PROJECT MANAGEMENT

A SYSTEMS APPROACH
TO PLANNING, SCHEDULING,
AND CONTROLLING

HAROLD KERZNER, PH.D.

Dr. Kerzner's 16 Points to Project Management Maturity

1. Adopt a project management methodology and use it consistently.

2. Implement a philosophy that drives the company toward project management maturity and communicate it to everyone.

3. Commit to developing effective plans at the beginning of each project.

4. Minimize scope changes by committing to realistic objectives.

5. Recognize that cost and schedule management are inseparable.

6. Select the right person as the project manager.

7. Provide executives with project sponsor information, not project management information.

8. Strengthen involvement and support of line management.

9. Focus on deliverables rather than resources.

10. Cultivate effective communication, cooperation, and trust to achieve rapid project management maturity.

11. Share recognition for project success with the entire project team and line management.

12. Eliminate nonproductive meetings.

13. Focus on identifying and solving problems early, quickly, and cost effectively.

14. Measure progress periodically.

15. Use project management software as a tool—not as a substitute for effective planning or interpersonal skills.

16. Institute an all-employee training program with periodic updates based upon documented lessons learned.

23

The Project Office

23.0 INTRODUCTION

PMBOK® Guide, 4th Edition
1.4.4 PMO

Today, companies are managing their business by projects. The result has been a vast amount of project management information surfacing from all areas of the company. This information focuses on best practices in the project management, the usefulness of an enterprise project management methodology, the benefits of project management, and how project management is improving the profitability of the company. As companies begin to recognize the favorable effect that project management has on performance, all of this project management knowledge is treated as intellectual property. Emphasis is now placed upon achieving professionalism in project management using the project office (PO) concept, where the project management office (PMO) becomes the guardian for the project management intellectual property. The concept of a PO or PMO could very well be the most important project management activity in this decade.

23.1 PRESENT-DAY PROJECT OFFICE

The 1990s began with a recession that took a heavy toll on white-collar ranks. Management's desire for efficiency and effectiveness led them to take a hard look at non-traditional management techniques such as project management. Project management began to expand to non–project-driven industries. The benefits of using project management, which were once seen as applicable only to the aerospace, defense, and heavy construction industries, were now recognized as being applicable for other industries.

By the late 1990s, as more of the benefits of project management became apparent, management understood that there might be a significant, favorable impact on the corporate bottom line. This led management to two important conclusions:

- Project management had to be integrated and compatible with the corporate reward systems for sustained project management growth.
- Corporate recognition of project management as a profession was essential in order to maximize performance.

The recognition of project management professionalism led companies to accept PMI's Certification Program as the standard and to recognize the importance of the PO concept. Consideration was being given for all critical activities related to project management to be placed under the supervision of the PO. This included such topics as:

- Standardization in estimating
- Standardization in planning
- Standardization in scheduling
- Standardization in control
- Standardization in reporting
- Clarification of project management roles and responsibilities
- Preparation of job descriptions for project managers
- Preparation of archive data on lessons learned
- Continuous project management benchmarking
- Developing project management templates
- Developing a project management methodology
- Recommending and implementing changes and improvements to the existing project management methodology
- Identifying project management standards
- Identifying best practices in project management
- Performing strategic planning for project management
- Establishing a project management problem-solving hotline
- Coordinating and/or conducting project management training programs
- Transferring knowledge through coaching and mentorship
- Developing a corporate resource capacity/utilization plan
- Assessing risks in projects
- Planning for disaster recovery in projects

- Performing or participating in the portfolio management of projects
- Acting as the guardian for project management intellectual property

With these changes taking place, organizations began changing the name of the PO to the Center of Excellence (COE) in project management. The COE was mainly responsible for providing information to stakeholders rather than actually executing projects or making midcourse corrections to a plan.

