

# Resource Management Challenges



A BENCHMARK OF  
CURRENT BEST PRACTICES

## 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

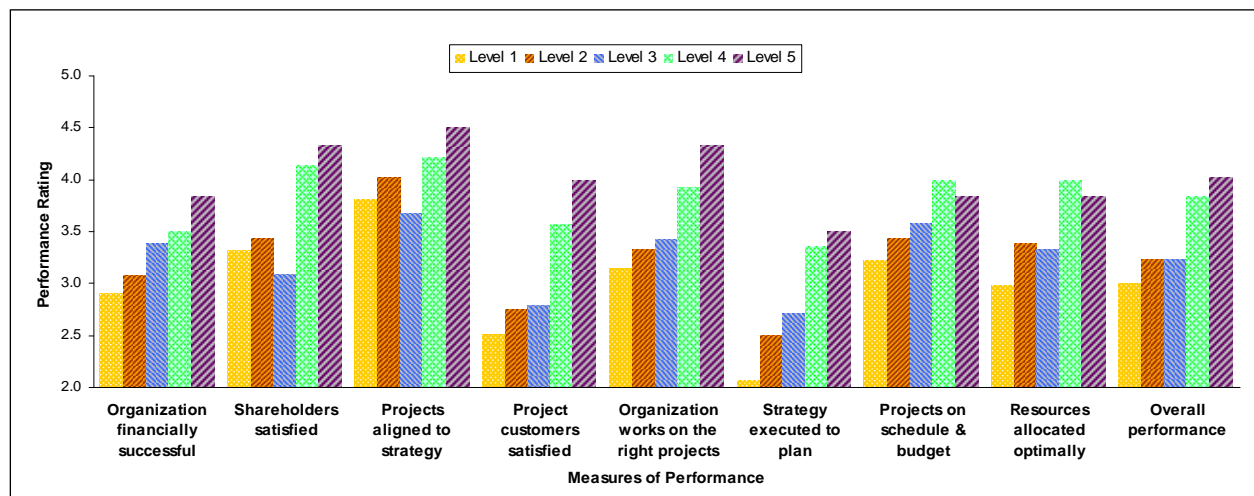


Exhibit 1. Organizational performance improves as organizations mature their resource management practices.

- 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.
 

○ 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

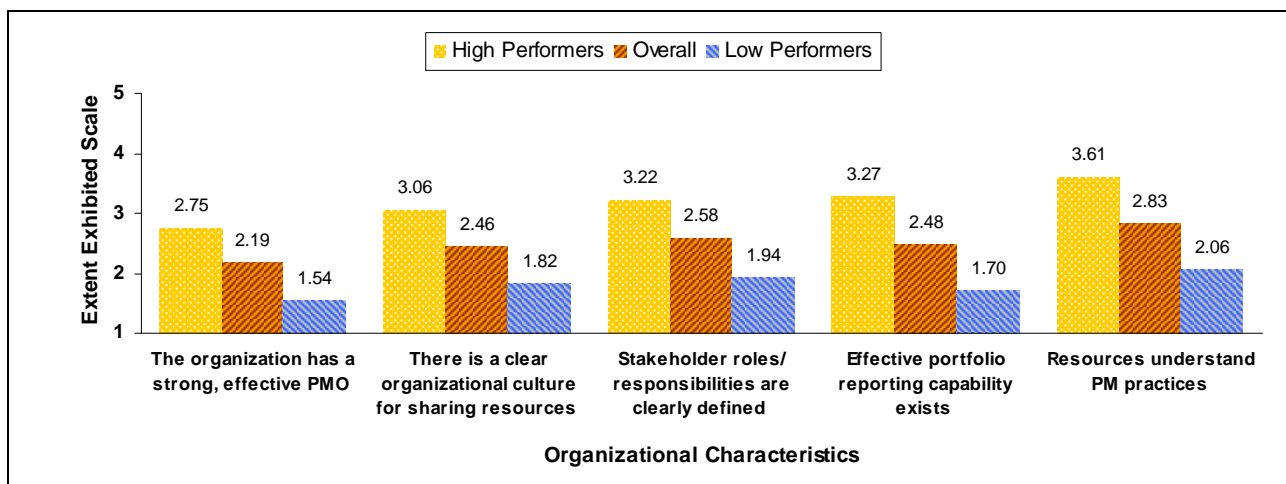


Exhibit 2. Miscellaneous organizational characteristics with the most significant difference between high-performing and low-performing organizations (average rating of the extent to which organizations exhibit the characteristics on a scale of 1 (not at all) to 5 (a great extent)).

## 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.

"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:<sup>1</sup> 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."

<sup>1</sup> 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%.

### Note:

The Center for Business Practices is now PM Solutions Research