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# Project Management Roles & Responsibilities SECOND EDITION



J. Kent Crawford Jeannette Cabanis-Brewin Deborah Bigelow Crawford James S. Pennypacker

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## J. Kent Crawford

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Center for Business Practices

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## **Project People** The Solution That Works

by J. Kent Crawford and Jeannette Cabanis-Brewin

Let's be frank: Better project management is carried out by better project personnel. Period. Most of the reasons technology projects fail are management-related rather than technical, yet many enterprises have no processes in place to ensure that project managers are appropriately trained and evaluated. Competent and experienced project managers are not accidental: they are grown in an environment that trains, mentors, and rewards them based on performance on projects. Thus, best practices for preventing project failure often include changes in the management of project personnel.

Benefits of having a good project manager include reduced project expense, higher morale, and quicker time to market. The skills most executives cite as desirable in a project manager are: technology and business knowledge, negotiation, good communications (including writing ability), organization; diplomacy and time management. Understanding the business is more important than understanding technology. They must be able to define requirements, estimate resources and schedule their delivery, budget and manage costs, motivate teams, resolve conflicts, negotiate external resources, manage contracts, assess and reduce risks, and adhere to a standard methodology and quality processes. Obviously, there is a growing body of knowledge about who makes the best project manager, how to develop their skills, and what kinds of rewards motivate them. After years of development, that body of knowledge finally has an organizational home in the enterprise-level Project Office.

And, of course, good project managers aren't born that way. They grow into the role by working in other roles on project teams. A Project Office is good news for project managers and team members, as it focuses attention on the training, rewards, and career path of the project professional. But it's also good news for the bottom line, since it translates the improved capabilities of individuals into better project management ... better portfolio management ... and strategies that are executed.

At the same time, it resolves many of the issues of motivation and retention that bedevil human resources managers. For a decade or more, writers in the HR and organizational development fields have been telling us that today's workers are changing: becoming more achievement oriented, less motivated by the "hygiene factors" of money, benefits and safety, and more driven by the need for what Abraham Maslow called "self-actualizing" work. Project work, because of its time-limited and cross-disciplinary nature, offers people "zest" — a sense of urgency, continuous learning, contacts with a wide variety of colleagues within and without their specialty areas, and repeated new challenges. On the organizational level, it makes possible the "flattening" and streamlining of management, reducing bureaucracy, facilitating the development of intellectual capital, and helping the organization to stay focused on strategic goals.

## The Project- and People-Centered Organization

If your company has a system in place for educating, mentoring, and evaluating project personnel, you are in the minority. Many companies do not even know how many people they have who are capable of managing projects. This has led to the unfortunate phenomenon of the "accidental project manager." We would not think of dumping major accounting responsibilities on whoever happened to be available, even though they had no background in accounting. Yet this is routinely done even with major projects, even though the skill set and knowledge you need to effectively deploy a project management initiative rivals the knowledge set of an MBA in terms of complexity and integration.

Yet the project-centered enterprise, in which people are treated as though project performance really mattered to organizational performance, isn't a theory. In fact, it's the logical outcome of the application of project management to business problems. In the industries where the practice of project management has long been accepted as the way to get work done, such enterprises already exist. A study of organizations with strong project management capability, and the related ability to leverage projects for competitive success, found that these companies display two people-centered best practices:

- **1. Project-centered Role Design**. Project managers are given the resources and authority to match their project responsibility and held accountable by their superiors for the extent to which they achieve targets. But, at the same time, a "project director role" is created and positioned as the immediate superior of a number of project managers. Meanwhile, career paths lead individuals through project teamwork into project leadership. Organizational roles are specifically defined around project work.
- **2. Valuing Project Managers**. Successful project-centered companies treat their project managers as an asset, retaining them in bad economic times, and being tolerant of mistakes. A sense that the company values and trusts the project manager results in more accurate estimating and reporting, and in the preservation of organizational knowledge.

Why all this focus on roles and responsibilities? From within the ranks of high-performance project managers will come the next generation of project executives: Project Office Directors, Portfolio Managers, CIOs ... perhaps even CEOs. Experienced project managers with the aptitude for business bring a valuable project-focused intelligence to corporate leadership. But these leaders must be developed, from team members into project managers, from managers into leaders. "At the heart of organizational project management capability is the company's ability to empower and support project managers," says Oxford University's Christopher Sauer. "Individuals do not innovate and advance organizational learning just because to do so improves organizational capability; they do so because human resource policies and the organization's values encourage them to feel they have a personal stake in helping the organization perform better in the long term."<sup>1</sup>

Sauer, in his study of successful project-based organizations, points out that organizational capability is built from the ground up: by making it possible for the people who do projects to do their best. A first step in this building process is defining what "best" means, and that means implementing a comprehensive competency assessment program. The results of this type of individual assessment helps organizations begin to harness the power of their project personnel's skills and abilities. It also allows the organization to focus training where it's most needed. Matching project manager and team competencies with the types of projects they are prepared to handle will result in more effective project execution, and thus better organizational performance.

This isn't a small change. In order to optimize the benefits of project management, organizations need to completely change their approach to hiring and training project personnel. They also need to more aggressively develop the knowledge, skills, and competencies of their project management staff. To accomplish this, the organization must focus on both developing the individual and on linking organizational roles to individual skills. Once a company begins viewing role description, recruitment, rewards, and professional development through the lens of competence on projects, many time-honored structures and patterns existing in our human resource management will change. Behaviors in the workplace are the building blocks of competence, but they are also an expression of organizational culture. It's no exaggeration to say that designing organizational human resource processes around competence on projects is a paradigm shift. Yet think of the rewards. The business needs addressed by competency models include clarifying work expectations for both team members and managers; hiring the best people and retaining them, and maximizing productivity.<sup>2</sup>

This book gathers together, in brief, some of the research done by Project Management Solutions and the Center for Business Practices from 2000–2004: research into project management role descriptions, project manager competency, and other related topics. If you are ready to place the emphasis in project management where it belongs – on the people who carry out projects – this book provides a springboard.

<sup>1</sup> Christopher Sauer, LI Liu, Kim Johnston, Where project managers are kings, *Project Management Journal*, December 2001.

<sup>2</sup> Antoinette D. Lucia and Richard Lelpsinger, *The Art and Science of Competency Models*, Jossey-Bass, 1999.

# Project Office Roles & Responsibilities

J. Kent Crawford and Jeannette Cabanis-Brewin

The following position descriptions cover the gamut of project-management-related jobs in an organization that is committed to managing by projects, from executive staff members on the enterprise and organizational levels, to specialty staff. The positions in your own company probably represent a subset of those described here, since few companies have fully implemented and committed to enterprise project management on an enterprise scale of this magnitude. Lest you think these are unrealistic organizational positions, we note numerous organizations have dedicated resources much like our descriptions. Specifically, a fully mature Enterprise Project Office in fields such as construction, federal governments, and certain industry groups represent examples of such matured, projectized organizations. We offer these as downstream goals that may spark discussion and planning for the future.

While in the first edition of this book, we offered these roles as "downstream goals" to spark discussion and aid in planning for the future, it is worth noting that, as the second edition goes to press, recent research by the Center for Business Practices shows that many organizations now have these roles in place.

Respondents to the survey *The State of the PMO 2007-2008* indicate that mature, enterprise-level PMOs not only have project managers reporting within the PMO, but they have a variety of supporting roles as well. Organizations identified by the study as high performers (as measured by a number of project and organiza-

Excerpted from: *Optimizing Human Capital with a Strategic Project Office,* Auerbach Publications/Center for Business Practices, 2006.

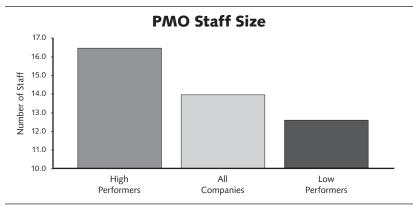


Figure 1. High-performing companies have more roles within the PMO, with more personnel performing those roles. From *The State of the PMO 2007–2008*, Center for Business Practices.

tional metrics) have larger PMOs (30% more staff) and rely on more specialized roles (i.e., they have more staff performing those roles), including mentors (a 136% increase over low-performing organizations), team leads (467% increase), planners (147% increase), controllers (116% increase) and relationship managers (698% increase). And, the more mature the PMO, the more planners, schedulers, and controllers they employ: at Level 4 maturity (utilizing PM Solutions' Project Management Maturity Model), PMOs have 70% more of these positions than Level 3 maturity PMOs, as shown in Figure 1.<sup>1</sup>

On a more practical level, you may use these descriptions of the responsibilities, skills, and desired backgrounds for project personnel to craft a job description that's appropriate for your organization, or to rethink the ways in which you have assigned responsibilities to existing positions.

These snapshots of project management jobs are based on a broad review of the project management job marketplace, as represented by hundreds of job descriptions actually used in companies in a variety of industries around the world, plus ideal job descriptions crafted by project management experts. In addition, we have refined them by limiting the sometimes unwieldy job descriptions of Project Managers and their colleagues to combinations of duties and personal characteristics that we have learned from experience are workable. So in addition to "wish list," what follows is a "reality check." Add to the list any responsibilities that are important or unique in your organization or in your industry – while being careful not to create "monster" jobs.

Position descriptions have a dual purpose: They both describe the ideal candidate for the job (and can be used as a checklist when considering internal hires or seeking external candidates) *and* they assist the person fulfilling the role in keeping focused on the right areas, in knowing when to say no, and in understanding how their job fits into the larger picture of the organization. This information can also assist project participants in identifying their own personal professional development needs, in relation to the knowledge, skills and competencies required for their project role(s). Project Managers or Project Executives may use these position descriptions as checklists for the selection of new project personnel, or to help confirm a participant's commitment to their responsibilities.

Finally, we offer this list as a kind of template in order to solve one of the most pressing human resource problems facing project organizations today: the difficulty of communicating about the work that needs to be done due to a lack of consensus on the names, descriptions, or required backgrounds of jobs in project management. A little more commonality in the language surrounding staffing projects and Project Offices will help the discipline to match the right people to the right positions.

Each position description includes an overview or general description, a list of possible responsibilities and duties, a suggested set of skills and competencies, and suggested background experience and/or educational credentials.

Note: While we are working from the premise of an enterprise-level Strategic Project Office, readers who are staffing a divisional-level Project Office (such as one within IT) can still use these job descriptions, which are scalable to any type of PO. Readers who are creating or staffing a divisional PO should be able to "read between the lines" to scale the described enterprise-level functions back to the circumstances of their specific organization.

## **Chief Project Officer**

Other titles that may be descriptive of this role: Director of Project Management; Director of Programs and Strategy; Director of Enterprise Project Management; Director of Project Portfolio Management

#### Role Overview

Reports to a senior C-level executive, preferably the CEO. Provides leadership, direction, and oversight of all corporate programs and projects under development and execution. This role also provides executive oversight for all divisional projects and maintains responsibility for data integration and reporting for all projects and programs within the organization. Oversees development and management of the Strategic Project Office and plays a key facilitative role in project portfolio management. May include the role of Portfolio Manager. Responsibilities for the Chief Project Officer parallel that of a Chief Financial Officer as the office of the CPO provides corporate status, reporting, analysis of all programs/projects with analysis of corresponding impacts to budget, delivery timetables, and resources.

### Suggested Duties and Responsibilities

- Promotes the development and diffusion of project management culture throughout the enterprise.
- Maintains effective communication with senior management, making them aware of critical issues confronting corporate programs/ projects and of the action plans for addressing those issues.
- In conjunction with corporate leadership, develops and manages the enterprise project portfolio management process, integrates the corporate project decision-making with corporate strategy, and facilitates on-going enterprise program/project portfolio decision making.
- Identifies needed corporate process improvements and works with business partners to effectively drive change throughout the organization.

- Facilitates program/project reviews of critical/key enterprise programs and projects.
- Direction and oversight of all corporate systems for project planning, implementation and monitoring, insuring that all projects have clear goals, objectives and timelines with measurable milestones consistent with corporate strategy and goals.
- With the director of divisional project offices, organizes the project office structure to effectively achieve divisional and departmental project objectives.
- With the director of the divisional project offices, oversees major periodic divisional portfolio meetings, driving results and resolving key project and program issues.
- With the divisional Project Office Director, oversees preparation of key management communications such as project steering committee presentations, status reports, budget reports, etc.
- With the divisional Project Office Director, oversees relationships between project personnel and functional managers.
- With the Enterprise Project Office Director, oversees education and mentoring for staff and management regarding project management.
- Oversees and participates in the project portfolio management process, ensuring that the technical objectives of projects are integrated with commercial requirements.
- Oversees the integration of project processes with other functional areas such as manufacturing, marketing, and finance in order to ensure the success of corporate strategies, products and initiatives.
- Maintains an understanding of contemporary project management techniques and industry practices, as they impact corporate objectives.
- Ultimate responsibility for enterprise project problem/issue identification and resolution.

## Suggested Knowledge, Skills and Abilities

- Ability to analyze and synthesize information in a concise manner and to make recommendations on strategies to resolve policy and political issues.
- Demonstrated ability to use professional management and/or technical concepts to solve complex problems and oversee key projects in creative and effective ways is required.
- Strong knowledge of finance and accounting.
- Strong partnering skills.
- Ability to understand and deal with political issues in a highly matrixed environment.
- Excellent communication skills (oral and written).
- Strong organization skills and the ability to manage multiple priorities.
- Strong project management ability.
- Strong leadership ability.
- Strong negotiation skills.
- Skills to interact with clients and business partners effectively (especially if programs/projects are developed for external client use).
- Strong skills in conflict resolution and problem solving.
- Results orientation.
- Strong analytical and interpersonal skills.

Suggested Background, Experience and/or Education

- Extensive experience (10+ years) in the management of large, complex programs/projects.
- 7+ years of experience in the relevant industry area.
- PMP<sup>®</sup> or other project management certification or equivalent experience required.

- College degree in finance, accounting, subject related to the industry area, or a technical subject preferred; CPA or MBA is a plus; MS or PhD in a business specialty or industry-related subject may be useful.
- Product development and delivery experience.
- Experience with relevant enterprise project management and enterprise financial systems.

## **Project Portfolio Manager**

Other titles that may be descriptive of this role: Director of Strategic Project Management, a Director of Enterprise Project Management, Chief Project Officer

## Role Overview

The Project Portfolio Manager's responsibility is ideally enterprisewide. This role has become much more common as companies seek to align projects and strategies. This position manages the corporate or divisional project portfolio by managing the process for identifying, selecting, and prioritizing projects that support corporate business strategy. This is done using a facilitative process where the Portfolio Manager (or PO Director) facilitates decisions with the leadership team by providing data, inputs, analysis and facilitative assistance so the executives reach prioritization conclusions and ultimately "own" the organizational projects. This position reports to an upper-level executive; in a small company, it may report to the CEO. The responsibilities described below may also reside with a CPO or Director of Enterprise Project Management; on a divisional level, they may be rolled into the Project Office Director position.

## Suggested Duties and Responsibilities

• With a team of project stakeholders from all levels of the organization (C-level at the enterprise level; senior managers at the divisional level), responsible for developing formal criteria for identifying, evaluating, prioritizing, selecting and approving the set of projects that form the corporate (or division) project portfolio. (This process should be generally consistent throughout the organization, integrated at the CPO level. In other words, the CPO should form the corporate process, integrating corporate strategy, then corporate strategy should flow down to the divisional level; while portfolio decisions by the division management should first account for delivering projects against corporate strategies, then balance specific divisional strategies into the workload.)

- With an executive committee, administers and facilitates the portfolio management process, including oversight of documentation and periodic reviews.
- With senior executives from the finance function, works to establish a system for quantifying project benefits so that project approval decisions can be made objectively. (This should be developed within the office of the CPO then flowed down to the divisions who may chose to tailor the process to meet their specific needs.)
- Assist Project Office Director in identifying project interrelationships that will affect priority and resource allocation decisions.
- With functional managers and Project Managers, oversees the process for collecting the project data on which portfolio decisions are based.
- Monitors projects in the portfolio (such as milestones, schedule performance, resource constraints, etc.) and updates executives on progress in the portfolio.
- With functional and Project Managers, analyzes the impact to the existing portfolio of changes in existing projects, or the addition of new projects outside of the portfolio process cycle, and identifies strategies (resource allocation, project sequencing) for accomplishing all the desired projects.
- Oversees the distribution of project portfolio information to executive management, directors, and other key personnel.

