

Effective Project Management Portfolio Management - Understanding Capacity and Capability Management

DLB Associates, LLC - Dennis Bolles, PMP

Most organizations determine their capacity and capability to produce the goods or services with a relative amount of confidence. However, estimating their capacity and capability to manage work in the form of projects is another issue altogether. Determining work capacity and capability is an extremely difficult but important task that is a critical prerequisite to effectively managing the resources of the company. The following system must be in place to accurately determine capacity and capability:

- A standard time recording and reporting system
- Documentation of workers skills and knowledge
- Project estimating standards
- A project portfolio management system

Standard Time Recording. This is a basic requirement for developing accurate estimates of the effort it takes to complete various activities. Accurate estimates are often based on historical information, which can only be obtained by keeping accurate and timely records. Efficiency and productivity cannot be accurately measured and therefore improved, without documenting work effort. Implementing time recording and reporting systems in business areas is usually a hard sell and is met with a high degree of resistance. Office employees consider their work to be more flexible and varied with less dependence on specific process regimens, unlike machine or assembly operations in the factory setting. Changing this mindset is not easy, but it is an absolute requirement for process improvements, both in the office as well as the manufacturing areas.

Workers' Skills and Knowledge. Documenting the skills and technical or special knowledge of the workers throughout the organization is needed to determine an organization's capacity and capability to perform. Gathering information concerning employee skills and knowledge is typically done during the hiring process and the information is held and managed by the human resources department. Skills management has recently become a specialized field with many of its aspects incorporated into human resources electronic applications, such as PeopleSoft. Using computerized systems allows data to be accessed securely by department managers and others who have been authorized to do so. Skills and knowledge databases can be used to create resource pools, which in turn can be used to plan multiple projects not only within departments, but also across the entire company. Establishing the initial skills and knowledge database is a significant project, which is one of the reasons why few organizations undertake the effort. Those that do, however, realize considerable returns on the time and cost they have invested by improving their;

- Ability to quickly match skills and knowledge with requirements
- Ability to schedule multiple projects requiring shared resources
- Likelihood of transferring critical knowledge
- Identification and use of subject matter experts
- Ability to manage critical resources

- Identification of missing resources, and or under or over utilized resources, and under staffed, or over staffed departments
- Creation and management of resource pools

Project Estimating Standards. Developing accurate estimates for customer quotations and projects is an important step in the process of winning new business and completing projects on time and within budget. Keeping accurate records on all projects provides a historical record on which to base future estimates. Any number of important metrics can be recorded on most projects. The following are typically the most important:

- Actual versus estimated effort to complete project tasks
- Number of issues submitted with average time to resolution
- Number of changes requested versus number approved and average time required to process to resolution
- Number of schedule variances (early/late) reported during each phase of the project (initiation, planning, execution, and closing) with average duration of the variances

Project Portfolio Management System. A documented process must be established to provide a means to identify projects that have been approved versus those that have not. The key elements of a project portfolio management system are:

- Authorization Team, comprising project management office and business unit leaders, established at whatever levels the project portfolio lists have been set up for; responsible for reviewing and approving projects to proceed
- Project Submittal Requirements
 - Project summary, including its purpose, description, deliverables, and benefits
 - Preliminary milestone schedule
 - Proposed budget with capital and expense items detailed
 - Cost benefit analysis (NPV, RRI, ROI, projected cost-saving benefits)
 - Resource requirements
- Management Project Reviews: project status reviews held monthly for senior management at each business unit level

My experience indicates that few companies are very good at getting a handle on their capability and capacity to manage multiple projects. This is largely because they may be doing *some* of the things noted above, but not *all* of them, and all of them are necessary to an adequate job. The result is usually that expectations for projects to be completed on time and within budget are often not met because the ability to judge capacity and capability to deliver was inadequate.

Dennis Bolles, president of DLB Associates, LLC, is a certified Project Management Professional (PMP®) with nearly 25 years experience in increasing professional performance levels within many organizations. He excels in developing multi-functional teams to improve business workflow processes utilizing Six Sigma and other methods to achieve “world-class” capabilities in meeting the needs of internal and external customers. He is a published author of many project management articles, and a book entitled Building Project Management Centers of Excellence, (ISBN 0-8144-0717-X), released by Amacom in June 2002. For additional information visit the DLB Associates, LLC web site at www.dlballc.com or contact the author by email at dbolles@dlballc.com.