

— Executive Summary —

Resource Management Challenges



A BENCHMARK OF
CURRENT BUSINESS PRACTICES



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Resource Management: A Significant Challenge

Resource management is one of the nine knowledge areas whose practices are defined extensively in the Project Management Institute’s standards (see References). The literature is filled with descriptions of “best practices” in resource management; software vendors rave about the resource management capability of their sophisticated tools. Yet resource management issues continue to be the number one challenge to organizations that practice project management (Pennypacker, 2006; Pennypacker, 2007). From inadequate resource forecasting to resource contention issues; from conflicting resource priorities to inadequate information on what resources are available; our research has shown that the significant resource challenges faced by project management professionals impact their organizations’ effectiveness.

Seeking to make sense of seeming contradiction in project management practice, the Center for Business Practices surveyed a broad spectrum of organizations in order to understand the issues surrounding resource management challenges. What are the causes of these resource challenges and what can be done about them? How do best-in-class organizations manage their resources differently from the rest of us? In particular, we looked for answers to the following questions:

- How mature are organizations’ resource management capabilities?
- What are the most significant challenges in estimating, scheduling, and monitoring project resources?
- What are the most significant practices in estimating, scheduling, and monitoring project resources?
- To what extent do organizations perform best practices in managing resources?
- What resource management tools are used?

Key Findings

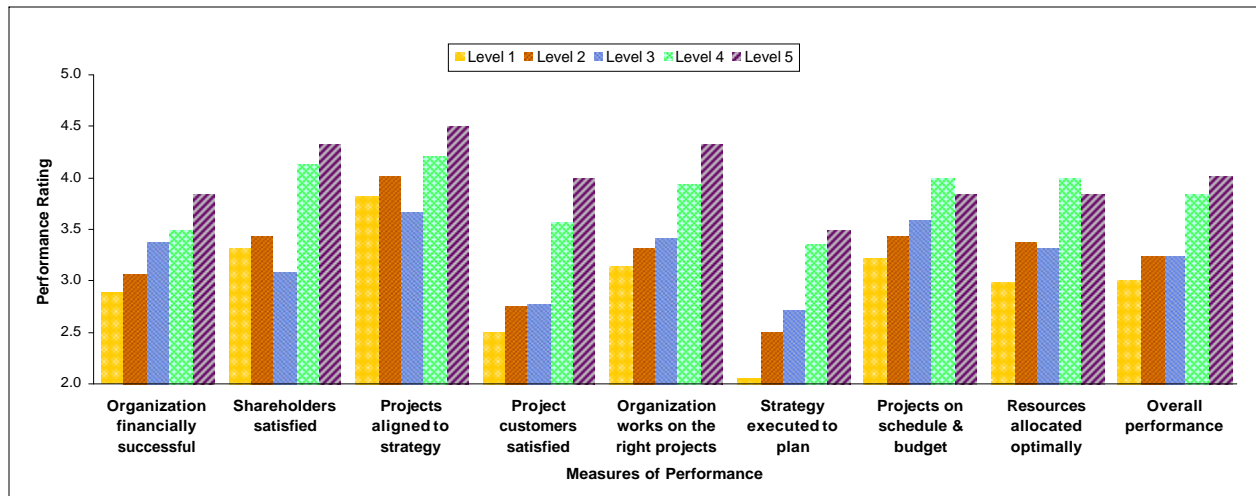


Exhibit 1. Organizational performance improves as organizations mature their resource management practices.

- There is a strong correlation between organizational performance and the level of resource management maturity of organizations (see Exhibit 1). “Performance improvement” is defined as rating higher on a scale of 1-5 on how well the organization performs in the eight measures of performance listed in the chart above. The data clearly show that, for each of the performance measures, organizational performance improves as the resource management maturity of the organization improves.
- Resource management maturity is low in organizations — 74.4% of organizations are at maturity level 1 or 2 (based on 5 levels of maturity).