• With the Project Office DIrector and Project Managers, works to translate portfolio decisions into appropriate planning and execution of projects.

## Suggested Knowledge, Skills and Abilities

- Strategic business knowledge; a long-term focus; ability to make recommendations regarding complex strategic decisions.
- High-level organization, communication, and facilitation skills; credibility with executive management.
- Willing to assume responsibility and ownership for making critical decisions or recommendations related to approving, rejecting, and discontinuing projects.
- Negotiation and conflict resolution skills; ability to create an open environment where conflicts as to project priorities and funding decisions can be aired and resolved in an objective manner.
- High-level understanding of technical concepts as related to the industry and products/services of the company.
- Ability to instill trust, motivate, and work with other people.
- Finance, accounting and budgeting knowledge.
- Ability to create and deliver executive-level summary reports and presentations.

Suggested Background, Experience and/or Education

- Extensive experience (10+ years) in the management of projects.
- PMP<sup>®</sup> or other project management certification or equivalent experience required.
- MBA or equivalent educational experiences and experience in business and finance.
- Experience and/or a related degree in the specific industry sector.

## Strategic Project Office Director

Other titles that may be descriptive of this role: Director, Project Management Office, Manager of PMO, Project Office Director

### Role Overview

The SPO Director is responsible for the overall project management function, providing leadership, coordination, and management to SPO activities. Reporting to a C-level director (e.g. Chief Project Officer, or, for a department-level project office, the CIO) Chief Financial Officer, Chief Operating Officer), the person who heads the SPO creates and maintains a uniform approach to project management and serves as change agent for continuous improvement through improved/enhanced methodologies. Either personally or through a "Manager of Project Managers," the SPO Director supports other Project Managers and leads the development and application of project management methodology and culture. He or she oversees enterprise project management strategy, training, communication, program/project control/ analysis/reporting, process development and tool development, and serves on the corporate committee for portfolio review. When no Chief Project Officer position exists, the position of Project Portfolio Manager may be combined with SPO Director and the SPO Director may serve on a corporate leadership team. Essentially, the SPO Director is a "relationship manager": one who serves as a conduit for communications and understanding between the project personnel who carry out corporate initiatives and the senior executives who make strategic decisions.

### Suggested Duties and Responsibilities

- Oversees implementation of processes and products to increase project management effectiveness.
- Interfaces with senior managers to provide strategic and tactical advice on program/project planning and execution.
- Appoints or approves the appointment of Project Managers.
- Facilitates approval (through Project Review Boards) for scope and objectives, schedule and resources, roles and responsibilities of all projects.

- Oversees development and deployment of enterprise project controls tools, methodologies, and systems.
- Coordinates recurrent enterprise program/project budgets and resource forecasts.
- Facilitates resource, budget, timing, and deliverables issues resolution for all enterprise programs and projects.
- Oversees coaching and mentoring of project team members in the use of project management tools and processes and develops training standards for project managers.
- With Methodologist, ensures enterprise consistency through the development and implementation of methodology.
- Oversees risk management process.
- Maintains a master status list of all enterprise projects and provides "dashboard" reports and analysis to senior leadership.
- Oversees the development of effective SPO program/project tools to aid in process standardization (project audits, reports, templates, knowledge management tools such as a "Lessons Learned" library, and intranet).
- With business development team, participates in business case and proposal development to ensure integration between the project planning effort and other functional areas, such as engineering, research and development, operations, marketing and sales.
- Oversees development of enterprise program/project business cases, plans, budgets, and resource requirements.
- Facilitates resolution of enterprise multi-project resource and integration conflicts.
- Accountable for SPO budget.

## Suggested Knowledge, Skills and Abilities

- Thorough understanding of budgeting, project management, and resource management.
- Thorough knowledge of company's industry area.

- Strong negotiation, facilitation and influencing skills.
- Strong analytical, interpersonal and verbal/written communication skills.
- Strong leadership skills.
- Customer and results-oriented.
- Capable of developing solutions to complex, integrated business problems.
- Extensive knowledge of project management tools and methodologies; extensive experience with using relevant project management and business management computer software.
- Ability to influence executive-level associates and bring issues to resolution.

Suggested Background, Experience and/or Education

- 7-10 years' project management experience in a business environment; including successful oversight of large, complex projects or programs; at least 5 years' experience in company's industry.
- Demonstrated success in management of other project managers or other experience on a management level within a project office.
- PMP<sup>®</sup> or other project management certification.
- College degree in a discipline such as Computer Science, Engineering, Business Administration or a discipline related to industry; an MBA or equivalent project management and business experience is desirable.
- Experience with roll-out of project management and process improvement in an organization, including implementation of standards and/or methodologies.
- Demonstrated ability to manage large, complex projects on time and within budget.
- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people.

## **Manager of Project Support**

Other titles that may be descriptive of this role: Project Controls Manager, Project Support Manager

## Role Overview

A second tier of management within a large corporate SPO might include this position, which provides line management oversight. This manager reports to the Enterprise SPO Director and manages the day-to-day project controls operations in the implementation of SPO objectives.

## Suggested Duties and Responsibilities

- Ensures adherence to enterprise policies and procedures and SPO methodologies, guidelines, and practices.
- Oversees maintenance of enterprise program/project controls tools, techniques, methodologies, processes, and procedures.
- Manages integration of enterprise project controls tools with corporate financial, procurement, quality, and reporting systems.
- Establish communication plans and roll out strategies for implementation and continuous improvement of processes, based on metrics and feedback from SPO members.
- Maintains the enterprise program/project portfolio information database.
- Coordinates development of the annual enterprise program/project budget.
- Integrates divisional project controls reporting for enterprise reporting and analysis.
- Ensures consistent application of an effective project management methodology and tools across the enterprise.
- Perform corporate dashboard reporting with regard to resources: resource leveling, utilization forecasts, and integrated program/ project analysis.

## Suggested Knowledge, Skills and Abilities

- Management skill as it relates to the administration of departmental goals and objectives.
- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people.
- Strong leadership, facilitation, negotiation, and mentoring and personnel management skills.
- Thorough knowledge of project management principles and practices.
- Strong knowledge in the use and application of project controls systems and tools.
- Understanding of the use and application of business information and reporting systems.
- Thorough knowledge of company's industry.
- Knowledge of the strategic and operational issues of the project or business unit.

Suggested Background, Experience and/or Education

- College degree in business or related discipline, plus 3-5 years experience in company's industry.
- 5 10 years of project management (or project controls, depending on the organization)\_experience in managing multiple, large, and complex divisional or enterprise programs/projects.
- PMP<sup>®</sup> or other project management certification.
- Experience in resource capacity planning and accounting processes.
- A previous project office role utilizing project management software.
- Previous experience integrating enterprise project controls software with business information and reporting systems.
- Methodology and/or process implementation background.

## **Manager of Project Managers**

Other titles that may be descriptive of this role: Manager of Enterprise Project Managers, Project Office Human Resource Manager, Enterprise Program Manager

## Role Overview

In large organizations, where multiple program/project managers are managing diverse enterprise projects, a Manager of Project Managers may be needed to oversee the assignment, development, and performance of initiative project managers. The Manager of Project Managers will be responsible for the "care and feeding" of this unique set of resources. Enterprise Program/Project Managers are highly experienced and successful in delivering large, very complex, programs/projects which may last several years. These projects may involve highly complex interrelationships within the organization but may also include relationships to entities outside of the enterprise; clients, partners, vendors, government agencies, regulatory agencies, and the citizenry. This manager reports to the Enterprise SPO Director and oversees the performance of enterprise program/ project managers.

## Suggested Duties and Responsibilities

- Ensures adherence to enterprise policies and procedures and SPO practices; provides SPO interface with corporate Human Resources function.
- With enterprise HR staff, participates in design and administration of systems for recruitment, rewards, retention, and professional development of SPO staff. Oversees these activities within the SPO.
- In coordination with enterprise HR staff, develops and maintains program/project manager career progression paths, performance measurement systems, and performance incentive/rewards systems.

- In coordination with enterprise HR staff, develops and maintains project manager competency measurement programs to ensure project managers are assigned programs/projects commensurate with their traits, skills, and knowledge.
- Enhances core project management disciplines by ensuring that project managers and project leads are enabled to consistently deliver projects on-time, within budget, and with high levels of customer satisfaction.
- Establish communication plans and roll out strategies for implementation and continuous improvement of processes, based on metrics and feedback from SPO members.
- Coordinates formal and informal program/project manager training.
- Appoints or approves the appointment of project managers.
- Ensures consistent application of an effective project management methodology across the SPO.
- Through program/project managers, oversees project activity ensuring critical tasks are identified and target dates are achieved. Participates in planning sessions as necessary to assist in determining project approach and overall time lines associated with project requirements. Ensures quality standards are met for projects overseen by the respective Project Review Boards.
- Ensures that client needs are communicated clearly to other project managers and staff. Ensures that client relations are maintained at the highest level through all phases of project planning and execution.
- Ensures that program/project managers adhere to project management methodology and Project Office procedure and that appropriate tracking, reporting and communication take place.
- Serves as a mentor/advisor on issues related to corporate politics, external politics, client relations, governmental regulation, project quality, project risk, issues resolution, conflict management, and safety.

## Suggested Knowledge, Skills and Abilities

- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people.
- Strong leadership, facilitation, negotiation, mentoring and personnel management skills.
- Thorough knowledge of project management principles and practices.
- Thorough knowledge of company's industry.
- A technical background sufficient to understand the technologies and technical issues involved with the project and industry, to be able to anticipate and identify technical obstacles, and to make accurate technology decisions.
- Knowledge of the strategic and operational issues of the project or business unit.
- Demonstrated ability in conflict resolution, issues and change management.
- Strong understanding of internal/external political environment with demonstrated success in managing diverse internal/external issues.
- Understanding of legal issues and dealing with their resolutions for the enterprise programs/projects.

Suggested Background, Experience and/or Education

- College degree in business or related discipline, plus 5-10 years experience in company's industry.
- 10-20 years of project management experience, with 3 years of experience managing project managers.
- Certification, education or experience in human resource management helpful.
- PMP<sup>®</sup> or other project management certification.

- Demonstrated success in the management of large, complex, highly interrelated programs/projects.
- Previous successful experience working with mid- and senior level executives.
- Demonstrated ability working with clients, vendors, and government regulators (if applicable).

## **Project Management Mentor**

#### **Role Overview**

A PM Mentor is a project management professional with extensive project and program experience who is capable of working with project managers and project teams to help them grow in the practice of the profession. Mentors are skilled at teaching and coaching project participants. They specialize in helping to put in place the processes, skills and support structure in place to effectively establish and manage projects. Typically, mentors provide consulting services to program managers, project managers, program/project teams and corporate managers. The Project Management Mentor is well versed in leading and managing program/project team members from diverse backgrounds, and within global and virtual settings. In program/project crisis the mentor can be called in to fill-in for an extended period of time for and unexpected absence of the senior project manager or program manager. Mentors play an important role in standardizing the practice of the agreed-upon methodology, in building a project management culture, and in spreading the project management "gospel" throughout the organization by troubleshooting projects in functional areas enterprise-wide. This role is for experienced and highly skilled senior project or program managers with superior or advanced interpersonal skills. Mentors report to the Manager of Project Managers and work closely with the Manager of Project Support to assist the entire SPO staff in professional development or to effectively deliver enterprise or divisional program/projects.

## Suggested Duties and Responsibilities

- Serve as a subject matter expert for project management processes and tools.
- Work closely with or supervise Methodologists in the development of project management methodology and tools.
- Offer consulting support to new and on-going initiatives.
- Work closely with Project Managers and Business Systems Analysts to ensure all projects are managed using corporate accepted tools, techniques and methodology processes.
- Serve as a senior advisor on project management issues enterprisewide.
- Able to provide vision and direction for strategic planning within the SPO and across the enterprise.
- Provide advise, counsel, and mentoring to program and project managers.
- Provides conflict resolution to troubled projects.

## Suggested Knowledge, Skills and Abilities

- Superior/advanced competency in project management processes.
- Full proficiency with project management tools.
- Excellent counseling, facilitation, conflict resolution, and interviewing skills.
- Able to provide visionary leadership to SPO staff.
- Skilled at internal/external consulting and relationship management.
- Well-versed in industry and in organizational politics.

Suggested Background, Experience and/or Education

• Extensive experience (10+ years) in the management of projects, including demonstrated ability to manage large, complex projects or programs on time and within budget.

- Extensive experience in relevant industry area and understanding of strategic issues that impact the company and project management.
- PMP<sup>®</sup> or other project management certification.
- College degree in finance, accounting, subject related to the industry area, or a technical subject preferred; advanced degree in a business specialty or project management may be useful.
- Experience with relevant enterprise project management and enterprise financial software.
- Demonstrated success in the mentoring or management of other project managers or other experience on a management level within a project office.
- Experience with roll-out of project management and process improvement in an organization, including implementation of standards and/or methodologies.
- Ability to express complex technical concepts effectively, both verbally and in writing, to diverse groups of people.

## **Program Manager**

### Role Overview

In large organizations with many project managers, project managers may be awarded "grades" based on their span of control. This position manages complex, strategic projects that span organizational boundaries, so Program Managers should have experience managing multiple high-risk projects, including projects involving external vendors and multiple business areas. This grade is a logical training ground for Manager of Project Managers, Manager of Project Support, Strategic Project Office Director, and CPO positions for the program manager with business acumen. When groups of related projects are organized into programs, this position may manage multiple project managers whose projects provide specific deliverables; all which must be collectively managed to provide the desired programmatic results.

## Suggested Duties and Responsibilities

- Manage and direct multiple medium to large-scale projects.
- Translate generalized customer business goals and objectives into concrete strategy and tactical plans.
- Work on complex problems where analysis of situation or data requires an in-depth evaluation of various factors to achieve best results.
- Exercise judgment within broadly defined policies and practices to develop corporate methods, techniques.
- Work effectively with internal and external clients, third party vendors, and senior management in accomplishing project objectives.
- Evaluate complex situations accurately and identifies viable solutions that create successful outcomes for the customer.
- Work closely with the Program Sponsor and Program Review Board to facilitate decisions necessary for program delivery.
- Oversee effective project oversight and reviews to effect program success.
- Develop and maintain "lessons-learned" inputs to the project repository for utilization on future programs initiated by the enterprise.
- Resolve political, resource, budgeting, change, and legal issues affecting the program.
- Serves as a mentor/advisor/decision-maker to project managers for the program for issues related to corporate politics, external politics, client relations, governmental regulation, project quality, project risk, and safety.
- Oversee development of proposals and requests for proposals associated with the program.
- Oversee vendor relations and procurement related to the program.
- Oversee execution and delivery of projects related to successful program execution.

## Suggested Knowledge, Skills and Abilities

- Understanding of the strategic and operational issues of the project or business unit.
- Ability to train, mentor, and develop project managers in project management methodologies and their application.
- Liaison and consultative skills; negotiating skills within a context of high political sensitivity and conflicting interests.
- Presentation and written communication skills, including proposal writing.
- Ability to advise on complex matters to non-specialists.
- Demonstrated ability in managing internal and external client expectations on program requirements and deliverables.
- Highly developed business acumen.
- Skilled at requirements analysis and management.
- Strong writing, mentoring, negotiation, communication, and meeting facilitation skills; ability to utilize a combination of formal authority and persuasion skill sets.
- Strong integration skills; ability to coordinate all aspects of a project or program.
- Strong leadership, organizational, and interpersonal skills.
- Ability to manage in a matrix environment.

Suggested Background, Experience and/or Education

- College degree in a technical discipline; education in finance/accounting or an MBA helpful. Related work experience can be substituted for educational requirement in some industries.
- Must have held project management and leadership positions (reflecting increasing levels of responsibility) in an organization of comparable size; 5-7 years project management experience with experience in large, complex projects and management of distributed project resource teams; 3-5 years of experience in the industry with previous supervisory or coaching experience.

- Proficiency in relevant computer applications.
- PMP<sup>®</sup> or other project management certification.
- Demonstrated experience leading cross-functional teams within a formalized methodology.