23.2 IMPLEMENTATION RISKS

Each activity assigned to the PO brought with it both advantages and disadvantages. The majority of the disadvantages were attributed to the increased levels of resistance to the new responsibilities given to the PO. For simplicity sake, the resistance levels can be classified as low risk, moderate risk, and high risk according to the following definitions:

- *Low Risk:* Easily accepted by the organization with very little shift in the balance of power and authority. Virtually no impact on the corporate culture.
- *Moderate Risk:* Some resistance by the corporate culture and possibly a shift in the balance of power and authority. Resistance levels can be overcome in the near term and with minimal effort.
- *High Risk:* Heavy pockets of resistance exist and a definite shift in some power and authority relationships. Strong executive leadership may be necessary to overcome the resistance.

Not every PO has the same responsibilities. Likewise, the same responsibilities implemented in two POs can have differing degrees of the best interest of the organization.

Evaluating potential implementation risks is critical. It may be easier to gain support for the establishment of a PO by implementing low-risk activities first. The low-risk activities are operational activities to support project management efforts in the near term whereas the high-risk activities are more in line with strategic planning responsibilities and possibly the control of sensitive information. For example, low-risk activities include mentorship, developing standards, and project management training. High-risk activities include capacity planning, benchmarking, and dissemination of information.

Senior managers were now recognizing that project management and the PO had become invaluable assets for senior management as well as for the working levels.

During the past ten years, the benefits for the executive levels of management of using a PO have become apparent. They include:

- Standardization of operations
- Company rather than silo decision-making
- Better capacity planning (i.e., resource allocations)

- Quicker access to higher-quality information
- Elimination or reduction of company silos
- More efficient and effective operations
- Less need for restructuring
- Fewer meetings which rob executives of valuable time
- More realistic prioritization of work
- Development of future general managers

All of the above benefits are either directly or indirectly related to the project management intellectual property. To maintain the project management intellectual property, the PO must maintain the vehicles for capturing the data and then disseminate the data to the various stakeholders. These vehicles include the company project management intranet, project web sites, project databases, and project management information systems. Since much of this information is necessary for both project management and corporate strategic planning, there must exist strategic planning for the PO.

As we entered the twenty-first century, the PO became commonplace in the corporate hierarchy. Although the majority of activities assigned to the PO had not changed, there was now a new mission for the PO: supporting the entire corporation.

The PO was now servicing the corporation, especially the strategic planning activities, rather than focusing on a specific customer. The PO was transformed into a corporate center for control of the project management intellectual property. This was a necessity as the magnitude of project management information grew almost exponentially throughout the organization.

23.3 TYPES OF PROJECT OFFICES

Three types of POs are commonly used in companies:

- *Functional PO:* This type of PO is utilized in one functional area or division of an organization, such as information systems. The major responsibility of this type of PO is to manage a critical resource pool, that is, resource management. The PMO may or may not actually manage projects.
- *Customer Group PO:* This type of PO is for better customer management and customer communications. Common customers or projects are clustered together for better management and customer relations. Multiple customer group POs can exist at the same time and may end up functioning as a temporary organization. In effect, this acts like a company within a company. This type of PMO will have a permanent project manager assigned and managing projects.
- *Corporate (or Strategic) PO:* This type of PO services the entire company and focuses on corporate and strategic issues rather than functional issues. If this type of PMO does management projects, it is for cost reduction efforts.

Companies can champion more than one type of PO at the same time. For example, there can exist both a functional PO and a strategic/corporate PO that work together.

23.4 NETWORKING PROJECT MANAGEMENT OFFICES

Because of political infighting for control of the PMO, many companies have established multiple PMOs all of which are networked together by a "coordinating" PMO. Other companies that are multinational have created regional PMOs that are groupings of project management associates (project managers, team members, etc.) who perform project management duties within specific regional or industry-specific areas. In this case, the primary PMO responsibilities are:

- Promoting the enterprise project management methodology
- Promoting the use of standard project management tools
- Assuring standardization in project execution and delivery
- Maintaining a source of project management subject matter expertise
- Coordinating multinational project management knowledge