- There are significant challenges in all components of resource management, but particularly issues around understanding the number of resources needed to complete projects. The top five most significant challenges are:
 1. Resource capacity planning is poor
 2. Not enough appropriately skilled resources
 3. Too many unplanned requests for resources
 4. Resource use is not optimized
 5. Effort estimation is inaccurate
- Organizations fail to practice many of the resource management standards noted by the Project Management Institute (see References). In fact, organizations don't seem to even practice some basics consistently — using resource leveling, creating staffing management plans, and even considering the number and availability of resources required before determining schedules.
- There is a significant disconnect between decision makers who assume that there are enough resources for all projects when, in fact, there often are not.
- Almost half (47.9%) of all organizations use automated information systems to assist in resource management functions. But those who do are lukewarm in their description of the value of those systems. Of those who used these systems, almost half (47.3%) thought they did not accurately calculate resource forecasts and more than half (55.0%) said their managers did not use the systems consistently or effectively.

High-Performing vs. Low-Performing Organizations

We compared the responses of high-performing organizations to low-performing organizations to determine whether there were any particular challenges or practices that stood out and might represent the most significant challenges to avoid or mitigate or practices to emulate. For the purposes of this study, high-performing organizations rank in the top 25% in overall performance based on ratings in eight measures (strategy execution, shareholder satisfaction, customer satisfaction, budget/schedule performance, financial performance, resource allocation, strategic alignment, portfolio performance,). Low-performing organizations rank in the bottom 25%.

- High-performing organizations are at a significantly higher level of maturity in resource management than low-performing organizations — that is, high-performers are 57% more mature than low-performers.

○ Average level of resource management maturity for all organizations	1.98
○ Average level of resource management maturity for high-performing organizations	2.33
○ Average level of resource management maturity for low-performing organizations	1.48
- There are significant challenges in all components of resource management, but there are some challenges that are seen far more often in low-performing organizations, in particular, issues around setting expectations. The top five most significant challenges to low-performing organizations are:
 1. Too many unplanned requests for resources
 2. Schedules/deadlines are unrealistic
 3. Projects regularly exhibit scope creep
 4. Pet projects receive priority access to resources
 5. Deliverables are poorly defined

- High-performing organizations are significantly more likely to practice resource management standards than low-performing organizations. Those standards in particular include:
 - Resource career plans used to effectively utilize and train employees
 - Information about potentially available resources used for estimating resource types
 - Staff assignments are effectively negotiated with functional managers
 - Scope of work and resource data is used in estimating activity durations
 - The organization has a centralized pool of resources
 - “Resources required” is used to determine the duration of activities
 - Project performance reports provide information on resource performance
 - Resource leveling is used to keep resource usage constant
 - Resource reallocation from non-critical to critical activities is used
- About half (53.2%) of all organizations practice project portfolio management, but high-performing organizations are far, far more likely to practice it than low-performing organizations.
 - Percentage of organizations that practice project portfolio management 53.2%
 - Percentage of high-performing organizations that practice project portfolio management 71.2%
 - Percentage of low-performing organizations that practice project portfolio management 24.0%
- Other characteristics of note that high-performing organizations exhibit significantly more often than low-performing organizations (see Exhibit 2).
 - The organization has a strong, effective PMO
 - There is a clear organizational culture for sharing resources
 - Stakeholder roles/responsibilities are clearly defined
 - Effective portfolio reporting capability exists
 - Resources understand PM practices