## **Project Manager**

### Role Overview

This role manages cross-functional teams responsible for delivering defined project outputs on time, within budget, and with quality results. Project Managers plan, organize, monitor, and oversee one or more projects to meet defined requirements or business specifications. They work closely with the Manager of Project Support and others in project management to guide efforts toward achieving intended business results. They report to a Program Manager, Manager of Project Managers, SPO Director, Executive Sponsor, or other senior project management role. Project Managers have primary responsibility for defining, planning, tracking and managing the enterprise project, for identifying key resources and providing the direction they require in order to meet project objectives. They also ensure appropriate management, customer and supplier involvement throughout the life of the project. Selecting the right person for the role of project manager is crucial to project success.

## Suggested Duties and Responsibilities

- Determines project goals and priorities with management program manager and/or project sponsors, SPO Director, or CPO.
- Select team members; may not have direct supervisory responsibility (such as hiring and performance/pay reviews) for project team members, but provides performance input to team members' functional managers and/or the SPO Director or Project Support Manager.
- Support requirements of the enterprise program manager (if supporting a program) to provide necessary information and support for successful program delivery.
- May be responsible for one or more projects.

- Negotiate the performance of activities with team members and their managers if operating in a matrix environment.
- Coach to clarify assignments and deliverables; mentor others in project management practices; review quality of work and manages integration of team members' work
- With Project Support Manager, strategize to optimize professional development for each team member.
- Co-create a project charter with the team, including the definition of completion criteria.
- Manage and communicate a clear vision of the project's objectives, and motivate the project team to achieve them; create a project environment that enables peak performance by team members.
- Organize the work into manageable activity clusters (phases) and determines an effective approach to completing the work.
- With Estimator(s), compile a complete and accurate estimate of a project; using reserves appropriately.
- With Project Planner(s), prepare project plan and obtain management approval.
- Analyze risks, establish contingency plans and identify trigger events and responsibility for initiating mitigating action. Oversee activities of Risk Administrator. Gather stakeholder input, rank the top project risks in terms of total impact.
- Work with Planner/Scheduler/Controller in tracking and reporting on progress to plan, cost and schedule reporting, and change control.
- Analyze the actual performance against the plan and make adjustments consistent with plan objectives.
- Manage relationships with project stakeholders, including internal and external clients and vendors, keeping them stakeholders informed of progress and issues in order to manage expectations on all project requirements and deliverables.
- Involve functional expertise and specialist SPO staff in design reviews and key decisions.

- Manage change to preserve business plan commitments; initiate review if objectives must change.
- Establish and publish clear priorities among project activities.
- Arbitrate and resolve conflict and interface problems within the project.
- Manage the financial aspects of the project: budgeting, estimate to actual variance, capital project management, etc.
- With Librarian, oversee project documentation and updates to relevant knowledge bases; analyze lessons learned and shares with other project directors and project managers.
- With Analyst(s), analyze original estimate against actual hours and duration, and understand the factors that contributed to any variance.
- Effectively coordinates the activities of the team to meet project milestones.
- Provides input/justification for project costs and budget impact.
- Works with Methodologist to ensure implementation of SPO standards, processes, and support services.
- Proactively identify changes in work scope and ensure appropriate planning measures are taken with internal and external clients to reassess and amend the scope of work requirement, budget, and timeline.
- Oversee the reporting activities of Planners and Analysts, determining when to escalate issues to appropriate levels of management.
- Represent project at meetings and with external consultants and departmental and senior management to assure that priorities are communicated and understood, and that progress/delays/issues are reported.
- Determine what constitutes successful closure for all parties. Gain acceptance and sign-off by all parties when closure is attained.
- Resolve issues related to client relations, governmental relations, project quality, project risk and project safety.
- Manage vendor relations and procurement related to the project(s).

## Suggested Knowledge, Skills and Abilities

- Knowledge of and competency in project management processes, including planning tasks and allocating resources, risk management, issues management, time management, financial management, HR management, working in teams, quality management, monitoring and reporting, documentation and record keeping.
- Ability to plan and facilitate meetings.
- Knowledge of the strategic and operational issues of the project or business unit.
- Strategic, conceptual analytical thinking and decision making skills.
- Adaptability and flexibility including ability to manage deadline pressure, ambiguity and change.
- Negotiating skills within a context of political sensitivity and conflicting interests.
- Presentation and written communication skills.
- Ability to advise on complex matters to non-specialists; ability to communicate effectively with senior management.
- A clear vision of what determines a successful project for the customer and for the company.
- A technical background sufficient to understand the technologies and technical issues involved with the project and industry, to be able to anticipate and identify technical obstacles, and to make accurate technology decisions.
- Personal integrity and courage to escalate issues about the project to management when necessary and to advocate for responsible solutions to project problems.
- Extensive knowledge of project management methodology.
- Exceptional interpersonal skills; the ability to work well with people from many different disciplines with varying degrees of technical experience; competence in clear, concise and tactful communication with senior management, clients, peers and staff.

- Ability to build teams and generate a spirit of cooperation while coordinating diverse activities and groups; people management and negotiating skills within a team environment.
- Ability to negotiate consensus amongst diverse groups and impact the activities of others not in own reporting structure.
- Budget management skills; Ability to analyze and review financing plans and related budgetary information to determine the impact on a project is required.

- College degree, preferably in a technical subject; minor or advanced degree in business or industry-related subject is a plus. In some industries, work experience may be substituted for educational credentials.
- PMP<sup>®</sup> certification and/or other industry and project management certifications.
- 3-5 years experience in using formal project management methodology, techniques, and tools.
- Demonstrated expertise in creating and maintaining project deliverables such as project charter, project plan, status reports, project timesheets, estimates, communication plan, reports, risk management plan, budget (work hours and cost), milestone/deliverable charts.
- Demonstrated experience in managing issues, scope, and quality while bring projects to successful completion within the cost and time requirements.
- Proficiency with project management software tools used by the enterprise.
- Industry experience preferred.
- Demonstrated expertise in teambuilding and leading teams.

#### Note: Project Manager Career Pathing

In large organizations with many project managers, project managers may be awarded "grades" based on their level of experience and expertise. A "Senior Project Manager" has all the qualifications listed above. In addition, because this position manages complex, strategic projects that span organizational boundaries, Senior Project Managers should have managed two or more high-risk projects, including projects involving external vendors and multiple business areas. Typically, large projects and high-risk projects would be given to more senior PMs. This grade is a logical training ground for Director of Project Support, Director of SPO, and CPO positions for the project manager with business acumen. In organizations with groups of related projects organized into programs, this position may be titled Program Manager; or, this level of skill may be assigned the role of Project Management Mentor.

## **Project Team Leader**

Other titles that may be descriptive of this role: Project Leader, Project Coordinator, Team Lead

#### Role Overview

The Project Team Leader is usually a senior staff member appointed by the Project Manager to head up a sub-project group, and to supervise and represent a team within a large project. A Project Team Leader may be responsible for one or more project components. Team leaders should possess a subset of the skills and experience necessary to be a Project Manager. This role is a natural step in the career path to project managership. At a minimum, the Team Leaders should display:

- Knowledge of the principles and practices of contemporary project management.
- Understanding of the strategic and operational issues of the project or business unit.
- Conceptual and analytical thinking skills.
- Decision making and problem-solving skills.
- General knowledge of the use and application of project management tools and techniques.

- Adaptability and flexibility including ability to manage pressure, ambiguity and change.
- General management skills necessary to plan, organize and prioritize workload.
- Ability to work in teams.
- Communication skills required for reporting on progress and leading meetings.
- Ability to prioritize and manage well under deadline pressure.

## **Project Support Team Member**

Other titles that may be descriptive of this role: Specialist Team Member

#### Role Overview

The Project Team member(s) are appropriately skilled individuals who report to the Manager of Enterprise Project Support. They are assigned full-time to the Strategic Project Office but may be assigned to an individual project full-time, part-time or variably, based on the needs of the project. Naturally, the exact roles of team members will vary by project and by industry. We have attempted to create descriptions of the specifically project management-related roles that might be based in a Strategic Project Office. Specialist Team Roles within the project management discipline may include such roles as Controller, Scheduler, Risk Management, Methodologist, Systems Analyst, plus a number of other, less-common titles, described below. At a minimum, all team members, even those whose involvement in the project is on an as-needed basis from another functional area, should possess:

- Skills for working in teams: communication (oral and written), collaboration, problem solving in a team context.
- Understanding of contemporary project management principles and practices.
- Understanding of the strategic and operational issues of the project and/or business unit.

## **Project Controller**

Other titles that may be descriptive of this role: Project Controls Manager, Controls Manager, Project Controls Specialist

#### Role Overview

Project Controllers have the primary responsibility of tracking enterprise or divisional program and project performance against budgets, plans and schedules. Their primary area of responsibility is managing the integration of multiple programs and/or projects; providing data, analysis, and reporting to project managers and various levels of management. Project Controllers may have responsibility to integrate data from hundreds of programs and projects to provide many types of information and reporting, including trend analysis, earned value analysis, divisional or enterprise resource forecasts, resource modeling, resource leveling, cost profiling, project prioritization, divisional or enterprise budgeting, periodic status reports to departments, to divisions, and to enterprise executives. Control of costs and schedule and associated documents, especially those concerned with changes. Working with other departments, implementation contractors and consultants, they support multiple project teams through the implementation of project management controls, assisting Project Managers in conducting variance analysis, performing assessments, project forecasting, managing changes, and producing a variety of management reports. Project Controllers in large and complex organizations (or Project Planner/Controllers in smaller organizations) may have an assistant/administrator, the Issue Resolution and Change Control Coordinator, with a subset of the following responsibilities, specifically those related to administration, data entry, and communication reporting to them.

#### Suggested Duties and Responsibilities

• Develop and implement procedures, systems, and reports pertaining to program/project status and forecasts. Responsible for the cost/schedule control system, cost estimating capability, and the management reporting on these.

- Provide input and review for development of schedule, work breakdown structure, estimates and work packages during the different phases of a project.
- Provide input and review project estimates.
- Maintain accurate records of committed, expended and forecast costs and monitor all organizational project costs to determine and verify the Planned Value, Actual Cost, Earned Value, Cost Variance, Cost Performance Index, and Estimate at Completion.
- Maintain accurate time estimating and tracking for all organizational projects to verify the Planned Value, Actual Cost, Earned Value, Schedule Variance, Schedule Performance Index, and Estimate at Completion.
- Oversee management of scope changes, trends and change notices initiated from the project management system and review time and cost implications.
- Manage the transfer of cost data from financial, accounting, and procurement systems to the organizational project control system, review data transfer errors with the appropriate Project Planner or Project Manager and coordinate corrections with the accounting staff.
- Operational responsibility also includes cross-functional integration of above items with other systems especially finance, purchasing and contracts.
- Develop timely, accurate, in-depth analysis of organizational cost and schedule data, provide corrective action recommendations; develop and implement project cost and schedule baselines; develop, track, report subcontract accruals; track and monitor acquisition commitments; develop strategic planning schedules and provide support to project management in cost, schedule, performance measurement, forecasting and variance analysis.
- Apply appropriate metrics and tools for project control.
- Recognize and evaluate actual or proposed changes to any aspect of a project scope or schedule.
- Provide cash-flow analysis reports.
- Identify cost-savings opportunities, and develop programs to achieve long-term savings.

## Suggested Knowledge, Skills and Abilities

- Sound task management skills and strong analytical ability.
- Ability to assign and manage work activities and meet deadlines.
- Strong oral and written communication skills.
- Strong attention to detail and organizational skills.
- Ability to work effectively as a member of a team and foster teamwork in others.
- Demonstrated ability to handle multiple concurrent assignments.
- Advanced computer skills and knowledge of the most current industry standard computerized project control applications, such as cost and planning software; working knowledge of computer relational databases, computer estimating systems and budget control monitoring techniques.
- Proficiency in project control techniques and principles, and ability to perform comprehensive organizational forecasting and analysis.
- Positive customer service orientation, with both internal and external clients required.
- Strong interpersonal skills required, demonstrating a commitment and ability to work with diverse work groups and individuals.
- Ability to work in a flexible team environment and, independently with minimal supervision.
- High level numeracy, analytical skills and management accounting knowledge.
- Ability to write clear concise reports for project reporting.

- Experience summarizing results and producing project management reports.
- Experience in budgeting, forecasting, scheduling (CPM) and analytical reporting including baselines development and Earned Value Management Systems.

- Proficiency with project controls computer applications used by employer.
- 5-10 years experience in a project management role; 5+ years in planning/scheduling/controls functions.
- · Industry experience.
- PMP<sup>®</sup> or other project management certification; certification in cost and/or contract management a plus.
- College degree in a technical field with up to 3-10 years experience required, depending on size and complexity of project organization.

## **Project Planner**

#### Role Overview

Planners assist Project Managers and Systems Analysts by developing, analyzing, and managing project plans, schedules, and resource forecasts. In organizations that run many projects concurrently, Planners focus on the Project Planning phases while working closely with Schedulers, Controllers and Analysts to create schedules and keep the plan current and meaningful. In smaller organizations or project offices, the Planner role may include elements of the roles described in this book as Project Analyst, Controller, Estimator, and Scheduler; for this reason, the Planner role is often subject to overload. In this situation, individual and organizational needs should be carefully weighed (by the Organizational Development Analyst) to create and fill Planner roles that both reflect the requirements of projects, and the varying attributes (such as business acumen, technical skill, facility with analysis and figures, ability to negotiate with vendors and so on) that indicate whether a person would perform best as Planner/Scheduler; or Planner/Analyst, Planner/Estimator, or Planner/Business Analyst. Planners with strong leadership, facilitative and interpersonal skills are good candidates for Project Manager. This is a role that could have multiple career paths depending on the personal characteristics and education of the individual. Planners generally work on multiple projects and report to Project Support Manager, while working closely with and under the supervision of the Program or Project Managers they support. Entry-level Planners report to a Lead Planner in larger organizations.

- Prepare and keep current master project plans as well as subproject plans for monitoring and tracking the requirements, and stay abreast of changes to the requirements.
- Develop work breakdown structures; Critical Path Method (CPM) schedules; and resource, cost and budget plans.
- With Scheduler, create project timelines (if using Scheduler Role).
- With Project Controller, update master and sub-project plans with new information as changes occur. Monitor dependencies affected by changes.
- Provide key data to Portfolio Management to update project status and impact on overall portfolio (e.g. timelines, budget, resources, delays).
- Responsible for communicating any schedule conflicts, resource constraints, and time constraints to the project team.
- Works with staff from throughout the company as well as with Project Managers to develop detailed project plans (with all tasks, durations, resources, etc.) from concept through completion for approved projects with all the interacting departments.
- Communicate and publish plans to appropriate involved individuals to ensure each person understands the overall scope of the project and when tasks are required to be begun and completed.
- Utilize relevant project management software applications to manage projects.
- Review each project periodically to insure projects are on time and within cost projections.
- Prepare an executive summary of all exceptions on projects, inclusive of tasks that are behind schedule, tasks that are competing for the same resource, conflicting priorities and exemplary performance etc. for the executive review.
- Provide planning and resource allocation services that support the project schedule.
- Support the preparation of progress reports, standardized reporting procedures and the monitoring of overall project performance.

• Lead Planners may manage junior planners in multiple locations and handle hundreds of projects in a distributed environment simultaneously.

## Suggested Knowledge, Skills and Abilities

- Must have strong oral and written communication skills.
- Full proficiency with relevant software tools.
- Ability to work in a cross-functional team environment.
- Must be a team player and demonstrate a teamwork approach to performance.
- Good time management skills.
- Sound understanding of project management in relation to timeframes, dependencies and critical paths.
- Able to work with all levels of management and technical staff.
- Analytical ability and problem solving skills.
- Ability to remain calm and productive in a high-pressure environment.

- 5-10 years project planning skills required for a Lead Planner.
- Demonstrated knowledge of project management, with hands-on experience and proficiency using project management tools and computer based scheduling systems.
- Experience developing project-specific and high-level milestone deliverable master plans to meet defined business objectives.
- Experience in helping perform Work Breakdown Structures in creating project schedules and estimates.
- Experience with program scheduling to include an understanding of networks, interdependencies and networks.
- Previous hands-on project experience and experience working on industry related projects.
- Experience with project earned value principles.