23.5 PROJECT MANAGEMENT INFORMATION SYSTEMS

Given the fact that the PO is now the guardian of the project management intellectual property, there must exist processes and tools for capturing this information. This information can be collected through four information systems, as shown in Figure 23–1. Each information system can be updated and managed through the company intranet.
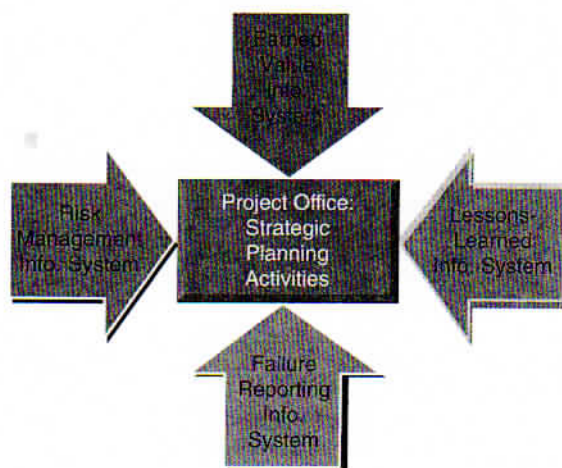

FIGURE 23-1. Project management information systems.

Earned Value Measurement Information System

The earned value measurement information system is common to almost all project managers. It provides sufficient information to answer two questions:

- Where is the project today?
- Where will the project end up?

This system either captures or calculates the planned and actual value of the work, the actual costs, cost and schedule variances (in hours or dollars and percent), the estimated cost at completion, the estimated time at completion, percent complete, and trends.

The earned value measurement information system is critical for a company that requires readily available information for rapid decision-making. It is easier to make small rather than large changes to a project plan. Therefore, variances from the performance management baseline must be identified quickly such that corrective action can be taken in small increments.

Risk Management Information System

The second information system provides data on risk management. The risk management information system (RMIS) stores and allows retrieval of risk-related data. It provides data for creating reports and serves as the repository for all current and historical information related to project risk. The information will include risk identification documentation (possibly by using templates), quantitative and qualitative risk assessment documents, contract deliverables if appropriate, and any other risk-related reports. The PMO will use the data from the RMIS to create reports for senior management and retrieve data for the day-to-day management of projects. By using risk management templates, each project will produce a set of standard reports for periodic reporting and have the ability to create ad hoc reports in response to special queries. This information is directly related to the failure reporting information system and the lessons-learned information system. The last two information systems are covered in more detail in the next two sections.

Performance Failure Information System

The PO may have the responsibility for maintaining the performance failure information system (PFIS). The failure could be a complete project failure or simply the failure of certain tests within the project. The PFIS must identify the cause(s) of the failure and possibly recommendations for the removal of the cause(s). The cause(s) could be identified as coming from problems entirely internal to the organization or from coordinated interactions with subcontractors.

It is the PO's responsibility to develop standards for maintaining the PFIS rather than for validating the failure. Validation is the responsibility of the team members performing the work. Failure reporting can lead to the discovery of additional and more serious problems. First, there may be resistance to report some failures for fear that it may reflect badly upon the personnel associated with the failure, such as the project sponsors. Second, each division of a large company may have its own procedures for recording failures and may be reluctant to make the failure visible in a corporate-wide database. Third, there could exist many different definitions of what is or is not a failure. Fourth, the PO may be at the mercy of others to provide accurate, timely, and complete information.

The failure report must identify the item that failed, symptoms, conditions at the time of the failure, and any other pertinent evidence necessary for corrective action to take place. Failure analysis, which is the systematic analysis of the consequences of the failure on the project, cannot be completed until the causes of the failure have been completely identified. The PO may simply function as the records keeper to standardize a single company-wide format and database for reporting the results of each project. This could be part of the lessons-learned review at the end of each project.

Consider the following example: An aerospace company had two divisions that often competed with one another through competitive bidding on government contracts. Each conducted its own R&D activities and very rarely exchanged data. One of the divisions spent six months working on an R&D project that was finally terminated and labeled as a failure. Shortly thereafter, it was learned that the sister division had worked on exactly the same project a year ago and achieved the same unproductive results. Failure information had not been exchanged, resulting in the waste of critical resources.

Everyone recognizes the necessity for a corporate-wide information system for storing failure data. But there always exists the risk that some will view this as a loss of power. Others may resist for fear that their name will be identified along with the failure. The overall risk with giving this responsibility to the project office is low to moderate.