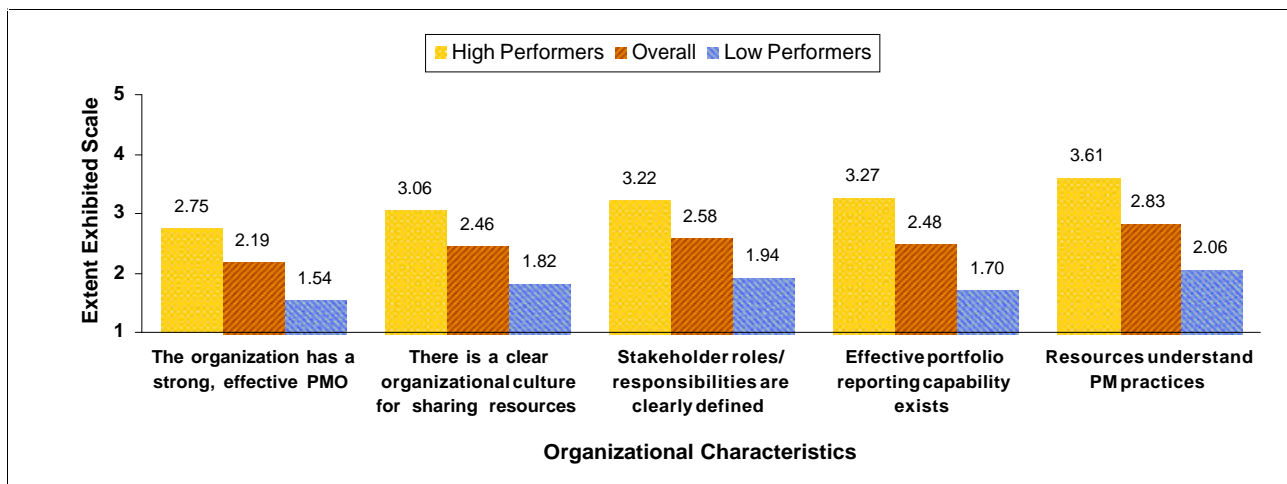


Exhibit 2. Miscellaneous organizational characteristics with the most significant difference between high-performing and low-performing organizations (average rating of the extent to which organizations exhibit the characteristics on a scale of 1 (not at all) to 5 (a great extent)).

Research Methodology

Statement of the Problem

To be a truly powerful, credible, and useful function, resource management must be considered a dynamic and integral part of the project management functions of an organization. To identify organization's most significant resource management challenges, and to learn how well organizations' resource management functions are working, The Center for Business Practices surveyed a broad spectrum of organizations to get a clearer understanding of the variety of factors that affect resource management, including the following:

- How mature are organizations' resource management capabilities?
- What are the most significant challenges in estimating, scheduling, and monitoring project resources?
- What are the most significant practices in estimating, scheduling, and monitoring project resources?
- To what extent do organizations perform best practices in managing resources?
- What resource management tools are used?

Research Approach

An invitation to participate in a web-based survey on Resource Management was sent to the mailing list of the Center for Business Practices (senior project management practitioners). Responses to the survey were received by June 8, 2008. There were two hundred fifty two useable responses to the survey.

Notes on Reading the Survey Findings

This benchmarking survey charts the results of the responses to the questionnaire on Resource Management shown on page xxx. The survey questions were divided into six categories:

- Respondent Profile
- Resource Management Maturity
- Resource Management Challenges
- Resource Management Practices and Tools
- Resource Management Environment
- Organizational Performance

“Observations” are the results of our analysis of the data.

“Summary Results” list average responses to the survey questions and average ratings on Likert scales. Averages reported are mean averages unless otherwise noted. Ratings are based on Likert scales, where respondents specify their level of agreement to a statement (on a scale from 1 to 5).

High-Performers vs. Low-Performers:¹ We compared the responses of high-performing organizations to low-performing organizations to determine whether there were any particular practices that stood out and might represent “best practices.”

¹ For the purposes of this study, high-performing organizations are those that rank in the top 25% in overall performance based on ratings in eight measures (strategy execution, shareholder satisfaction, customer satisfaction, budget/schedule performance, financial performance, resource allocation, strategic alignment, portfolio performance,). Low-performing organizations rank in the bottom 25%.

Survey Questionnaire

Resource management is one of the nine knowledge areas whose standard practices are well defined in the PMBOK® Guide and other standards. Many articles, books and presentations are devoted to “best practices” on the subject as well. And software vendors rave about the resource management capability of their sophisticated tools. So why do resource management issues continue to be the number one challenge to organizations that practice project management.*

This survey, conducted by the Center for Business Practices, is designed to help us understand this seemingly contradictory project world in which we live. We hope to discover the root causes of our resource management challenges as well as what practices are most important in overcoming those challenges.

We appreciate your participation in this survey. Please submit your responses by 8 June 2008. Thank you.

Yours truly,

Jim Pennypacker
Director, Center for Business Practices

*Sources: The State of the PMO (2007) and The State of Project Management (2006), Center for Business Practices

INSTRUCTIONS

- For the purpose of this survey, the word "resources" only refers to human resources (people)
- Please submit the survey by 8 June 2008
- Complete survey results will be sent to all those completing the survey
- All names (personal and company) will be held strictly confidential
- You can't go back a page to change your answers. If you try to go back you will be prompted by a message giving you two choices: either you can start over, or you can continue where you left off. You might want to [Download the Survey](#) to see the questions before you complete the survey online.