- Education may vary according to industry. For a Lead Planner, work experience in industry may substitute for a college (2 or 4-year) degree in a technical field.
- PMP<sup>®</sup> or other project management certification helpful; other technical certifications as relevant to industry.

Project Planners often lead small project initiatives (generally less than a month in duration with 1-2 people) and are skilled in reviewing project deliverables and technical documentation and is capable of leading facilitation sessions for group reviews and project charter definitions. A Lead Planner must have a proven track record in effectively applying project management. They may have led small-medium project initiatives (generally one-three months in duration with 3-6 people).

# **Project Scheduler**

#### Role Overview

The roles of Planner and Scheduler are frequently combined, but in large organizations running many concurrent projects, they may be separated out. The Scheduler is responsible for the development and maintenance of schedules for multiple, large or complex projects and programs.

- Create, manage, maintain and update schedules in a complex project environment.
- Develop policy and procedures to improve the adequacy and efficiency of the scheduling processes.
- Perform critical path analysis and develop timelines for completion of tasks, measuring the deliverable work packages of the project against the project plan. Develop work breakdown structure (WBS).
- May manage junior schedulers in multiple locations and oversee multiple projects in a distributed environment simultaneously.
- Keep Project Managers informed of impacts to project schedule.

• Work with Analysts to ensure that schedule data is accurately interpreted; work with Planners to ensure that schedule changes and their impacts are accurately reflected in the master plan.

#### Suggested Knowledge, Skills and Abilities

- Must have strong oral and written communication skills and problem solving abilities.
- Good analytical skills and expertise with relevant software tools.
- Ability to work in a cross-functional team environment; able to work with all levels of management and technical staff.
- Must be a team player and demonstrate a teamwork approach to performance.
- Good time management skills.
- Sound understanding of project management in relation to timeframes, dependencies and critical paths.
- Ability to remain calm and productive in a high-pressure environment.

- 2-5 years project scheduling skills required for a Lead Scheduler.
- Demonstrated knowledge of project management, with hands-on experience and proficiency using project management tools and computer based scheduling systems.
- Experience in developing project Work Breakdown Structures used to create project schedules and estimates.
- Experience with program scheduling to include an understanding of networks, interdependencies and networks.
- Previous hands-on project experience and experience working on industry related projects.
- Education may vary according to industry. For a lead scheduler, work experience in industry may substitute for a college (2 or 4-year) degree in a technical field.

- PMP<sup>®</sup> or other project management certification helpful; other technical certifications as relevant to industry.
- High level of data manipulation and reporting knowledge is required.

## **Project Estimator**

#### Role Overview

This role works as a part of a team to develop detailed cost estimates during all phases of a project — in the proposal stage as well as for each scope change throughout the lifecycle. The Estimator works with the Project Controller to continually keep project costs realistically forecast and recorded. Since poor estimation of costs is a primary contributor to project failure in many industries, the Estimator role is critical. It requires a skill set more consistent with cost management and accounting than with the facilitative role of Project Managers yet it is a common error in organizations to expect both functions from the same person. An individual with business acumen or education may perform the role of both Estimator and Business Analyst in a smaller company; the Estimator skill set also overlaps with Project Control. One estimator can deal with many projects as early phases of the project typically require much higher levels of estimating support than do project which are underway.

- Estimates labor requirements, required project equipment, supplies, contracted services, costs, prepares cost estimates and monitors expenditures.
- Prepares estimates for proposed change orders and updates project plans and estimates with new information on change order approval.
- With Business Analysts and Project Managers, works to accurately forecast costs of proposed projects.

- Builds systems to enhance organizational estimating capability.
- Maintains estimating databases and integrates these databases with the enterprise project controls tools.
- Integrates estimates with project schedules to achieve phased timing of costs and resources.
- Supports Risk Management Coordinator on quantitative risk assessments; provides inputs, and analysis for prediction of project cost and resource risk.

## Suggested Knowledge, Skills and Abilities

- Excellent verbal and written communications skills, including the ability to interact effectively with customers and vendors.
- Previous demonstrated experience in project cost and resource estimating.
- High-level numeracy and familiarity with accounting and finance processes.
- Ability to meet deadlines and work under stress.
- Exposure and general understanding of risk management tools and techniques.
- Familiarity with enterprise project controls tools.

- A minimum of 2-5 years of estimating experience in a related environment.
- Proficiency with relevant computer applications.
- High school graduate (minimum) or 2-year degree with courses in accounting for entry-level Estimator.
- Project management courses desirable; PMP<sup>®</sup> required for advancement.
- Experience working in cross-functional teams.

## **Risk Management Coordinator**

Other titles that may be descriptive of this role: Risk Management Analyst, Risk Management Administrator, Risk Manager

#### Role Overview

Risk management has received increased attention in recent years as a neglected area of corporate planning and project execution. Creating a dedicated Risk Management Coordinator ensures that project risks will be adequately monitored and managed. Particularly when the Risk Management Coordinator supports multiple projects, there is less likelihood of a disconnect between projects creating an avoidable risk. Risk Management Coordinators work closely with Estimators, Business Analysts, Project Managers and Project Controllers to assess, monitor, manage, and mitigate risk events throughout the project lifecycle. They report to the Project Support Manager and work collaboratively with the Project Controllers or Planners of specific projects.

- Perform cost and schedule "what if" analysis; prepare and effectively communicate corrective, mitigating or improvement actions.
- Identify project risk during project definition.
- Perform risk assessment, qualification, analysis, and reporting.
- Offer alternative solutions or mitigation plans.
- Identify qualitative and quantitative impacts and recommend responses through prevention, mitigation, and contingency planning.
- Communicate with others throughout the project organization about potential and identified risks and plans for corrective actions.
- With controller, monitor program/project risks, schedule and cost variance.

## Suggested Knowledge, Skills and Abilities

- Facilitation, interviewing and listening skills.
- Experience using advanced project risk assessment and analysis tools.
- Experience in performing large, complex program and project risk assessments.
- Knowledge of legal and regulatory requirements.
- Organizational and problem solving abilities.
- Excellent written and verbal communication skills.
- Thorough knowledge of industry.
- Understanding of project management principles and practices.
- Understanding of strategic implications and of initiatives being pursued through projects.
- Research skills.

- College degree in business, finance or a related field.
- Proficient in the use of advanced risk assessment software.
- 3 yrs. experience in project support performing project scheduling, project planning, or project controls.
- A breadth of personal knowledge and industry experience sufficient to be risk-aware.
- PMP<sup>®</sup> helpful; technical project management training a must.
- Proficiency with the company-standard project management and productivity tools.

## Methodologist

Other titles that may be descriptive of this role: Methodology Specialist, Process Improvement Coordinator; Manager of Methodology and Standards

#### Role Overview

A Methodologist keeps the SPO staff focused on the agreed upon corporate standards for project management, while remaining alert to areas where improvements in process can be made. This requires a proactive approach to project management methodology, not simply a "policing" approach. Methodologists work with the CPO, the SPO director, Manager of Enterprise Project Support, Manager of Enterprise Project Managers, and Project Managers on projects for organizational improvement, including but not limited to: Defining, monitoring the use of, training in and evaluating the effectiveness of project management methodologies. They may participate in organizational assessments such as those required to determine a project management maturity baseline, and set up benchmarking processes to identify best practices. This role also drives best practices usage within the organization to insure processes are supported and trained for.

- Develop and maintain the organization approved project management methodology, processes, templates, guidelines, and procedures.
- Develop repository standards with Knowledge Management Coordinator.
- Develop training requirements on methods and processes with Organizational Support Analyst.
- Evaluate, select, and maintain process management tools.
- Serve as a subject matter expert for certain project management processes and tools.

- Proactively identify process improvement opportunities. Drive continuous process improvement via post-project reviews.
- Coordinate with project managers to insure all new projects/processes are developed and optimized according to the company standard procedures.
- Maintain repository for project experience and models to insure accurate and consistent project management processes.
- Mentor and provide guidance to project teams on formal project methodologies.

#### Suggested Knowledge, Skills and Abilities

- Solid understanding of project management, including project control, planning estimating, resource management, change management, issue management, risk management, vendor management and quality assurance.
- Knowledge of project management best practices, benchmarking techniques, maturity modeling and other concepts in process assessment and improvement.
- Expertise in project management methodology design and management.
- Excellent communication skills and the ability to conduct oral presentations.
- Strong verbal and written communications skills as well as listening skills.
- Ability to solicit and collaborate with all team members, including stakeholders.
- Strong knowledge and understanding of project needs, with the ability to establish and maintain a high level of trust and confidence.
- Ability to facilitate large meetings ranging from 10-30 people.
- Research skills.

Suggested Background, Experience and/or Education

- 5-10 years of project management experience as a member of crossfunctional project teams; Project Office experience strongly preferred.
- Experience in the use of structured project management methodologies.
- Proficiency in the use of project management tools.
- Experience mentoring other project managers.
- College degree in a business or technical field, with a process-improvement focus; advanced degree in business, quality management or project management helpful.
- PMP<sup>®</sup> or other project management certification required.

## **Measurement Analyst**

Other titles that may be descriptive of this role: Metrics Steward, Metrics & Reporting Analyst, Metrics Analyst

One of the key roles for the Strategic Project Office is to develop metrics for the measurement of various aspects of company effectiveness: project metrics, project manager effectiveness metrics, program and portfolio metrics, and metrics that reflect progress in executing strategy. As an "add-on" to normal tasks of management, a fully-enabled measurement program can become burdensome and fall by the wayside. Thus, the role of Measurement Analyst is key to understanding the value and contributions of project and portfolio processes, and to "tweaking" those processes for maximum productivity.<sup>2</sup>

#### Role Overview

Measurement Analysts serve as the manager of the measurement program. They should be connected with all stakeholders involved in the project or program, but should be independent enough to avoid undue influence and to be an honest broker of the data. They are responsible for leading the development of performance measures by facilitating Goal-Question-Measure (GQM) sessions with key stakeholders. They establish the measurement processes and develop and manage the project measurement architecture. MAs facilitate analysis of measures – they cannot perform all the analysis, but must work with the various experts in each activity area to provide insights and root cause analysis. A significant part of the MA role is training other stakeholders in analysis techniques and proper applications of measurement. MAs also create periodic measurement reports and lead measurement meetings. This role may include Estimator duties, and could also have Quality Assurance responsibilities.

#### Suggested Duties and Responsibilities

- Facilitate GQM working sessions with key stakeholders.
- Develop and maintain measurement processes through the Measurement Architecture:
  - o Measurement Information Model.
  - o Measurement Plan.
  - o Measurement Design Document.
  - o Measurement Repository.
  - o Data Collection Processes.
  - o Measurement Reports.
- Manage data collection and author measurement reports.
- Facilitate data analysis and suggest potential focus areas.
- Lead regular measurement meetings.
- Communicate effectively with all stakeholders.
- Interact with key stakeholders for requests for new measures/ measurement process improvement.

## Suggested Knowledge, Skills and Abilities

- Strong quantitative skills (math, statistics, etc.).
- Ability to teach/train others is important.
- Skilled writer and communicator.
- Skilled at developing and presenting presentations.
- Knowledge of various data visualization techniques.

Suggested Background, Experience and/or Education

- College degree (math, statistics, IT, or some other quantitative analysis) preferable.
- 3–5 years' experience in industry; knowledge of or experience in software development life cycle is ideal.
- Training in goal-driven measurement through SEI, IFPUG, or some other IT organization is critical.
- Experience on project teams essential.
- Certified Software Measurement Specialist (CSMS) through IFPUG is a plus.

## **Business Analyst**

#### Role Overview

Business Analysts are a primary interface between projects and business partners. They are responsible for understanding current and future processes, including processes for the entire enterprise. They define and document business needs and requirements, and generate project business cases. BAs work with Project Managers at project initiation to define costs and benefits of a proposed project prior to the project being reviewed for inclusion in the portfolio. They may participate in portfolio review meetings. Business Analysts report to the SPO director. This role may include Risk Analyst/Administrator duties and or Estimator duties in smaller organizations.

- With functional area representatives and estimator(s), define benefits and costs of projects.
- Analyze alignment of proposals to corporate strategies.
- Document requirement to meet business needs of organization.
- Write and present business cases.

• Participate in project and portfolio reviews to maintain project's alignment with business cases.

## Suggested Knowledge, Skills and Abilities

- Strong business background with thorough knowledge of company's industry, markets and strategy.
- Skilled writer and communicator.
- Skilled at developing and presenting presentations.
- Knowledge of project management principles and practices.
- Strong business acumen and high level of numeracy.
- Extensive knowledge of financial and accounting practices.

Suggested Background, Experience and/or Education

- College degree in business, finance, or related field; MBA desirable.
- Project management education and training.
- 3-5 years' experience in industry.
- Experience on project teams a plus.
- College degree in Accounting or Finance plus a minimum of 5 years experience in financial statement preparation, budgeting and cost analysis.

## **Project Office Administrator**

Other related titles: Administrative Coordinator, Organizational Support Specialist, Project Administrator

#### Role Overview

The administrative role in a project should not be minimized or overlooked. Many project managers are burdened by job descriptions that include administrative tasks that are necessary, even critical, but which do not require a staff member with a PMP<sup>®</sup> to perform them. Any time that an experienced, highly-skilled PM spends on administrative duties diminishes his or her ability to achieve the level of management oversight that results in successful projects. Project Administrators are responsible for performing a variety of tasks in support of project management, including clerical support such as company correspondence, presentations and training materials, maintain calendars, set up meeting logistics, travel arrangements and various other duties as needed. The gathering and organizing of data is a common task. With experience and continuing professional development, they may lead or direct communications activities within the Project Office and grow into the role of Knowledge Management Coordinator.

- Develop and maintain procedures, tools, and practices that systematically control revisions to the scope, schedule, and cost of organizational projects to ensure that (a) changes are well defined and coordinated; (b) changes are approved at appropriate authority levels; and (c) approved changes are fully documented and promptly communicated to affected parties.
- Review submitted requests within the organization for changes and ensure required signatures/documentation are completed; coordinate and conduct change control meetings; update and maintain change control database; maintain change control supportive documentation and issue various reports to show status of change control.
- Maintain and monitor issues logs for all projects within the organization.
- Scribing notes at project meetings; annotating and finalizing and managing multiple sets of notes.
- Providing proactive support to SPO staff.
- Assist with PM training coordination and meeting planning and management.
- Create and distribute minutes and document the resolution of action items.

- Support communications plan and knowledge management administrative responsibilities.
- A broad range of documentation and administrative tasks including scheduling and maintaining calendars, and other tasks as required.

#### Suggested Knowledge, Skills and Abilities

- Excellent verbal and written communication skills with attention to detail.
- Effective working independently or as part of a team.
- Ability to multitask; good prioritization, time management and organizational skills.
- An understanding of project management terminology and practices.

Suggested Background, Experience and/or Education

- 3-5 years work experience, preferably in a related industry or project environment.
- High school graduate, or 2-year college degree, or equivalent work experience.
- Project Office experience a plus.
- Expert level skills with the relevant software applications.

# **Organizational Development Analyst**

Other titles that may be descriptive of this role: Project Human Resource Coordinator, Role Steward, PMO-HR Liaison

#### Role Overview

This role assists programs and projects by identifying and addressing the human impact issues such as risks and resistance that endanger the successful implementation of a program, project, or change initiative. They identify and address communication and performance needs. OD Analysts act as training, communications, and change management experts both within the SPO and by interfacing with other functional areas that may be impacted by a project to manage the transition and minimize the impact of a change. They report to the Project Support Manager or SPO Director, and work closely with the corporate HR function to implement policies for training, retention, performance measurement, and professional development of project personnel that will lead to successful projects.

#### Suggested Duties and Responsibilities

- Assist Strategic Project Office Director and HR department in developing position descriptions and performance management plans for SPO personnel.
- Design, develop, and deploy corporate project management training, education, and development programs.
- Build, deploy, and maintain enterprise project management competency program.
- Assist Methodologist with organizational assessments.
- Assist Manager of Enterprise Project Support and Manger of Enterprise Project Managers with duties related to performance management and professional development within the SPO.
- Provide meeting support through advanced facilitation skills.
- Work with the SPO Director and management staff to design and implement project management training programs.
- Assess organizational and human issues associated with implementation and change projects within the enterprise. Provide recommendations for overcoming resistance and building morale.