Lessons-Learned (Postmortem Analysis) Information System Some companies work on a vast number of projects each year, and each of these projects provides valuable information for improving standards, estimating for future bidding, and the way business is conducted. All of this information is intellectual property and must be captured for future use. Lessons-learned reviews are one way to obtain this information.

If intellectual property from projects is to be retained in a centralized location, then the PO must develop expertise in how to conduct a postmortem analysis meeting. At that meeting, four critical questions must be addressed:

- What did we do right?
- What did we do wrong?
- What future recommendations can be made?
- How, when, and to whom should the information be disseminated?

23.6 DISSEMINATION OF INFORMATION

A problem facing most organizations is how to make sure that critical information, such as KPIs (key performance indicators) and CSFs (critical success factors), are known throughout the organization. Intranet lessons-learned databases would be one way to share information. However, a better way might be for the PO to take the lead in preparing lessons-learned case studies at the end of each project. The case studies could then be used in future training programs throughout the organization and be intranet-based.

As an example, a company completed a project quite successfully, and the project team debriefed senior management at the end of the project. The company had made significant breakthroughs in various manufacturing processes used for the project, and senior management wanted to make sure that this new knowledge would be available to all other divisions.

The decision was made to dissolve the team and reassign the people to various divisions throughout the organization. After six months had passed, it became evident that very little knowledge had been passed on to the other divisions. The team was then reassembled and asked to write a lessons-learned case study to be used during project management training programs.

Although this approach worked well, there also exist detrimental consequences that make this approach difficult to implement. Another company had adopted the concept of having to prepare lessons-learned case studies. Although the end result of one of the projects was a success, several costly mistakes were made during the execution of the project due to a lack of knowledge of risk management and poor decision-making. Believing that lessons-learned case studies should include mistakes as well as successes, the PO team preparing the case study included all information.

Despite attempts to disguise the names of the workers that made the critical mistakes, everyone in the organization knew who worked on the project and was able to discover who the employees were. Several of the workers involved in the project filed a grievance with senior management over the disclosure of this information, and the case studies were then removed from training programs. It takes a strong organizational culture to learn from mistakes without retribution to the employees. The risk here may be moderate to high for the PO to administer this activity.

23.7 MENTORING

Project management mentoring is a critical PO activity. Most people seem to agree that the best way to train someone in project management is with on-the-job training. One such way would be for inexperienced project managers to work directly under the guidance of an experienced project manager, especially on large projects. This approach may become costly if the organization does not have a stream of large projects.

Perhaps the better choice would be for the PO to assume a mentoring role whereby inexperienced project managers can seek advice and guidance from the more experienced project managers who report either "solid" or "dotted" to the PO. This approach has three major benefits. First, the line manager to whom the project manager reports administratively may not have the necessary project management knowledge or experience capable of assisting the worker in times of trouble. Second, the project manager may not wish to discuss certain problems with his or her superior for fear of retribution. Third, given the fact the PO may have the responsibility for maintaining lessons-learned files, the project mentoring program could use these files and provide the inexperienced project manager with early warning indicators that potential problems could occur.

The mentoring program could be done on a full-time basis or on an as-needed basis, which is the preferred approach. Full-time mentoring may seem like a good idea, but it includes the risk that the mentor will end up managing the project. The overall risk for PO mentoring is low.

23.8 DEVELOPMENT OF STANDARDS AND TEMPLATES

A critical component of any PO is the development of project management standards. Standards foster teamwork by creating a common language. However, developing excessive standards in the form of policies and procedures may be a mistake because it may not be possible to create policies and procedures that cover every possible situation on every possible project. In addition, the time, money, and people required to develop rigid policy and procedure standards would make PO implementation unlikely because of head-count requirements.

Forms and checklists can be prepared in a template format such that the information can be used on a multitude of projects. Templates should be custom-designed for a specific organization rather than copied from another organization that may not have similar types of projects or a similar culture. Reusable templates should be prepared *after* the organization has completed several projects, whether successfully or unsuccessfully, and where lessons-learned information can be used for the development and enhancement of the templates.

There is a danger in providing templates as a replacement for the more formalized standards. First, because templates serve as a guide for a general audience, it may not satisfy the needs of any particular program. Second, there is the risk that some perspective users of the templates, especially inexperienced project managers, may simply adopt the templates "as required, as written" despite the fact that they do not fit his or her program.

