green Belts.

If, for example, they decide to select one Black Belt and three Green Belts) then they need to determine whether (according to their selected criteria) Nick Rogers or Peggy Moss is the better choice. Likewise, they will need to choose three of the Green Belts from the ten member pool.

Having made their initial selection, students will then need to utilize the estimated resource proficiency data given in Table 2. The range of proficiencies is quite wide (from a high of 98 to a low as 61) and thus students may wish to review their choices against the data for each task with the goal of maximizing the overall proficiency.