## Suggested Knowledge, Skills and Abilities

• Understanding of contemporary project management principles and practices.

- Understanding of the strategic and operational issues of the project and/or business unit.
- Understanding of industry issues.
- Superior/advanced listening, interviewing, facilitation and conflict resolution skills.
- Thorough understanding of organizational dynamics, including political issues and information flow.
- Excellent communication skills, including writing, presentations, teaching and coaching.
- Ability to design training programs, including performance metrics.

Suggested Background, Experience and/or Education

- College degree in human resource development or related field.
- Project management training and education.
- 1-3 years project office or cross-functional team experience.
- Certifications in organizational development and/or human resource management subjects a plus.
- Experience developing training programs.

## Systems Analyst

#### Role Overview

A Systems Analyst analyzes, designs, and develops information systems to support project management and acts as subject matter expert in project management technology, assisting other project personnel in effective use of these tools. In a small Project Office, this role may be combined with that of Project Controller if the candidate has the requisite project management experience.

#### Suggested Duties and Responsibilities

- Customize configure/troubleshoot software to support project management methodology and practice.
- Define appropriate technology deployment strategies to increase organization's maturity in PM tool use.
- Identify project management software implementation and use best practices, document guidelines and procedures, and train the organization on the project management software applications.
- Integrate project management software with enterprise management and reporting tools such as; executive reporting, time collection, payroll, financial, budgeting, procurement, and reporting systems.
- Develop and deploy enterprise project controls tools, procedures, and systems.
- Maintains project controls tools with high levels of system availability.
- Monitor compliance of SPO standards as institutionalized in software products.
- Coach and mentor teams on project management tools.
- Serve as a subject matter expert for certain project management processes and tools.

#### Suggested Knowledge, Skills and Abilities

- Ability to understand and appreciate project management technology and best practices as well as the ability to learn and apply new technologies/tools quickly.
- Good communication skills, both written and oral.
- Knowledge of business systems and how they integrate with the project controls tools.
- Full proficiency in a wide range of project management and productivity tools.
- Ability to work well in teams.

- Ability to assist in preparation of technology training programs.
- Teaching or coaching ability a plus but not required.

Suggested Background, Experience and/or Education

- Computer Science, Management Information Systems, or related college degree, or equivalent work experience and technical training.
- Proficient in relevant software applications.
- 1-3 years of Project Office or project team experience.
- Project management certification and or other technical certifications as appropriate to industry and tools used in company.

## **Knowledge Management Coordinator**

Other titles that may be descriptive of this role: Documentation Specialist, Project Librarian, Project Information Coordinator

#### Role Overview

Formerly more often known as "Librarian" in organizations with sophisticated Lessons Learned repositories, this position is growing in importance due to the widespread recognition that project historical documents are only the first step in capturing, documenting, storing and sharing the knowledge gained by the organization in the course of each project. Today, a KM Coordinator works primarily with Web-based tools to make project information widely accessible to project teams. He or she works closely with the Methodologist to make methodology components available to SPO staff, and with Planners and Controllers to capture and communicate project status, trends and histories. Sharing administrative tasks with a Project Administrator, this role manages all project documents and maintains the corporate repository of project wisdom. This position reports to the Manager of Enterprise Project Support or an SPO Director but works closely with all members of the Project Office.

#### Suggested Duties and Responsibilities

- Manage all project documents and coordinate documentation revisions and releases; ensure that project documents are archived for later retrieval.
- Update project management websites, intranet, or community of practice tool.
- Manage a historical database of project timeframes and estimates to improve the estimation process for future projects.
- Implement and ensure controls for reproduction of "controlled documents" to minimize potential use of obsolete documents and establish the process to cross reference the documentation.
- Develop lessons learned by applying developed project knowledge to augment corporate intellectual capital.
- Support department objectives regarding appropriate methodology.
- With Methodologist, provide contributions to knowledge management portions of project management manuals for all enterprise customers.
- Assist in developing written processes, procedures and flowcharts to support department activities.
- Facilitate communication within the team by ensuring accessibility and completeness of information.
- Maintain repository standards.
- Maintain and perform periodic archiving of project records.

#### Suggested Knowledge, Skills and Abilities

- Strong written communications skills and the ability to apply appropriate communication techniques to various individuals across the enterprise.
- Knowledge of systems and tools for the organizing, archiving, and retrieval of documents.

- Knowledge of project management principles and practices.
- Research skills.
- Able to handle multiple projects and deadlines.
- Detail-oriented and flexible.

Suggested Background, Experience and/or Education

- Technical documentation abilities.
- 3-5 years of project administrative support experience.
- Proficiency in the relevant project management, productivity and KM tools.
- College degree in library science, knowledge management, or technical communication preferred.
- Project management training required; PMP<sup>®</sup> needed for advancement.

## **Communications Planner**

Other titles that may be descriptive of this role: Project Communications Coordinator, Project Office Communications Specialist; Communications Administrator

#### **Role Overview**

In a large and complex organization, a dedicated role for project and SPO communications is necessary to smooth over the many potential opportunities for disconnect and miscommunication in the fastpaced life of projects. Working with the Knowledge Management Coordinator and Project Administrator(s), the Communications Planner specializes in keeping SPO personnel informed and in touch with each other and with stakeholders elsewhere in the organization or externally. In smaller organizations and when the staff member is appropriately skilled, this role may be combined with the Knowledge Management Coordinator or a Project Administrator's duties.

#### Suggested Duties and Responsibilities

- Help develop enterprise-wide and project communications plan.
- Determine communication strategies and medium for information delivery.
- Interface with internal and external organizations for information delivery.
- Ensure timely delivery of all project statuses.
- Determine audiences requiring communications.
- Identify and implement effective techniques to communicate project/program objectives, responsibilities, ideas, feedback and other appropriate information.
- May publish SPO newsletter and/or contribute to community of practice website and/or intranet.

#### Suggested Knowledge, Skills, and Abilities

- Superior/advanced written communication skills.
- Understanding of organizational dynamics and communication networks, formal and informal, within the SPO.
- Excellent interpersonal skills.
- Strong organizational and administrative skills.
- Knowledge of communications delivery instruments.
- Technical documentation abilities.

- 3-5 years of project administrative support, business communications, public relations, or marketing experience.
- Experience working in a Project Office and/or on cross-functional teams.

- Experience with planning and producing communications documents.
- Proficiency in the relevant project management, productivity and publishing tools.
- College degree in technical writing, English, or business communication preferred.
- Project management training required; PMP<sup>®</sup> needed for advancement.

# **Relationship Manager**

Other titles that may be descriptive of this role: Contracts Manager, Procurement Coordinator, Outsourcing Manager, Vendor Support Specialist

#### Role Overview

The growth of outsourcing as a strategy for success has meant a proliferation of partnerships, contracts, vendors and relationships for the organization. Research shows that companies who fail at outsourcing arrangements generally do so because of failed relationship and contract management. The Relationship Manager manages contracts with vendors from project initiation-to post-project review, in order to ensure that the partnership is successful.

- Work external contacts and vendors to facilitate project management; obtain and share information and develop consensus on issues related to partnerships and outsourcing contracts.
- Maintain an adequate working knowledge of relevant subject matter to current assigned contracts, relationships and projects.

#### Suggested Knowledge, Skills and Abilities

- Must be able to work independently and handle multiple projects.
- Excellent planning, organizing, problem solving, verbal and writing skills required.

Suggested Background, Experience and/or Education

- Project management experience required.
- Computer literacy in word processing, spreadsheet, and graphics required with project management preferred.
- Contracts management experience.
- Extensive industry knowledge and familiarity with outsourcing best practices.

<sup>1</sup> Center for Business Practices (2007), *The State of the PMO 2007-2008*, Havertown, PA: Center for Business Practices.

<sup>2</sup> Brown, Ian, Effective Measurement Programs, presentation, CBP IT Benchmarking Forum, Las Vegas, NV, Sept. 19, 2007; and personal follow-up interview: Jeannette Cabanis-Brewin, via email, Nov. 19, 2007.

# **Does Your Organization Have a CPO?**

Deborah Bigelow Crawford

As project management has gained in importance, corporate executives have struggled to find a way to link strategic business objectives with projects. Too often, projects that have little if any connection to corporate strategy get the green light. This is usually because there is no organizational entity with responsibility to map strategy to projects and to monitor projects and portfolios against strategic initiatives.

Establishing the position of Chief Project Officer (CPO) provides project oversight in virtually all areas of an organization, managing corporate level projects and overseeing corporate-wide resource distribution and allocation on all projects. Projects that cross divisions fall under the auspices of this position.

If you care about what business analysts say, you should have a Chief Project Officer as a key position within your organization.

Ideally, organizations should strive to have a CPO sit at the director or vice president level with other senior executives in the organization.

"Chief project officers can be easily eviscerated – they make easy targets," says Melinda Ballou, senior research analyst at Meta Group Inc., Stamford, Conn., USA. "Organizations must make a CPO a 'facilitator' or 'steward' with the highest level of executive support, appropriate staffing and good marketing or run the risk of undermining the very rigor and process improvements that they're seeking to establish."

Reprinted from: *PM Network*, Project Management Institute, September 2003. Copyright and all rights reserved. Material from this publication has been reproduced with permission. Research from the Gartner Group suggests that information systems organizations, which establish enterprise standards for project management including a project office with suitable governance, will experience half as many major project cost overruns, delays and cancellations as those that fail to do so. Given the resources necessary and the competitive importance of projects, the profession of project management must be elevated to the strategic level so that its impact can be felt at the bottom line.

Software vendors, with their new enterprise solutions, are unable to reach the senior level due to the current positioning of project management within organizations. Project management is still too often seen as a "functional activity."

An important part of corporate strategy is an appropriate organizational design for the implementation of projects. Projects are the basic building blocks in the design and execution of corporate strategies, requiring ongoing strategic management and surveillance. Without the proper mechanism for aligning projects with strategic objectives, organizations will experience imprudent financial performance, delay of effective strategies, wasted resources and support of a culture that condones poor quality in the management of corporate resources. One of the greatest threats to business success is an organization's inability to see the value and effectiveness of enterprise solutions. But organizations must be pragmatic as they bring in stronger project management governance.

"It's a balancing act," Ballou says. "Because if the CPO is anemic, she or he will also fail. It may seem easy. 'Put someone in charge, and you'll do fine.' But it doesn't work that way in practice because people's habits are unbending."

Project management in the 21<sup>st</sup> century is changing. Traditional project management focused on efficiency, operational performance, and meeting time and budget goals. While these are still important, today's dynamic business environment and global competition require finding new ways to make projects into powerful, competitive weapons.

In the quest to reach these strategic objectives, project management no longer can be perceived as another operational activity. Its

## **Eight Critical Responsibilities of a CPO**

- 1. Strategic Input and Direction
- 2. Project Portfolio Management
- 3. Resource Prioritization
- 4. Business Interface
- 5. Development of Project Management Standards, Policies, Guidelines and Procedures
- 6. Project Review and Analysis
- 7. Budget
- 8. Project Management Competency Development

position in the organization must be strategic. Project management has created a strategic pathway with the emergence of alternative teams in the modern organization that deal with change initiatives, such as reengineering, benchmarking, simultaneous engineering and self-managed production. Traditional organizational hierarchies have been changes forever in favor of a horizontal, projectized form of organizational structure.

The next organizational change necessary to enable project management to be fully effective will be to have a CPO managing cross-functional activities and providing the strategic perspective that every organization needs.

#### Postscript, 2008

As we go to press with the second edition of this book, the title of CPO is truly becoming widespread. A quick search on the title finds employment ads, press releases, and corporate position descriptions in organizations from India to the U.S., and in industries as varied as mining, governmental agencies, nonprofits, and IT. In 2007, the Project Management Institute chose, as the Person of the Year, Eric Norman, the CPO of Atlanta-based Choice Point, Inc. The Chief Project Officer has arrived.

## The Strategic Project Office Executive Roles and Responsibilities

J. Kent Crawford and Jeannette Cabanis-Brewin

Project failure rates are falling, cost and time overruns are down, and large companies have made the most dramatic improvement.<sup>1</sup> Three factors explain these encouraging results: 1) a trend toward smaller, less complex projects; 2) better project management; and 3) greater use of "standard infrastructures" — such as those instituted through a Project Office. Large companies show up as more successful in the study cited above for one simple reason, in our view: large c`ompanies lead the pack in the establishment of enterprise-level or Strategic Project Offices.<sup>2</sup>

With a Strategic Project Office, executive management can get the big picture of all project activity across the enterprise from a central source; project priority can be judged according to a standard set of criteria, and projects can at last fulfill their promise as agents of enterprise strategy.

### A "Systemic Approach"

To effectively deploy project management throughout an organization, all the players must be on board. That's why the most effective project offices are at the corporate level, providing data on total corporate funding for projects, the resources utilized across all corporate projects, capital requirements for projects at the corporate level, materials impact, supplies impact, the procurement chain impacts. When corporate executives can effectively prioritize projects and make fact-based decisions about initiation, funding, and resources, they are in a position to apply systems theory to their organization: to optimize the system (corporation) as a whole, rather than just tinkering with the parts (projects and departments).

Project management improvement on this organizational scope not only brings benefits to executives, however: it also requires their engagement. In fact, according to research, top management involvement is one of the key factors in organizations that demonstrate competence in managing projects, and in managing by projects; similar studies have reinforced the finding that senior-level sponsorship and visibility are keys to a successful project management office. Although only a fraction of the 67 percent of companies who have project management have enterprise-level SPOs, those companies that have a senior-level executive who oversees the PMO reported greater project success rates (projects completed on time, on budget and with all the original specifications) than those without. In fact, the higher the PMO resides in the organization, the fewer the problems reported. With actively engaged executive players, the project office acts as a communication tool, maintaining a consistent flow of communication to senior executives.3,4,5

A recent study published in the *Project Management Journal* noted that organizations with strong project management capability, and the related ability to leverage projects for competitive success, display a different view of the role of executive management. They "reframe the management task" so that the enterprise's objective is to improve the way the organization manages its project managers and its project management processes. Improved performance on individual projects follows as an outcome of the redesigned management structure and processes.<sup>6</sup> This "systemic approach" contrasts with many organizations' habit of focusing on and intervening in on individual projects on a case-by-case (and often, crisis-by-crisis) basis, rather than the enterprise level. So, what does the ideal executive role consist of?

## The Executive Role

The primary role of executives is to establish vision and direction for the project management initiative and allocate funding and resources to it. It isn't necessary for executives to become project managers; but it is necessary that they enthusiastically support, with words, actions, funding, and support the aspirations of the project management community within their organizations. Ideally, management understands the strategic implications of the Project Office initiative and its impact on the company's bottom line in terms of more rapid new product development, the potential for rational allocation of resources through project portfolio management, and the resulting increased return to shareholders. (For tips on giving executives the information they need about project management, see Figure 1.)

The keystone in a Strategic Project Office deployment strategy is the Executive Sponsor. The Executive Sponsor paves the way for the deployment by dealing with other executives as a peer when conflicts over resources arose. Without an Executive Sponsor, the chances of successfully deploying a Project Office are very slim.

### **Identifying the Executive Sponsor**

Choose a sponsor for the SPO who can communicate the plan, and keep the organization's priorities straight. He or she must be a strong advocate for the changes involved, extremely knowledgeable about the benefits of project management, and have the ear and confidence of the powers-that-be. If senior management doesn't fully understand and support the project management approach, it may be time to bring in an external consultant who has dealt with a number of companies in your market segment to explain and execute the advantages of project management and the results achieved by others who have successfully implemented a Project Office.

The Sponsor chosen to spearhead the Project Office initiative will have a particularly important role in leading organizational change; thus the Sponsor of the Project Office initiative must be highly placed. A simple rule of thumb for choosing a person with sufficient authority is simply this: Does he or she have the authority to cancel the project?

Lack of an executive sponsor with sufficient authority is a major risk to the success of your initiative, and we recommend that work not proceed until you engage a effective project office sponsor. This step should take place early in the initiative to ensure the project will move forward. The value of a higher-level executive sponsor is that they can help adjust priorities relevant to the priorities of the overall organization. He or she can cut thru some of the political challenges that a mid-level Project Office "project manager" will have extreme difficulty in achieving.