The reason for providing templates is *not* to tell the team how to do their job, but to give the project manager and his or her staff a starting point for their own project initiation, planning, execution, control, and closure processes. Templates should stimulate proactive thinking about what has to be done and possibly some ideas on how to do it. Templates and standards often contain significantly more information than most project managers need. However, the templates and standards should be viewed as the key to keeping things simple and the project managers should be able to tailor the templates and standards to suit the needs of the project by focusing on the key critical areas.

Templates and standards should be updated as necessary. Since the PO is most likely responsible for maintaining lessons-learned files and project postmortem analysis, it is only fitting that the PO evaluate these data to seek out key performance indicators which could dictate template enhancements. Standards and templates can be regarded as a low-risk PO activity.

23.9 PROJECT MANAGEMENT BENCHMARKING

Perhaps the most interesting and most difficult activity assigned to a PO is benchmarking. Just like mentoring, benchmarking requires the use of experienced project managers. The assigned individuals must know what to look for and what questions to ask, have the ability to recognize a good fit with the company and how to evaluate the data, and what recommendations to make.

Benchmarking is directly related to strategic planning for project management and can have a pronounced effect on the corporate bottom line based on how quickly the changes are implemented. In recent years, companies have discovered that best practices can be

benchmarked against organizations not necessarily in your line of business. For example, an aerospace division of a large firm had been using project management for over 30 years. During the early 1990s, the firm had been performing benchmarking studies but *only* against other aerospace firms. Complacency had set in, with the firm believing that it was in equal standing with is competitors in the aerospace field. In the late 1990s, the firm began benchmarking against firms outside of its industry, specifically telecommunications, computers, electronics, and entertainment. Most of these firms had been using project management for less than 5 years and, in that time, had achieved project management performance that exceeded the aerospace firm. Now, the aerospace firm benchmarks against all industries.

Project office networking for benchmarking purposes could very well be in the near future for most firms. Project office networking could span industries and continents. In addition, it may become commonplace even for competitors to share project management knowledge. However, at present, it appears that the majority of project management benchmarking is being performed by organizations whose function is entirely benchmarking. These organizations charge a fee for their services and conduct symposiums for their membership whereby project management best practices data are shared. In addition, they offer database services against which you can compare your organization:

- Other organizations in your industry
- Other organizations in different industry sectors
- Other employee responses within your company
- Other organizations by company size
- Other organizations by project size

Some organizations have a strong resistance to benchmarking. The arguments against benchmarking include:

- It doesn't apply to our company or industry.
- It wasn't invented here.
- We're doing fine! We don't need it.
- Let's leave well enough alone.
- Why fix something that isn't broken?

Because of these concerns, benchmarking may be a high-risk activity because of the fear of what will be found and the recommended changes.

23.10 BUSINESS CASE DEVELOPMENT

One of the best ways for a PO to support the corporate strategic planning function is by becoming expert in business case development. More specifically, this includes expertise in feasibility studies and cost-benefit analysis. In the Scope Management section of the PMBOK® Guide, one of the outputs of the Scope Initiation Process is the identification/appointment of a project manager. This is accomplished after the business

case is developed. There are valid arguments for assigning the project manager after the business case is developed:

- The project manager may not be able to contribute to the business case development.
- The project might not be approved and/or funded, and it would be an added cost to have the project manager on board early.
- The project might not be defined well enough to determine at an early stage the best person to be assigned as the project manager.

While these arguments seem to have merit, there is a more serious issue in that the project manager ultimately assigned may not have sufficient knowledge about the assumptions, constraints, and alternatives considered during the business case development. This could lead to a less than optimal project plan. It is wishful thinking to believe that the project charter, which may have been prepared by someone completely separated from the business case development efforts, contains all of the necessary assumptions, alternatives, and constraints.

One of the axioms of project management is that the earlier the project manager is assigned, the better the plan and the greater the commitment to the project. Companies argue that the project manager's contribution is limited during business case development. The reason for this belief is because the project managers have never been trained in how to perform feasibility studies and cost-benefit analysis. These courses are virtually nonexistent in the seminar marketplace as a publicly offered course, but some companies have custom-designed courses specifically for their company.