SURVEY CONTENTS

- Respondent Profile
- Resource Management Maturity
- Resource Management Challenges
- Resource Management Practices and Tools
- Resource Management Environment
- Organizational Performance

RESPONDENT PROFILE

- What is your e-mail address? Your response will be held in confidence. (response required)
- What is the name of your organization? Your response will be held in confidence. (response required)
- Please enter your name and telephone number (if you are willing to be interviewed briefly by us if we have questions about your responses or would like more detailed information to help us understand your cost estimating practices).
- Which of these titles best describes the level of your job or job function? (select one)
 - VP or Director-Level Business Management
 - Director/Manager, Portfolio Management
 - Director/Manager, Project/Program Management
 - Director/Manager, PMO
 - Program/Project Manager
 - Manager
 - Business Analyst
 - Other:
- What is the approximate annual sales revenue (\$US) of your entire company? (select one)
 - Less than \$25 million
 - \$25 million to \$100 million
 - \$100 million to \$500 million
 - \$500 million to \$1 billion
 - \$1 billion to \$3 billion
 - Greater than 3 billion
- What is your company's primary industry? (select one)
 - Finance & Insurance (includes financial services)
 - Information (includes telecommunications, software development)
 - Manufacturing (includes pharmaceutical, computer, aerospace)
 - Professional, Scientific & Technical Services (includes consulting, business services)
 - Public Administration (includes government, legal)
 - Healthcare
 - Utilities (includes energy)
 - Transportation (includes postal services)
 - Educational Services
 - Other:
- Does the data you are providing in this survey apply at the enterprise level or at the department/business unit level only? (select one)
 - Whole Enterprise
 - Information Technology
 - Engineering Services
 - New Product Development
 - Other:
- What type of project is most often executed in your organization? Please select one characteristic from each of the four categories below.*
 - Novelty (the newness of the project's product in the market)
 - Derivative (extension of existing product)
 - Platform (new generation of exiting product line)
 - Breakthrough (new to the world product)
 - Technology (the level of technology needed to execute the project)
 - Low-tech (well-established technologies)
 - Medium-tech (incorporate some new technologies)
 - High-tech (technologies employed are new to the firm)
 - Super-high-tech (technologies employed do not exist at project initiation)
 - Complexity (of the project)

- Assembly (collection of components combined into a single entity; e.g. a car transmission)
- System (complex collection of interactive components; e.g. a car)
- Array (widely dispersed collection of systems that function together; e.g., a transportation system)
- Pace (needed to execute the project)
 - Regular (time is not critical)
 - Fast/competitive (most common, addressing market opportunities)
 - Time-critical (must be completed by specific date; missing date means failure)
 - Blitz (crisis projects; utmost urgency)

*Source: Shenhar, A.J., & Dvir, D. (2007). Reinventing project management. Boston: Harvard University Press.

RESOURCE MANAGEMENT MATURITY

- Please rate your organization's resource management maturity based on the descriptions below. (select one)

Level 1: The organization may recognize the need for a resource management process consisting of identifying resource requirements and "reserving" them; however, there are no established practices or standards in place.

Level 2: There are documented resource management processes in place, considered standard practice for large or highly visible projects. They are not organizational standards used on all projects. All documented processes are repeatable.

Level 3: All resource management processes are in place, documented, and repeatable. The processes are considered organizational standards and are being used by nearly all projects. Management fully supports the resource management processes and has institutionalized the procedures and standards.

Level 4: Resource management processes and standards, used by nearly all projects, are integrated with other corporate processes and systems. Integration includes the resource planning process with the project management office and human resources management process. Measurement processes are in place to provide resource performance data for management decision making.

Level 5: Resource management processes and standards, used by nearly all projects, are integrated with other corporate processes and systems. Resource management improvement processes are in place and used. Lessons learned are regularly examined and used to improve documented processes. Processes are in place to measure resource management effectiveness and efficiency. There is a mandate to comply with all documented and repeatable resource management processes.