#### The Project Office Steering Committee

As the liaison between senior corporate management and the SPO project team, the Executive Sponsor should be the chair of the Project Office Steering Committee. This committee is normally made up of the director of the SPO, the Project Sponsor, the heads of key functional organizations (members of business units affected by the project or projects being dealt with at any one time), and a senior corporate official, such as the CEO or COO. The Project Office Steering Committee should be comprised of three to seven individuals total. This committee is formed to change the corporate project culture and is active on a continuing basis to select, prioritize, and evaluate the entire corporate portfolio of projects. In addition, it acts specifically on very large projects having overall corporate impact, such as the SPO initiative. When major issues or problems with the project must be escalated, the Project Office Steering Committee provides a forum for issue/problem resolution. This committee initiates the project in a management oversight role, and also continues to hold end-of-phase reviews throughout the duration of the deployment project, monitoring progress against the objectives to determine whether or not the SPO is meeting the objectives that were established at initiation. The Project Office Steering Committee may also discover the need to include technical and internal client representatives - senior staff from other business units that may be affected by the SPO deployment. If there are external customers who are critically affected, you may want to include them on this committee as well. This group is, in effect, the board of directors for the SPO and other mega-projects.

As a "board of directors," the Project Office Steering Committee has input into the strategic direction and will play a part in the review of the SPO charter. In some cases, members of the committee

Barriers to Executive Education	How to Overcome the Barriers
Executives are too busy to take time for training.	• Deliver information in bite-size components, say two hours maximum length for any one session.
Executives will never use project management; that's for their direct reports.	<ul> <li>The goal is not to create experts, but to increase their awareness of the potential of project management: to enlighten them as to how it can help them achieve their personal and professional objectives.</li> <li>Do not focus on tools and techniques: instead, give them the information needed to interpret the various types of reports generated by project management professionals.</li> <li>Teach enough project management so that they can ask the right questions to get the right picture from the project data.</li> <li>They should understand the realities of managing projects, so as to avoid unrealistic expectations.</li> <li>They should be able to connect the improvement in the management of projects with the company's business strategy.</li> </ul>
Executive education must be delivered differently than the traditional classroom approach.	<ul> <li>Senior executives must be engaged in a dialogue of exchange rather than the classroom paradigm of "I teach, you learn."</li> <li>An executive session requires a much smaller audience, preferably 12–15 at most.</li> <li>Use an action-oriented format: analyze where the organization rates on the project management maturity scale, identify steps needed to move towards maturation, and assign action items to the members of the executive staff. This sends a message to all attendees that they are expected to be active participants in the process.</li> </ul>

**Project Office Steering Committee Training** 

Figure 1. Adapted from Jimmie West, Even executives sing the blues, *The Project Management Best Practices Report*, Center for Business Practices, June 2000.

will need to sign off on key elements of the deployment plan (such as the project charter) since the charter defines the scope of the proposed SPO and its specific roles and responsibilities with respect to functional departments and business units. The Project Office Steering Committee will also continue to revisit the goals and objectives of the SPO, as well as the critical deliverables, and continue to work within the organization to achieve executive buy-in to all those areas.

Projects cannot be accomplished by a project manager and team alone. Many of the potential obstacles to success — things like poor definition of the business case for a project, lack of alignment with strategic corporate objectives, inadequate funding, or refusal to cooperate cross-functionally among the departments — must be cleared away at the executive level of the organization. That's why the project sponsor has always played such a critical role in the successful management of an individual project.

When initiating an organizational change project on the scope of a project office, executive sponsorship is even more necessary. The level of authority required to drive this kind of change does not exist on the project team or even the departmental level. The executive leadership of the enterprise must commit the organization to this new direction and show the resolve necessary to see these changes through to completion. Make no mistake: deploying a corporatelevel PO is a strategic program, and management has a critical role to play.

<sup>1</sup> The Standish Group, *CHAOS Report*, 1999; see current results at www. standishgroup.com. Also Jim Johnson, Turning chaos into success, *Software*, December 1999.

<sup>2</sup> The Value of Project Management, Center for Business Practices, 2001.

<sup>3</sup> Lorraine Cosgrove Ware, By the numbers, *CIO Magazine*, July 2003; Megan Santosus, Office discipline: Why you need a project management office, *CIO Magazine*, July 2003.

<sup>4</sup> The Value of Project Management, Center for Business Practices, 2001.

<sup>5</sup> C.W. Ibbs and Young-Hoon Kwak, Benchmarking project management organizations, *PM Network*, February 1998.

<sup>6</sup> Christopher Sauer, LI Liu, Kim Johnston, Where project managers are kings, *Project Management Journal*, December 2001.

## The Right Stuff Competency-Based Employment

J. Kent Crawford and Jeannette Cabanis-Brewin

One point that must be stressed about the importance of identifying high-performance project managers is this: from within their ranks will come the next generation of project executives – Project Office Directors, Portfolio Managers, CIOs, CPOs ... perhaps even CEOs. Experienced project managers with the aptitude for business bring a valuable project-focused intelligence to corporate leadership. But these leaders must be developed, from team members into project managers, from managers into leaders. "At the heart of organization-al project managers," says Oxford University's Christopher Sauer. "Individuals do not innovate and advance organization-al learning just because to do so improves organizational capability; they do so because human resource policies and the organization's values encourage them to feel they have a personal stake in helping the organization perform better in the long term."<sup>1</sup>

Sauer, in his study of successful project-based organizations, points out that organizational capability is built from the ground up: by making it possible for the people who do projects to do their best. A first step in this building process is defining what "best" means.

Focusing on building project manager competencies to the "best" level means first identifying what needs to be improved. To do this requires a comprehensive competency assessment program. The results of this type of individual assessment helps organizations begin to harness the power of their project personnel's skills

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and abilities. It also allows the organization to focus training where it's most needed. Matching project manager and team competencies with the types of projects they are prepared to handle will result in more effective project execution, and thus better organizational performance. Competency-based project human resource management is a bold approach to the professionalization of the role of project manager; not only in terms of providing them with the means to acquire the needed skills and competencies, but also making it possible for experienced project managers to bring their knowledge up through the ranks to senior-level positions in the organization.

## **Dimensions of Individual Competence**

Various writers on the theme of competence in business have broken down competence into its components in different ways. However, the following four dimensions seem to be universally acknowledged.

#### Knowledge

For project managers, the "body of knowledge" contains more than simply specific knowledge about how to plan and control projects. There's also knowledge in their chosen discipline (engineering, marketing, information systems, etc.); knowledge of other disciplines that come into play in the industry in which they work, such as regulatory law or technology advancements; and knowledge of the business side (finance, personnel, strategic planning). Knowledge in all these areas can be built up through reading, classroom training, research on the internet, and the kind of informal knowledge transfer that takes place constantly in the workplace and in professional associations.

#### Skills

For a project manager, such skills may fall into any of three areas: their area of subject matter expertise (engineering, marketing, information systems); project management skills related to planning and controlling; or human skills (influencing, negotiating, communicating, facilitating, mentoring, coaching). The technical skills become less and less important as the project manager's responsibility for the managerial skills grows: this is one reason why excellent technologists have often failed as project managers. As roles become more abstract – one of the hallmarks of knowledge work – the difficulty of defining the competencies necessary becomes complex. Skill at typing is easy to quantify; skill in strategic thinking, innovation, or teambuilding much harder.

#### Personal Characteristics

On the intangible, but extremely important, side of the ledger are things like energy and drive, enthusiasm, professional integrity, morale, determination, and commitment. In recent years, a number of project management writers have focused on these traits as being perhaps the most important for project managers, outweighing technical knowledge and skills.

#### Experience

When knowledge can be applied to practice, and skills polished, experience is gained. The great thing is that it doesn't stop there. Experience also increases knowledge and skill.

## **Competency Models**

A competency model comprises a list of differentiating competencies for a role or job family, the definition of each competency, and the descriptors or behavioral indicators describing how the competency is displayed by high performers. Options include developing models for entire families of jobs (all project management personnel) or whole departments, such as all information technology employees.

There are two types of competency models. Descriptive competency models define the knowledge, skills, and behaviors known to differentiate high performance from average performance in the current environment or recent past. Descriptive models can have high validity because they are built from actual data about the difference between average and star performers. Prescriptive models lean toward describing competencies that will be important in the future. They are helpful in dynamic environments or to help drive a major change in culture or capabilities. Competency models provide a catalogue of the leadership traits desired by the organization in its managers. These traits in turn become the key attributes to be developed.

There are many advantages in using competency models to manage knowledge workers. First, they are often constructed around tangible dimensions – behaviors, outcomes, or activities. These can be measured. Second, they send a clear message to an organization about the specific attributes that are considered valuable. Third, they provide a framework or checklist for both individual managers and their organizations to benchmark themselves – in other words, to see which competencies are strong or weak within the individual and within the management ranks of the organization.<sup>2</sup> So, while the work processes may be intellectual in nature, and the work product somewhat intangible, effectiveness can still be gauged in an objective manner.

While implementing competency-based management tools may be expensive in the short term, the costs are outweighed by the financial benefits. Craig Russell examined the value of competencybased selection in 98 candidates for executive roles in a Fortune 50 company. Monitoring their performance over three years, he calculated that general managers selected using a competency-based process each generated an additional \$3 million in annual profit as compared with recruits who were selected using a previous process that was not based on competencies.<sup>3</sup>

#### Models for Project Management

Within the last decade, research attention has been focused on identifying competencies for project managers. The seminal work in this field was done by the Australian Institute of Project Management (AIPM), whose National Competency Standard for Project Management was adopted by the Australian Government as part of that country's national qualification system. In England, the Association of Project Management (APM) has created competency standards for project controls specialists and project managers. The publication of U.S.-based PMI's competency standard in 2002, after five years of developmental work, established a new framework for thinking about the components of competence in a project management context.<sup>4</sup> This standard, along with other work by educational institutions and private sector companies (including our own), is framed on the concept that, when it comes to managing projects, many of the competencies required are specific to the discipline, but not to the organizational context. That is, a project manager who has cut his or her teeth on projects in the telecom industry might do very well on other types of projects that require either creating or introducing new technology. The existence of project manager competency models streamlines the adoption of competency-based management for project-oriented companies.

From our point of view, a project manager competency assessment should determine who has the best mix of traits and skills to be a superior project manager, or the potential to become one. By examining the knowledge, potential, and behaviors of project managers (or project manager candidates), the organization can achieve the following results:

- Project managers are appropriately recruited.
- Project manager training is more effective.
- Projects are managed at a higher level of quality.
- More projects are delivered on time and within budget.
- Project failure rates decline and time to market increases.
- Profitability improves.

## What a Project Manager Competency Assessment Looks Like

The best way to demonstrate how to assess project management competency is to look at an existing model in detail. The model co-

developed by PM College and Caliper, a leading human resources assessment firm, The Project Manager Competency Assessment Program (PMCAP) provides us with a ready example.

The PMCAP gives organizational leaders a holistic view of an individual's current project management knowledge and skills, along with his or her potential to effectively fill a project manager role. Armed with this diagnostic information, companies can determine which individual project managers have the highest potential to grow and excel. The assessment results also help organizations target training only where deficiencies are recognized, thus eliminating unnecessary training programs and ensuring more productive results from training investment.

Like other effective competency assessment systems, the PM-CAP has three components: a multi-level knowledge test, a personality and cognitive assessment, and a multi-rater survey reviewing the current workplace performance of project managers. These three instruments address three aspects of competence: Knowledge of project management concepts, terminology, and theories; behavior and performance in the workplace; and personal traits indicative of the individual's project manager potential.

#### Assessing Knowledge

The Knowledge Assessment Tool measures the level of an individual's project management knowledge. It tests the candidate's working knowledge of the language, concepts, and practices of the profession with questions based on the Project Management Institute's *PM*-*BOK*® *Guide*, the ISO-approved industry standard. The advantage of using this standard is that the *PMBOK Guide* has created a uniform language of project management that can be used across all industries. Knowledge assessment should address both the five process areas (initiating, planning, executing, controlling, and closing) of the *PMBOK Guide* as well as the nine knowledge areas (integration, scope, time, cost, quality, human resources, communications, risk, and procurement management). On an individual basis, the candidate can see how they scored on each knowledge area, how they compared to the highest score, their percentile ranking, and how many areas they passed. For the organization, an aggregate table provides insight into the areas of strengthened areas that need improvement for their entire population. This information is used to begin developing a targeted education and training program designed to meet those needs.

#### Assessing Behavior

A second area of assessment is in behaviors exhibited in the workplace. This approach requires the use of a multi-rater tool (sometimes called a 360-degree tool), which allows the acquisition of feedback on the project managers' behavior from a variety of sources – typically a peer, subordinate, supervisor, and/or client, but always someone who has first-hand knowledge of the candidate's behavior in the workplace. This type of assessment should focus on the desired behaviors that effective project managers exhibit in the execution of their jobs. For example, it might examine the creation of a stakeholder communication plan, the development and distribution of a team charter, or the execution of a risk management plan. Individuals rate themselves on their competency in several key performance indicators. The independent assessors then rate the individuals on those same criteria. Ratings are compared. A multi-rater assessment provides holistic view of the individual's project manager behaviors and serves as a gauge for determining which behaviors are present or absent, how well the behaviors are displayed, and which behaviors demonstrate areas for potential growth.

#### Assessing Potential

Potential to perform the Project Manager role is evaluated through a series of questions that test their ability to think and solve problems in specific situations. The role of project manager carries with it a number of critical factors that, when used together, can identify the potential of the project management candidate to be successful in managing projects. In addition, these factors can indicate whether

the candidate would be best used in small, non-complex projects or large, highly sophisticated and complex projects. Factors to consider include the abilities to handle stress, be flexible, and manage personal time; organization skills; and conflict management. The candidate's score is compared to high performers (project managers who show the highest level of competency). The instrument for measuring potential in the PMCAP is the Caliper Profile, an assessment battery developed by Caliper that provides competency-based reporting to the project management industry.

The information generated by the three assessment instruments is analyzed to identify the top three to five areas for growth opportunities. Together, the knowledge, potential, and behavior assessment profiles determine the individual's:

- Suitability for the project manager job, or if he or she should be redirected toward another career path.
- Potential to become a superior project manager.
- Skill area strengths and weaknesses.
- Need for training and what types of training programs will be most effective.

The assessment of this information is done through gap analysis. The knowledge gaps are determined by examining the differences between the demonstrated level of knowledge and the level of knowledge that is required. The behavioral gaps are identified by examining the differences between the self-rating of the project manager candidate and the rater's score. The gaps in both knowledge and behavior, based on the size of the gap, are targeted as developmental opportunities. The results of this integrated assessment are used to create professional development plans for project manager candidates.

While an individual assessment is being conducted, the organization should be determining what roles they will need to ensure an improved level of project performance. Possible roles include team leaders, multiple levels of project managers, program managers, project portfolio managers, project executives, project office directors, and chief project officers. With each of these roles, the organization will need to create effective job/role descriptions that define performance/competency expectations, experiential requirements, and prerequisites of whatever technical skills are required.

With these role descriptions in place, the organization can conduct a gap analysis between their desired state and the existing state. This analysis is accomplished by aggregating the individual results of the knowledge assessment with the multi-rater assessments. Once this gap analysis is completed, the next step is to examine the results of the assessments of potential to identify the project managers who display the most potential to succeed in the project manager role. The key to examining this data is to identify the project managers who will be successful in either the small, non-complex projects or the larger, complex projects.

#### Benefits to Organizations and Individuals

The Project Manager Competency Assessment Program is designed to improve the effectiveness of project management training and development programs. A gap analysis is performed to analyze the project manager's current capabilities and skill areas requiring improvement. Therefore, training and development initiatives can be tailored to individuals' needs, saving countless dollars on unnecessary training.

The PMCAP also increases the quality of project management recruitment and job placement decisions by identifying immediately which candidates are or have the potential to become effective project managers, recruitment and job placements are more effective. Thus the "right" people are placed in the "right" jobs.