Business case development often results in a highly optimistic approach with little regard for the schedule and/or the budget. Pressure is then placed upon the project manager to accept arguments and assumptions made during business case development. If the proj-ect fails to meet business case expectations, then the blame is placed upon the project manager.

The PO must develop expertise in feasibility studies, cost-benefit analysis, and business case development. This expertise lends itself quite readily to templates, forms, and checklists. The PO can then become a viable support arm to the sales force in helping them make more realistic promises to the customers and possibly assist in generating additional sales. In the future, the PO might very well become the company experts in feasibility studies and cost-benefit analyses and may eventually conduct customized training for the organization on these subjects. Marketing and sales personnel who traditionally perform these activities may view this as a high risk.

23.11 CUSTOMIZED TRAINING (RELATED TO PROJECT MANAGEMENT)

For years, the training branch of the human resources group had the responsibility of working with trainers and consultants in the design of customized project management training programs. While many of these programs were highly successful, there were many that

were viewed as failures. One division of a large company recognized the need for training in project management. The training department went out for competitive bidding and selected a trainer. The training department then added in its own agendas after filtering all of the information concerning the goals and deliverables sought by the division requesting the training. The trainer never communicated directly with the organization requesting the training and simply designed the course around the information presented by the training department. The training program was viewed as a failure and the consultant/trainer was never invited back. Postmortem analysis indicated the following conclusions:

- The training branch (and the requesting organization) never recognized the need to have the trainer meet directly with the requesting organization.
- The training group received input from senior management, unknown to the requesting organization, as to what information they wished to see covered, and the resulting course satisfied nobody's expectation.
- The trainer requested that certain additional information be covered while other information was considered inappropriate and should be deleted. The request fell upon deaf ears.
- The training department informed the trainer that it wanted only lecture, no case studies, and minimal exercises. This was the way it was done in other courses. The participant evaluations complained about lack of exercises and case studies.

While the training group believed that their actions were in the company's best interest, the results were devastating. The trainer was also at fault for allowing this situation to exist.

Successful project management implementation has a positive effect on corporate profitability. Given that this is true, why allow nonexperts to design project management coursework? Even line managers who believe that their organization requires project management knowledge may not know what to stress and what not to stress from the PMBOK® Guide.

The PO has the expertise in designing project management course content. The PO maintains intellectual property on lessons-learned files and project postmortem analysis, giving the PO valuable insight on how to obtain the best return on investment on training dollars. This intellectual property could also be invaluable in assisting line managers in designing courses specific to their organization. This activity is a low risk for the PO.

23.12 MANAGING STAKEHOLDERS

All companies have stakeholders. Apprehension may exist in the minds of some individuals that the PO will become the ultimate project sponsor responsible for all stakeholders. While this may happen in the future, it is highly unlikely that it will occur in the near term.

The PO focuses its attention primarily on internal (organizational) stakeholders. It is not the intent of a PO to replace executive sponsorship. As project management matures within an organization, it is possible that not all projects will require executive sponsorship. In such situations, the PO (and perhaps middle management) may be given the added responsibility of some sponsorship activities, most likely for internal projects.

The PO is a good "starting point" for building and maintaining alliances with key stakeholders. However, the PO's activities are designed to benefit the entire company, and giving the PO sponsorship responsibility may create a conflict of interest for PO personnel. Partnerships with key stakeholders must be built and nurtured, and that requires time. Stakeholder management may rob the PO personnel of valuable time needed for other activities. The overall risk for this activity is low.

23.13 CONTINUOUS IMPROVEMENT

Given the fact that the PO is a repository of the project management intellectual property, the PO may be in the best position to identify continuous improvement opportunities. The PO should not have unilateral authority for implementing the changes, but rather should have the ability to recommend changes. Some organizations maintain a strategic policy board or executive steering committee that, as one of its functions, evaluates PO continuous improvement recommendations.