RESOURCE MANAGEMENT CHALLENGES

Resource Planning and Estimating

- How significant are the following challenges in planning for the use of project resources in your organization? Please rate on a scale from 1 (not significant) to 5 (extremely significant).
 - Projects are given an arbitrary end date as opposed to the effort being estimated based on the scope
 - Projects regularly exhibit scope creep
 - Resource risks are not assessed
 - Resource capacity planning is poor
 - Estimation of project task (effort) duration is inaccurate
 - Deliverables are poorly defined
 - Activities are poorly defined
 - Skills needed are poorly defined
 - Competency levels needed are poorly defined
 - Project roles, responsibilities, authorities are poorly defined

- Information on what resources are available is inadequate
- Information on the skill sets of possible resources is inadequate

Resource Prioritization, Allocation, and Scheduling

- How significant are the following challenges in scheduling project resources in your organization? Please rate on a scale from 1 (not significant) to 5 (extremely significant).
 - There are not enough appropriately skilled resources to successfully complete all projects
 - The way resources are assigned is inconsistent
 - Resource use is not optimized
 - Getting resource commitments from functional managers is difficult
 - Resources are allocated by percentage of time rather than according to schedule
 - Projects are not prioritized
 - Pet projects receive priority access to resources
 - Project and functional priorities conflict
 - Schedules, deadlines are unrealistic
 - Planned time off/out for resources is not factored into the schedule
 - Individual schedules are not considered when building the project schedule

Resource Execution, Monitoring, and Controlling

- How significant are the following challenges in monitoring and controlling project resources in your organization? Please rate on a scale from 1 (not significant) to 5 (extremely significant).
 - Stakeholder responsibilities, authorities conflict
 - Stakeholders disagree on resource management policies, procedures
 - There are too many unplanned requests for resources
 - Shifting resources to respond to problems is difficult
 - There is no capacity flexibility (overtime, subcontracting)
 - Resource utilization is poorly documented
 - The transition process for resources who leave a project is inadequate
 - Contingency planning and response development is inadequate

RESOURCE MANAGEMENT PRACTICES & TOOLS

Resource Planning and Estimating

- To what extent does your organization exhibit the following characteristics? Please rate on a scale from 1 (not at all) to 5 (to a great extent).
 - Project plans include resource breakdown structures
 - Accurate resource estimating leads to effective schedule development
 - Organization staffing policies are considered in activity resource estimating
 - Activity lists identify scheduled activities for resources
 - Information about potentially available resources is used for estimating the resource types
 - Information for approximating the costs of the resources needed to complete project activities is available and used
 - All projects have a staffing management plan that describes when and how human resource requirements will be met
 - Resource career plans are used to effectively utilize and train employees
 - Project staff assignments are effectively negotiated with functional managers and/or other project teams
 - Resource risk is considered in developing a risk management plan
 - Management clearly understands its responsibility to provide the resources needed to succeed

Resource Prioritization, Allocation, and Scheduling

- To what extent does your organization exhibit the following characteristics? Please rate on a scale from 1 (not at all) to 5 (to a great extent).
 - The organization has a centralized pool of project resources with specific skills identified
 - When resources are assigned and resource over-allocations exist, resource leveling is used
 - When estimating schedule activity durations, the organization uses information on scope of work, required resource types, estimated resource quantities, and resource calendars with resource availabilities
 - The resources required to complete each activity—including their availability and productivity—are considered to determine the duration of each activity

Resource Execution, Monitoring, and Controlling

- To what extent does your organization exhibit the following characteristics? Please rate on a scale from 1 (not at all) to 5 (to a great extent).
 - When necessary, changes in resource requirements lead to appropriate adjustments in cost, schedule, and risk response estimates
 - Resource leveling is used to keep selected resource usage at a constant level during specific time periods of the project work
 - Resource reallocation from non-critical to critical activities is used to bring projects back on track
 - Utilization of extended hours, weekends, or multiple shifts (overtime) for selected resources is considered using different resource calendars to reduce the durations of critical activities
 - Project performance reports provide information on the project's performance with regard to resources
 - The project schedule repeatedly gets recalculated due to missed deadlines
 - Resource utilization is recorded for the work performed within each of the work elements included in the project plan