Because of the impact of excellent project managers on project outcomes, the more qualified the staff is to manage projects, the better the organization will be able to execute, manage, and complete projects. This leads to fewer project failures, increased organizational efficiency, faster project and product delivery times, reduced costs, and higher profitability.

From the individual's point of view, the PMCAP provides career guidance. Individuals are able to view their assessment results to

determine their best career path. If the results indicate that they are or have the potential to be effective project managers, they can learn which knowledge and skill areas to improve upon.

Of course, a series of tests does not in and of itself guarantee all these results. Ancillary activities to assessment might include individual feedback review and coaching; remediation plans for identified skill gaps; performance/profile correlation and industry benchmarking; and curriculum development for courses in project management and leadership.

<sup>1</sup> Christopher Sauer, LI Liu, Kim Johnston, Where project managers are kings, *Project Management Journal*, December 2001.

<sup>2</sup> Louis Carter et al., *Best Practices in Organization Development and Change*, Jossey-Bass, 2001.

<sup>3</sup> C.J. Russell, A longitudinal study of top-level executive performance, *Journal of Applied Psychology*, 2001.

<sup>4</sup> *Project Manager Competency Development Framework*, Project Management Institute, 2002.

# New Staffing Models Boost Project Efficiency

J. Kent Crawford and Jeannette Cabanis-Brewin

Project management, like any other business model or technique, is dynamic: it changes in response to changes in the social or technological environment. In recent years, new technologies have had a dramatic impact on our society, and these changes are mirrored in new ways of organizing and communicating within the project environment. In particular, the increasingly virtual project environment has implications for project manager competencies and career paths, as does the evolving practice of outsourcing the project management process.

The virtual workplace has edged its way into our business environment for many reasons. According to a 3M survey, 50% of corporate work is conducted in teams and 25% of those workers collaborate remotely. Two of every three Fortune 500 companies now employ telecommuters. Obviously, companies are doing this because there are business benefits. The primary benefit is that a virtual workforce can unite highly qualified people without location restrictions. Other reasons that an organization might want to consider being virtual rather than "traditional" are the ability to:

- Leverage skills throughout the organization.
- Provide customers with the "best and brightest."
- Balance work/home relationships for employees, engendering loyalty and morale.

Excerpted from: Optimizing Human Capital with a Strategic Project Office, Auerbach Publications/Center for Business Practices, 2006.

- Save organization overhead costs (up to \$1 million per month for one Fortune 500 company that recently downsized and consolidated office space in multiple metropolitan areas).
- Optimize employee time and energy for work by eliminating commuting time and hassles.

Therefore, the challenge of managing a virtual team has become a common part of the organizational climate. Such teams naturally require competencies in written and verbal communication as well as the use of communication technologies that project teams may not have needed twenty years ago. Not only that, but the project or functional managers who manage virtual workers also need to develop new competencies.

### The New Project Management

The project manager's challenge has always been to combine refining two distinct area of competence:

- The art of project management Effective communications, trust, values, integrity, honesty, sociability, leadership, staff development, flexibility, decision making, perspective, sound business judgment, negotiations, customer relations, problem solving, managing change, managing expectations, training, mentoring, consulting; and
- The science of project management Plans, WBS, Gantt charts, standards, CPM/precedence diagrams, controls variance analysis, metrics, methods, earned value, s-curves, risk management, status reportings, resource estimating and leveling.

Because of the nature of the enterprises that were early adopters of project management (military, utility, construction industries), the profession "grew up" in an environment with a strong cost accounting view and developed a focus on project planning and controls – and emphasis on the science. This is the kind of project management that we think of as being "traditional" or "classic" project management. However, the reality is that it probably simply represents an early evolutionary stage in the life of the discipline. "New project management" is characterized by a more holistic view of the project that goes beyond planning and controls to encompass business issues, human resource issues, strategic import, and marketing. The new project management places its focus on leadership and communication rather than a narrow set of technical tools, and advocates the use of project management office in order to change corporate culture in a more project-oriented direction.

As a result, the role of the project manager has expanded in both directions: becoming both more business- and leadership-oriented on one hand, while growing in technical complexity on the other. The result has been that the title "project manager" today often falls to an individual who is not only poorly prepared for the role, but carries a "kitchen-sink" job description that ranges from strategic and business responsibilities to paperwork to writing code.

However, there's hope. The now-widespread use of the project management office means that companies are now developing specialized project roles and career paths, defining specific competencies for these roles, and providing "a fork in the road" that allows individuals who are gifted strongly either on the art side of the ledger — as program and project managers and mentors — to flourish, while allowing those whose skill lies in the science of project management to specialize in roles that provide efficiency in planning and controlling projects. While, on the surface, an enterprise project office may seem to add more bureaucracy, in fact it can simplify project management by making it possible to break out, cluster, and create specialties from the many project management tasks that have until now been lumped together into one near-heroic role.

The present challenge is in defining these two separate paths. Because the project leader has been found to be one of the most (if not the single most) critical factors to project success, much published research exists on the roles and skills of project managers. Current industry research has found that a deficient project management workforce is one of the leading culprits of failed projects, which can cost companies millions of dollars annually. Much effort has therefore been devoted to understand what project managers can/should do to enhance the chances of project success and have found that leadership, communication, and networking skills top the list. In spite of the importance of leadership characteristics for project managers, researchers and practitioners observed that project managers in many organizations are seen by senior management as implementers.<sup>1</sup>

Organizations can avoid this problem by determining beforehand who has the best mix of traits and skills to be a superior project manager, or the potential to become one; and by creating career paths for both technical project managers and leadership-oriented project managers so that senior management can fully appreciate the breadth of the roles necessary to the effective management of projects. Technical project managers tend to focus more on process while business project managers are more concerned with business results. Ideally, a balance between the two is required, determined by the project type, organization culture and systems.<sup>2</sup> Confusion of roles and responsibilities would be averted if these two very different roles were not both referred to as "project managers," and this is an important step in developing project-friendly human resource policies.

And there are other roles that can be broken out, further streamlining the leadership work of the project manager. Many tasks that have long been part of the project management landscape feature elements of administrative work, for example.<sup>3</sup>

Next, it's important to review your existing project managers in terms of their appropriateness for these roles, confirm your ablest individuals as well as those who have potential. Review the remaining project managers against established inventories of skill sets or competencies to identify areas for development, then prepare and implement a development plan for individuals. We should note that what may be "unsuitable" in a project manager is often exactly suitable to the role of project planner and controller.

#### The Emergence of the Project Controller/Planner Role

The development of the project controller/planner position has been an evolutionary process. Initially, many organizations created a position called "coordinator." The coordinator was responsible for handling administrative tasks, gathering status information, entering data into a timekeeping and scheduling system, and helping to produce status charts.

Over time, additional responsibilities – such as tracking issue and risk logs, analyzing schedules, and facilitating planning sessions – were added to the coordinator role. More recently, their responsibilities increased to include handling resource constraints and allocations, schedule and critical-path analysis, and financial reporting of earned value, and other documenting sufficient to comply with the Sarbanes-Oxley Act.

Today, the role of project coordinator has evolved into that of project controller/planner. The new project controller/planner supports the project manager by taking over critical, detail-oriented, time-intensive tasks, such as the ones discussed above. As a result, the project manager is free to focus on more strategic project goals and objectives.

Earlier, we discussed the core tasks of the leader. It's worthwhile noting that the core tasks of the manager have been identified as:

- Planning the work.
- Organizing the work.
- Implementing the plan.
- Controlling results.

These tasks align with the role of planner/controller. Together, the project manager and planner/controller resolve the leader/manager dilemma by supplying both aspects of these roles in collaboration.

The project controller/planner is a key member of the project team and works directly with the project manager to help define the project's vision, goals, and objectives; analyze progress reported against the work schedules; and recommend and take action to improve progress. For a visual representation of how the two work in tandem, please see Table 1.

In order to achieve required consistent documentation and reporting, many organizations are positioning the project manager and project controller/planner as part of a centralized project support

#### PROJECT MANAGEMENT ROLES & RESPONSIBILITIES

PMBOK® Guide Knowledge Areas	Project Manager Functions	Project Controller Functions
Scope Management	<ul> <li>Work with project owners to ensure all scope (features/functionality) is explicitly defined and documented</li> <li>Accountable for maintaining integrity of scope, or authorizing scope changes</li> </ul>	<ul> <li>Track scope changes</li> <li>Gather data and analyze impact of change</li> <li>Make recommendation(s) to the project manager</li> </ul>
Quality Management	<ul> <li>Ensure project fulfills business needs</li> <li>Overall responsibility for the quality of any products delivered by the project</li> <li>Accountable for overall health of the project</li> </ul>	<ul> <li>Collect project documentation for quality reviews</li> <li>Prepare project status reporting on a set-interval basis, i.e. provide a project dashboard giving a high-level view of the project's health</li> </ul>
Time Management	<ul> <li>Obtain approval on schedule and any revisions</li> <li>Proactively improve the project timeline through parallel tasking or finding smarter ways to carry out work</li> </ul>	<ul> <li>Develop and maintain schedule</li> <li>Collect status updates for tasks</li> <li>Analyze variations, slipping tasks, impact of task changes, critical path, overall ability of project to deliver on time</li> <li>Perform earned value analysis</li> <li>Perform burn rate projections</li> <li>Recommend improvements</li> </ul>
Cost Management	<ul> <li>Work with Owner/Sponsor to obtain initial budget</li> <li>Proactively obtain further funding if needed</li> <li>Charged with ultimately delivering project within set budget</li> </ul>	<ul> <li>Track all expenditures</li> <li>Analyze spending trends and estimate final costs; report any deviation from baseline</li> <li>Recommend method to keep project under budget</li> </ul>
Risk Management	<ul> <li>Canvas team to identify all issues and risks; liaise with other business partners or PMs who have completed similar projects</li> <li>Develop mitigation ideas and work to have strategies in place should they be needed</li> </ul>	<ul> <li>Facilitate team session to identify risks</li> <li>Document/track issues, risks</li> <li>Oversee risk analysis &amp; impact</li> <li>Provide project manager with status report of open issues and risks</li> <li>Escalate, as necessary, extraordinary risk impacts and /or issues</li> </ul>

Table 1. Job responsibilities of Project Managers and Project Controllers

#### New Staffing Models Boost Project Efficiency

PMBOK® Guide Knowledge Areas	Project Manager Functions	Project Controller Functions
Procurement Management	<ul> <li>Ultimately responsible for procurement of all products, resources, and materials necessary to successfully complete the project</li> <li>Maintain open communication with suppliers/procurement to ensure quality products/services from suppliers.</li> </ul>	<ul> <li>Build sub-schedule to determine procurement dates</li> <li>Collect updates from suppliers and analyze impacts to project schedule</li> </ul>
Communications Management	<ul> <li>Communicate with entire organization, from the project team to the C-level;</li> <li>Negotiate conflict resolution when needed, between team members or business partners</li> <li>Honestly represent project status to project sponsor and other stakeholders</li> </ul>	<ul> <li>Communicate with team to delegate tasks and provide status of project activities and milestones</li> <li>Facilitate planning sessions including development of project charter, project plan, WBS, network diagram, and schedule.</li> <li>Facilitate risk sessions</li> <li>Facilitate lessons learned sessions</li> </ul>
Integration Management	• Charged with making sure that the project plan and processes are followed throughout project; negotiating with sponsor or key stakeholders should modifications to the plan become necessary	• Work with the project team to develop a project plan, including facilitating processes for handling risks, issues, scope, quality, and general project communication
Human Resource Management	<ul> <li>Resolve conflict within the project team</li> <li>Boost morale and reward project victories, i.e. hitting milestone dates</li> <li>Negotiate with project sponsor to obtain scarce resources or materials</li> <li>Garnering team buy-in and support for the project</li> </ul>	<ul> <li>As part of schedule development, determine that project has all needed resources</li> <li>Ensure resource allocations are current, i.e. that a resource has adequate project hours to cover tasks and has availability to work on project</li> <li>Educate project team on status reporting techniques and manage the process.</li> </ul>

organization, usually referred to as the Project Management Office (PMO) or the Strategic Project Office.

Specifically, the project controller/planner is responsible for carrying out the following six responsibilities:

- 1. Advise the Team on Proper Processes. The project controller/ planner educates and advises the team on project management policies and standards, methodologies, and processes across all phases of the project: initiating, planning, controlling, executing, and closing. This includes describing the processes' purpose, utilizing scheduling and costing tools, determining who is responsible for deliverables, and detailing approval procedures.
- 2. Facilitate/Oversee Project Planning/Control Sessions. Organizing and facilitating team planning sessions also falls within the realm of the project controller/planner's role. These sessions may deal with a variety of topics such as planning, developing the Work Breakdown Structure (WBS), developing the Network Diagram, integrating the WBS and network diagram into the project schedule, estimating resource hours and task durations, controlling issue/risk management, capturing lessons learned, and project reporting.
- 3. **Develop the Project Schedule.** Using Project Office standards, the project controller/planner works with other key members of the team to develop the project schedule, including resource leveling and critical path analysis. Once base-lined, the schedule is used to measure work progress, manage resource assignments, track milestones, and monitor and report on project performance metrics.
- 4. **Control Progress to Ensure Success.** The project controller/planner proactively manages the schedule to ensure that the project is delivered on time. As part of this responsibility, the project controller/planner must: regularly collect task statuses, update the schedule; analyze any variation or forecasted variation to the plan, emphasizing items such as critical path, slipped tasks, and upcoming tasks; calculate, analyze, and present metrics such as earned value; manage resource assignments including submitting resource requests, monitoring current allocations, and forecasting future needs; and meet with the project manager to discuss project status.

- 5. Track and Analyze Costs. The project controller/planner must work with available accounting and project management software tools to track actual (or blended) costs, including man-time, equipment usage, procured resources, etc. He or she must also analyze cost run rates and variations to extrapolate/forecast total costs, as well as report findings to the project manager, project office, and any financial oversight committee.
- 6. Manage Issue, Risk and Change Control. The project controller/planner ensures that issues, risks, and change requests are identified, analyzed and estimated, so they can be escalated to the appropriate levels of management for disposition, and documented/tracked in the project's collaboration database. The project controller/planner monitors issue, risk, and change request resolution dates; contacts team members listed as responsible parties, for status and documentation; offers assistance to responsible parties to facilitate progress and/or resolution meetings; and, provides the project manager with the status of open issues, risks, and changes.

In order to efficiently handle the responsibilities outlined above, the successful project controller/planner must possess technical expertise in project management software, and related spreadsheet and/or database (financial, resource) tools; as well as business process expertise in cost budgeting and estimating, risk analysis, critical path diagramming and analysis, resource forecasting, and change control. In contrast to the project manager candidate, the ideal project planner/controller (note that these two role descriptions are often combined, but may be two separate roles in large multiproject environments) has the following personal and professional characteristics:

- Logical thinker and problem solver.
- Organized and detail-focused.
- Numbers-oriented.
- PM Software expertise.
- Application software expertise (accounting, procurement, etc.).

It's important to note that the project controller/planner may be supporting several projects simultaneously (based on project size and work experience). Therefore, he or she must also be flexible in dealing with multiple project managers, while maintaining the required level of standards demanded by the organization.

Just as in project managers of varying experience and skill, you'll find a hierarchy in the project planning and controls arena. A serious project controls person will have a breadth of experience that encompasses many of what we have termed "specialty areas," like change (configuration) control, risk management (from the perspective of quantifying risks with the tools), issues management, action item tracking, multi-project reporting, executive reporting, scheduling integration, organizational resource management, multi-project resource analysis, forecasting, and leveling, multi-project what-if analysis, management of the organizational (enterprise) resource library, schedule estimating, cost estimating, etc. And, just as with project managers, the organization will benefit from establishing a career path from the specialist team member level to a sophisticated multi-project position.

#### Results

#### Increasing Project Efficiency and Success

There is no denying that the role of project controller/planner has the power to positively impact project performance and project success rates. In fact, organizations such as State Farm Insurance Companies that have already installed project controllers/planners, have seen immediate improvements. Jeanne Childers, Director of State Farm's Systems Project Office, states, "We've been using the project planner role for the past six years, and with solid results. What our project managers are finding most helpful is that they can delegate time-consuming yet critical tasks like updating and analyzing schedules. This enables the Project Manager to focus more time on higherlevel issues and leadership responsibilities. By utilizing the planner role we've been able to expand the capacity of our project managers to handle more projects concurrently."