23.14 CAPACITY PLANNING

Of all of the activities assigned to a PO, the most important activity in the eyes of senior management could very well be capacity planning. For executives to fulfill their responsibility as the architects of the corporate strategic plan, they must know how much additional work the organization can take on as well as, when and where without excessively burdening the existing labor pool. The PO must work closely with senior management on all activities related to portfolio management and project selection. Strategic timing, which is the process of deciding which projects to work on and when, is a critical component of strategic planning.

Senior management could "surf" the company intranet on an as-needed basis to view the status of an individual project without requiring personal contact with the team. But to satisfy the requirements for strategic timing, all projects would need to be combined into a single database that identifies the following:

- Resources committed per time period per functional area
- Total resource pool per functional area
- Available resources per time period per functional area

There may be some argument whether the control of this database should fall under the administration of the PO. The author believes that this should be a PO responsibility because:

- The data would be needed by the PO to support strategic planning efforts and project portfolio management.
- The data would be needed by the PO to determine realistic timing and costs to support competitive bidding efforts.

- The PO may be delegated the responsibility to determine resource skills required to undertake additional work.
- The data will be needed by the PO for upgrades and enhancements to this database and other impacted databases.
- The data may be necessary to perform feasibility studies and cost-benefit analysis.

This activity is a high-risk effort for the PO because line managers may see this as turf infringement.

23.15 RISKS OF USING A PROJECT OFFICE

Risks and rewards go hand in hand. The benefits of a PO can be negated if the risks of maintaining a PO are not effectively managed. Most risks do not appear during the creation of the PO, but more do so well after implementation. These risks include:

- *Headcount:* Once the organization begins recognizing the benefits of using a PO, there is a natural tendency to increase headcount in the PO with the false belief that additional benefits will be forthcoming. While this belief may be valid in some circumstances, the most common result is diminishing returns. As more of the organization becomes knowledgeable in project management, the headcount in the PO should decrease.
- *Burnout:* Employee burnout is always a risk. Using rotational or part-time assignments can minimize the risk. It is not uncommon for people working in a project office to still report "solid" to their line manager and "dotted" to the project office.
- *Excessive Paperwork:* Excessive paperwork costs millions of dollars to prepare and can waste precious time. Project activities work much better when using forms, guidelines, and checklists rather than the more rigid policies and procedures. To do this effectively requires a culture based upon trust, teamwork, cooperation, and effective communications.
- *Organizational Restructuring:* Information is power. Given the fact that the PO performs more work laterally than vertically, there can be power struggles for control of the PO, especially the project managers. Project management and a PO can work quite well within any organizational structure that is based upon trust, teamwork, cooperation, and effective communications.
- *Trying to Service Everyone in the Organization:* The company must establish some criteria for when the PO should be involved. The PO does not necessarily monitor all projects. The most common threshold limits for when to involve the PO include:
  - Dollar value of the project
  - Time duration of the project
  - Amount and complexity of cross-functionality
  - Risks to the company
  - Criticality of the project (i.e., cost reductions)

A critical question facing many executives is "How do we as executives measure the return-on-investment as a result of implementing a project office?" The actual measurement can be described in both qualitative and quantitative terms. Qualitatively, the executives can look at the number of conflicts coming up to the executive levels for resolution. With an effective PO acting as a filter, fewer conflicts should go up to the executive levels. Quantitatively, the executives can look at the following:

- *Progress Reviews:* Without a PO, there may exist multiple scheduling formats, perhaps even a different format for each project. With a PO and standardization, the reviews are quicker and more meaningful.
- *Decision-Making:* Without a PO, decisions are often delayed and emphasis is placed upon action items rather than meaningful decisions. With a PO, meaningful decisions are possible.
- *Wasted Meetings:* Without a PO, executives can spend a great deal of time attending too many and very costly meetings. With a PO and more effective information, the executives can spend less time in meetings and more time dealing with strategic issues rather than operational issues.
- *Quantity of Information:* Without a PO, the executives can end up with too little or too much project information. This may inhibit effective decision-making. With a PO and standardization, executives find it easier to make timely decisions. The prime responsibility of senior management is strategic planning and deployment and worrying about the future of the organization. The prime responsibility of middle-level and lower-level management is to worry about operational issues. The responsibility of the PO is to act as a bridge between all these levels and make it easier for all levels to accomplish their goals and objectives.