Project Portfolio Management

- Does your organization practice project portfolio management, focusing on ensuring that programs and projects are considered in relation to one another so resources can be allocated in alignment to and consistent with overall organizational priorities? Yes/No
- If Yes, to what extent does your organization exhibit the following characteristics? Please rate on a scale from 1 (not at all) to 5 (to a great extent).
 - A human resources function identifies the skills and qualifications needed for the success of the project portfolio and then works to ensure skilled resources are available when needed
 - Portfolio reporting provides meaningful information to help optimize resource utilization
 - Portfolio reporting is based on a predefined, preapproved set of metrics that measures resource utilization
 - Projects and their prioritization are consistent with the overall resource availability acknowledging that various resources may be constrained
 - Responsible project/program managers monitor planned to actual resource performance and provide feedback to the portfolio management team
 - Human resources management is responsible for maintaining the correct balance of staff and competencies based on the drivers of the strategic plan and marketplace pressures
 - Functional managers ensure that proper resources are allocated to the portfolio components and that those resources are performing in accordance with plans
 - Portfolio balancing supports the primary benefits of portfolio management and the ability to plan and allocate resources according to strategic direction and the ability to maximize portfolio return within the organization's desired risk profile
 - The portfolio management team conducts a human resource capacity analysis to understand the capacity of the organization to source and execute the organizations projects

Resource Management Tools

- To what extent does your organization use the following? (on a scale from 1 to 7 where 1=not at all and 7= to a great extent)
 - Resource list (roles, skills, availability)
 - Resource assignment database (what resources are working on)
 - Time capture tool (capturing actual time spent on project and non-project work)
 - Performance measurement tool (comparing actual to planned charges)
 - Work breakdown structure (with adequate resource information)
 - Resource plan
 - Resource breakdown structure
 - Responsibility assignment matrix / RACI matrix
 - Resource calendar
 - Resource histogram
 - Other

- Does your organization have an automated information system to assist you in your resource management functions (enterprise resource planning, project management, project portfolio management or related software)? Yes/No
 - If Yes, to what extent does your system exhibit the following characteristics? Please rate on a scale from 1 (not at all) to 5 (to a great extent).
 - The system is easy to learn
 - The system maintains and provides the user with up-to-date data
 - The system delivers a useable solution
 - The system can capture all the resource information needed to make effective decisions
 - Reporting/results from the system meet stakeholder expectations
 - The system includes or is integrated with a time management system
 - Resource forecasts are accurately calculated
 - The system is easy to update throughout the project lifecycle
 - All appropriate managers use the system consistently and effectively
 - The system provides actionable analysis

- If Yes, what is your primary automated resource management system?
 - Artemis
 - AtTask
 - Borland
 - CA-Clarity
 - Compuware
 - eProject
 - HP Project Portfolio Management (Mercury)
 - IBM Rational Portfolio Manager
 - Innotas
 - Instantis
 - ITM Software
 - Microsoft Project Desktop
 - Microsoft Project Enterprise/Server
 - Oracle (Peoplesoft, JD Edwards)
 - Planview (Business Engine)
 - PowerSteering
 - Primavera Systems (Prosight)
 - Sciforma
 - Serena (Pacific Edge)
 - Other

RESOURCE MANAGEMENT ENVIRONMENT

- To what extent does your organization exhibit the following characteristics? Please rate on a scale from 1 (not at all) to 5 (to a great extent).

Structure

- Projects are managed by virtual teams
- The organization has a strong, effective PMO
- Resources have a consistent place and time to meet
- Resources are shared effectively
- Resources report to the PMO
- Resources report to functional managers

Culture

- Executives/senior managers are supportive of project culture
- The organization's business environment is unchanging
- There is a clear organizational culture for sharing resources
- Standard processes are used for managing and leading change
- Expectations are clear and understood throughout the organization
- Standard processes are used for managing conflict

Governance

- Project stakeholders comply with project management policies/procedures
- Decision-making policies/procedures are clear and effective
- Organizational goals/objectives are clear and understood
- Decisionmakers assume there are enough resources for all approved projects
- Project stakeholder roles/responsibilities are clearly delineated
- Project definitions are applied consistently across the organization

Information

- Resource utilization is tracked effectively
- Effort is tracked effectively
- Resource information is reported effectively
- Effective portfolio reporting capability exists
- Project information is visible to the entire organization
- The organization has an effective project management software tool

People

- Project resource skills are adequate to complete the work required
- Resources perform both project and non-project work
- Resources understand project management practices/standards
- Project resources communicate effectively
- There are enough appropriately skilled resources to perform the work scheduled
- Resources are satisfied

ORGANIZATIONAL PERFORMANCE

- To what extent does your organization exhibit the following characteristics? Please rate on a scale from 1 (not at all) to 5 (to a great extent).
 - The organization's strategies are executed according to plan
 - The organization's shareholders are satisfied
 - The organization is financially successful
 - Projects are completed on schedule and on budget
 - Project customers are satisfied
 - Project resources are allocated optimally
 - Projects are aligned to the organization's business strategy
 - The organization works on the right projects

COMMENTS

Please feel free to submit critiques, criticisms, or other comments about the questions or the survey process.