Childers concluded, "We're finding that our project planners at State Farm are an excellent asset during project planning. Many of our planners have become very skilled at organizing and leading project planning meetings. In addition, we're in the process of expanding the role of our planners to take on other project management responsibilities – under the direction of a project manager – for segments of our larger efforts."<sup>4</sup>

Another insurance executive characterized the roles relationships in this way: "We like to think of the project manager as the CEO of the project, and the Project Planner/Controller as the CFO. Like the CEO and CFO, both the project manager and project controller/planner carry out crucial duties, and both need to possess significant, albeit different, skill sets and experiences in order to bring the projects in on time, within budget, and at agreed quality levels."

In building the business case for planner/controllers, some of the benefits of developing this as a separate position and career path includes:

- It allows project managers to take on additional projects.
- It reduces risk in schedule slippage.
- It allows for more consistent and accurate status reporting.
- It increases morale in both project managers and planner/controllers.
- Project documentation improves.

#### Case Study: Virtually in Control

One example of an emerging way of organizing for project management is provided by a program our own company recently developed that we call "Remote Controls." Remote Controls is a service that supports global and virtual project management initiatives by segmenting off the planning and controls functionality within a project. Planning and controls – the project accounting aspects of project management – lend themselves well to remote or virtual work. Moving the Project Controller/Planner functionality to a remote technology-driven location allows for increased productivity, decreased cost of ownership, increased flexibility, and high quality. Because project resource needs may change through the project phases, additional or part-time project controller/planner resources can be assigned to projects quickly, since all resources are co-located. The remotely located Controller/Planner has few distractions, but is focused on the project at hand. A repository of best practices, both processes and technologies, in the project controls area is available to him or her. With the processes, technology, and knowledge available immediately when needed, the remote Project Controller/Planner is highly efficient. Services and deliverables remain identical. Even risk management, issue management, and change controls can be efficiently managed remotely. Remote planners can also track resource assignments.

At the same time, this role is a source of job satisfaction for individuals who prefer to work in quiet concentration far from the "front lines" of the projects. Our Project Controllers/Planners are experienced people who have chosen to specialize in the Project Controller/Planner role as their career path. The consulting firm incurs the overhead, equipment, and employee-related costs, while avoiding travel expenses; the client can potentially reduce headcount and save costs by outsourcing the controls functionality.

#### Outsourcing

#### Project Management Expertise as a Commodity

At one time, a debate raged within the profession as to whether project management expertise was portable or not – whether an experience project manager could lead a nomadic existence, applying the discipline in various organizations and industries. That debate is over, judging from the proliferation of professional services firms specializing in project management. Today, not only the management of single projects, but the entire project management function is often outsourced. Organizations that don't have a proficiency in managing projects, or which don't have as many project managers as they need and don't want to incur the overhead to recruit and orient new employees, increasing turn to outsourcing relationships.

For those in the project management profession, this "have talent, will travel" trend is a very positive development, allowing skilled project managers, planners, schedulers, methodologists, and trainers the opportunity to grow professionally from exposure to a wide variety of project settings. And, contrary to the widespread belief that outsourcing poses a threat to corporations' existing project management staffs, project management outsourcing enables companies to leverage their in-house resources. By working with a skilled consultancy, in-house staff benefits from a valuable knowledge transfer that can enhance the existing staff's project management performance, and broaden their network of colleagues in the discipline.

Not only project managers, but other project staff are being swept up in this trend. A recent survey of several hundred Project Office Directors and senior-level executives revealed that 39 percent of respondents said that they currently outsource project management functions like planning and controls, or are considering it. In addition, more than half (61 percent) of the responding companies use consultants for project management, primarily for augmented staffing.<sup>5</sup>

Some additional benefits of outsourcing the controller/planner role include:

- Immediate access to professionally trained and experienced personnel, without the cost of recruiting, hiring, and training.
- Consistency across all projects in following prescribed methodology, processes, and reporting techniques.
- Objective assessment of project status (no political fallout when key projects are reported to be in trouble).
- Allows internal project managers to take on additional, concurrent work without losing control over existing projects.

For companies whose project managers simply have too many responsibilities to complete them efficiently and effectively, outsourcing project controller/planners is a viable option. These external resources can forge a trusted partnership with internal project managers enabling them to achieve higher project success rates – a win-win for the project manager and their organization.

Overall, for the companies that utilize the skills of contract project managers and other project staff, there are many important benefits, including:

- Reduced costs: Bringing in a project management outsourcing partner eliminates the need to invest in internal project management training and infrastructure development. It also eliminates the need to recruit and assimilate project management specialists for unique situations.
- A framework for continuous improvement: Bringing in "ready made" processes, staff and support services jump-start the entire project management function. Service firms coach and mentor internal staff as well. By reducing the burdens of managing projects in house, companies can focus on improving in other operational areas, such as research and development, software engineering, staff productivity and quality assurance.
- Decreased employee turnover: Turnover costs of a project manager average 150 percent of the employee's salary. This includes tangible costs such as hiring and relocating new employees and intangible costs such as inefficiency and lost productivity while the job is vacant.
- Improved customer satisfaction: When companies achieve new levels of efficiency and product and service quality, customer satisfaction improves. And customer satisfaction is the key to growing sales and profits.
- Knowledge transfer from external professionals to in-house staff: The enterprise can enhance its internal project management competency with proficient outsourcing. Mentoring and coaching by the outsourced staff helps to build in-house expertise. When the client company uses documentation and benchmarking to capture and preserve new organizational learning, the benefits become long term. Outsourced project managers look at internal project management practices with fresh eyes and bring in new information about best practices. They do sector-specific research and bring in ideas from other industries that can "cross-fertilize" with their clients' base of expertise.<sup>7</sup>
- More success: By outsourcing their project offices and/or project management improvement initiatives, companies can achieve a

higher project success rate at a lower cost, enabling them to increase the value of project management competency within the organization.

• A healthier bottom line: Having a team of established experts in place to take over the project management function enables companies to focus on improving profitability much more quickly than otherwise possible. Increasing productivity, decreasing operational costs and improving product and service quality usually result in significant improvements to companies' profitability.<sup>8</sup>

## **Getting Executive Buy-In**

#### How to Build a Successful Business Case for Project Controllers

Corporate decision makers — not to mention stockholders — keep a close eye on all of their investments. The first and foremost thing that executives need to know about project management is its ultimate impact and value on their businesses. They may be suspicious of any new expenses — especially if the expenses include expanding their project management staff to include a new role. The key to building a successful business case for the Project Controller role is to educate corporate decision makers about the responsibilities of the new position, and emphasize the positive impact that it will have on the company. Here are a few key points to include:

- Strengthen communication with high-level executives. With the support of the Project Controller, Project Managers can 97 share vital information more regularly including financial reporting of earned value and other documentation sufficient to comply with regulatory requirements such as the Sarbanes-Oxley Act without taking time away from other critical project areas. Executives will have a better understanding and more control of the projects and their financial implications, and decisions will be made in a more timely fashion.
- Leverage the Project Manager and take on additional projects. By utilizing the Project Controller role, companies can leverage and

expand the capacity of project managers to handle more projects concurrently. This will enable the organization to derive benefits more quickly than before. In addition, the Project Manager should be able to spend more quality time with executives in explaining status, gaining insight into political and budgetary issues, and basically "selling" the project.

- Boost staff motivation. Many Project Managers are frustrated with the detailed tasks of project planning and controls. They would much prefer to deal with executives on scope management issues, handle high-risk issues, communicate status to the organization, and work other high visibility activities. Having a professional Project Controller reduces stress on the Project Manager and makes the job more enjoyable. Similarly, most Project Controllers do not enjoy the "politics" of project management, and would prefer to deal with the tactical staffing and scheduling issues. This, to them, is less stressful and more rewarding. Utilizing two people in these two roles of project management motivates both sides to perform their jobs well.
- Improve project performance and project success rates. By delegating critical yet time consuming tasks to a Project Controller, Project Managers can focus on higher-level project issues, while Project Controllers can ensure that no part of the project is missed or delayed due to scheduling issues or communications failures. This means that more projects will be completed on time and within budget — saving the company the debilitating cost of project failures and project delays.

## Tips for Outsourcing Project Management Functions

As the demand for Project Controllers grows, an interesting "trend within the trend" has been identified: outsourcing project management functions. In fact, during a recent survey of several hundred Project Office Directors and senior-level executives, 39 percent of respondents said that they currently outsource project management functions such project controls, or are considering it. In addition, more than half (61 percent) of the responding companies use outside consultants for project management, primarily for augmented staffing. Here is a quick look at some additional benefits of outsourcing the Project Controller role:

- Immediate use of professionally trained and experienced Project Controllers, without the cost of recruiting, hiring, and training.
- Consistency across all projects in following a standard methodology and reporting techniques.
- Objective assessment of project status (no political fallout when key projects are reported to be in trouble).
- Allows internal Project Managers to take on additional, concurrent work without losing control over existing projects.

For companies whose Project Managers simply have too many responsibilities to complete them efficiently and effectively, outsourcing the Project Controller role is a viable option. These external resources can forge a trusted partnership with internal project managers, enabling them to achieve higher project success rates – a win-win for the Project Manager and their organization. However, the Project Controller role is just one piece of the complex project management puzzle. As business needs evolve, many companies are finding that they need additional project management personnel to help support and manage their project initiatives. They're turning to outside firms to provide experts to round out their project management team, so they can get the immediate expertise they need without straining their resources. Here are a few other positions to consider outsourcing:

• Mentors. Look for highly seasoned professionals with extensive project and program management experience. Mentors should be well-versed in project management methodologies, have earned the Project Management Professional (PMP®) designation, and have the interpersonal and communication skills required to coach and mentor project managers. A qualified mentor can work with management to implement new processes, using proven change management, training, and organizational development techniques.

- Project Managers. When outsourcing a Project Manager, look for one who has earned the Project Management Professional (PMP®) designation and who has the knowledge and experience to plan, control, and execute projects similar to those of your size and complexity. This individual should come into an organization already trained and motivated to perform at a high level immediately. Good Project Managers are strong communicators, able to establish rapport at all levels within an organization.
- Methodology Developers. Should you need a new or revised project management methodology, a professional process developer may be the best choice. Most organizations do not develop business processes for a living; consider moving an experienced processional into the role for the duration of the effort to handle all integration and process customization tailored to your environment.

<sup>1</sup> Frame, J.D., The New Project Management: Corporate Reengineering and Other Business Realities, Jossey Bass, 1994.

<sup>2</sup> Dennis Comninos and Anton Verwey, Business-focused project management, *Management Services*, Jan. 2002; see also R. Graham and R. Englund, *Creating an Environment for Successful Projects*, Jossey-Bass, 1997; and J. Nicholas, *Managing Business & Engineering Projects—Concepts and Implementation*, Prentice Hall, 1990.

<sup>3</sup> Tom Mochal, Is project management all administration? TechRepublic.com, posted 29 Nov. 2002. Accessed May 2004.

<sup>4</sup> Robert Wourms, "A new way to look at PM roles: where do you fit in?" presentation, April 28, 2004, Great Lakes (Detroit) Chapter of PMI Symposium.

<sup>5</sup> Center for Business Practices, Project Control Functions: A Benchmark of Current Business Practices, 2004.

<sup>6</sup> Robert Wourms, Attention project managers: project relief is within sight, unpublished article, May 2004; also, "A new way to look at PM roles: where do you fit in?" presentation, April 28, 2004, Great Lakes (Detroit) Chapter of PMI Symposium.

<sup>7</sup> Marcia Jedd, Outside in, PM Network, Nov. 2004.

<sup>8</sup> Robert Wourms, IT organizations discovering new ways to stay nimble: project management outsourcing, *DM Direct Newsletter*, May 23, 2003.

## **Project Control Functions** Benchmarks of Current Business Practices

James S. Pennypacker

Organizations do not perform project control functions well. Managing issue, risk and change control processes are particularly troublesome. But there has been a significant increase in the numbers of project controls staff within mature enterprise-level PMOs to counter these challenges. These conclusions are among the results of surveys of project management practitioners by the Center for Business Practices.

The CBP surveyed senior practitioners with knowledge of their organizations' project management practices and business results. The surveys, *Project Control Functions* and, more recently, *The State of the PMO*, were designed to investigate best practices in the performance of project management in organizations.

The initial survey results revealed that half of the organizations responding performed project control functions average to poorly. Three functions in particular were cited for needed improvement: managing the process of issue, risk and change control; educating the project team on proper project management processes; and estimating project costs. Organizations are best at documenting and delivering project status information.

They also showed that most organizations do not recognize project controls as a specific job role. Project control functions are typically performed by Project Managers, who either report to a centralized project office or to specific departments within their organization.

Excerpted from: *Project Control Functions*, Center for Business Practices, 2004 and *The State of the PMO 2007–2008*, Center for Business Practices, 2007.

Observations and conclusions drawn from the study include:

- In most organizations (83%), project control functions are performed by multiple roles, mostly by project managers (64.8%) or project coordinators (38.9%).
- A majority of those performing project control functions report to either a centralized project office (33.3%) or to decentralized departments within their organization (37.0%).
- More than half of the organizations responding use (49.1%) or plan to use (5.7%) augmented services (consulting, staffing, outsourcing) to perform project control functions.
- More than half of the organizations responding performed project control functions average to poorly. Below are the average scores, based on a scale from 1 (very poorly) to 5 (very well), showing how well organizations performed individual project control functions:

0	Documenting and Delivering Project Status Information	3.40
0	Developing the Project Schedule and WBS	3.20
0	Facilitating/Overseeing Project Planning/Control Sessions	3.13
0	Estimating Project Costs	3.11
0	Managing the Critical Path to Ensure Schedules are Met	2.96
0	Educating the Project Team on Proper PM Processes	2.94
0	Tracking and Analyzing Project Costs	2.94
0	Managing the Process of Issue, Risk and Change Control	2.81

- Sarbanes-Oxley and other government mandates have had little effect on organization's project control processes.
- Tracking actuals, improving project management software tools, creating a strong project management governance structure, and educating on the benefits of using project controls were a few of the practices cited as means to improve the organization's project controls.

## **Project Control Functions in the PMO**

An interesting aspect of the CBP's research study, *The State of the PMO 2007-2008*, is the startling jump in the numbers of project con-

trols staff within mature enterprise-level PMOs. This study shows roles in project management shifting dramatically. In 2007, 60% of responding organizations now have PMOs that manage a staff of project managers. The study also showed an uptick in the numbers of supporting roles that report within the PMO, including planners, controllers, and business relationship managers. In addition, it revealed some correspondences between organizational performance and the structuring of project management roles.

- High-performing companies more often implement enterprise PMOs, and pull into the PMO a number of roles and responsibilities related to human resource management. For instance, the top performers in the study, far more frequently than low-performing companies, perform resource identification; develop processes for assigning resources; manage a staff of project planners and controllers within the PMO.
- PMOs are increasingly staffed organizational units. The average PMO has 8.0 people reporting to it (the range of PMO size is huge—from a single person to more than 100). As can be expected, the larger the organization, the larger the staff Also, older PMOs have significantly more staff (those 5+ years old average 16.5 staff vs. 8.0 overall). PMOs in high-performing organizations are slightly larger than those in low-performing organizations (7.0 vs. 5.5)
- As PMOs mature, they are more likely to staff professional planners, schedulers, and controllers:
  - o Level 2 PMOs have 14% more planners, schedulers, and controllers than Level 1 PMOs
  - o Level 3 PMOs have 24% more planners, schedulers, and controllers than Level 2 PMOs
  - o Level 4 PMOs have 70% more planners, schedulers, and controllers than Level 3 PMOs.

Thus, the division of project management responsibilities among various specialized staff appears to be a best practice in mature organizations, and mature PMOs are more likely to be found in high-performing organizations.

## **About the Authors**

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# Project Management Roles & Responsibilities

**SECOND EDITION** 

Project Management Roles & Responsibilities provides comprehensive descriptions of the responsibilities, skills, and desired backgrounds for project personnel to guide you in crafting job descriptions that are appropriate for your organization, or to rethink the ways in which you have assigned responsibilities to existing positions. The positions described in this book include:

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- Project Portfolio Manager
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