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CBP Research Reports

The CBP conducts original research to help organizations realize maximum benefit from their projects. Research reports cover a wide range of topics and are available from the CBP website: www.cbponline.com. Available reports include:

The State of the PMO: 2007-2008

\$95.00, © 2007, PDF for download, 57pp.

PMOs are becoming standard practice in most project-based organizations. This latest research from the Center for Business Practices uncovers a fascinating array of key findings on: PMO maturity; high-performing organizations vs. low-performing organizations; PMO size, scope, and complexity; PMO functions and services; PMO staffing and project managers; and PMO challenges and critical success factors.

Strategy & Projects

\$95.00, © 2006, PDF for download, 104pp.

High-performing organizations integrate strategy execution, portfolio, program, project, and performance management best practices more than other organizations. Conversely, low-performing organizations consistently underutilize these best practices. These conclusions are among the results of this survey research by the Center for Business Practices.

Project Management Maturity Benchmark

\$95.00, © 2006, PDF for download, 89pp.

This research shows clearly that organizational and project management performance is linked to reaching higher levels of maturity and shows what distinguishes high-performing organizations from low-performing ones. Also, results from a similar survey conducted in 2001 were compared with the current results to see whether or not there has been improvement over time in project management maturity industry-wide and, if so, how much.

Troubled Projects: Project Failure or Project Recovery

\$95.00, © 2006, PDF for download, 83pp.

In this latest survey of senior project practitioners, the Center for Business Practices investigated the extent to which projects are troubled and recovered, the symptoms and root causes of the troubled projects, and the types of project recovery efforts and their outcomes.

High-Performance Project Teams

\$95.00, © 2006, PDF for download, 138pp.

This research, sponsored by ProjectWorld, investigated whether or not organizations that exhibit team building best practices are, indeed, high performing, to confirm whether or not the practices identified are really "best practices," and to identify those practices that are most critical to the success of the organization.

Project Portfolio Management Maturity Benchmark

\$95.00, © 2005, PDF for download, 89pp.

These research results document the maturity level of organizations in six components of project portfolio management: portfolio governance, project opportunity assessment, project prioritization and selection, portfolio communications management, portfolio performance management, and portfolio resource management. The report documents PPM maturity in a way that organizations can use to perform a self-assessment and compare their maturity to this baseline.

About the Center for Business Practices

The Center for Business Practices is a knowledge center created to capture, organize, and transfer business practice knowledge to project stakeholders in order to help them excel in today's rapidly changing business environment. The CBP promotes effective strategy execution through sound portfolio, program, project, and performance management by capturing best practice knowledge and integrating it into actionable, fact-based information: research, publications, and benchmarking events.

CBP Research

The CBP conducts original research to help organizations realize maximum benefit from their projects. Research reports cover a wide range of topics, including strategy & projects, project portfolio management, project management offices, project management maturity, the value of project management, project management training, project control functions, high-performance project teams, troubled projects, and more.

CBP Summit: Strategy & Projects

The annual CBP Summit is a dynamic conference that analyses current management issues through presentations, panel discussions, and open forums led by industry leaders and senior practitioners. The summit focuses on Strategy & Projects and the integration of portfolio, program, project, and performance management practices for effective strategy execution. The Summit also features the PMO of the Year Awards ceremony. For more information visit www.cbponline.com.

CBP Benchmarking Forum

The CBP Benchmarking Forums are facilitated two-day structured exchanges of best practice knowledge among senior practitioners. Each forum focuses on a particular set of best practices, such as change management, project management office, government project management, project portfolio management.

CBP Books and Online Store

The CBP publishes books through the internationally respected publisher, Taylor & Francis Group (including various imprints: Auerbach Publications, CRC Press, Marcel Dekker) and publishes books under the CBP imprint as well. Current titles include *Seven Steps to Strategy Execution*, *The Strategic Project Office*, *Project Management Maturity Model*, *Optimizing Human Capital with a Strategic Project Office*, *Project Portfolio Management Maturity Model*, *Project Portfolio Management*, *Advancing Organizational Project Management Maturity*, *Managing Multiple Projects*, and others.

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