

The Value of Project Management

Validating the positive impacts of project management on organizations

SENIOR EXECUTIVES WANT TO KNOW ONE thing about any project management improvement initiative: "What's the value?" Today more than ever, every dollar invested must be justified, and any initiative must deliver positive and tangible results. The good news is that tangible metrics on project management value can be established by asking the right questions and developing an appropriate measurement system. Even better news is that the Center for Business Practices (CBP), the research arm of PM Solutions, has conducted industry-wide studies using a balanced family of measures that document the value of project management to organizations. In those studies, 97% of the respondents say project management adds value to their organizations. By implementing project management improvement initiatives, organizations have on average returned the following value:

For all types of organizations [1]:

- 27% return on investment
- 18% improvement in customer satisfaction
- 25% improvement in time to market
- 50% improvement in the number of projects completed
- 30% improvement in project budget performance
- 34% improvement in project schedule performance
- 39% improvement in project requirements performance
- 24% improvement in project risk
- 31% decrease in the number of process errors
- 43% decrease in the number of defects
- 34% decrease in the number of scope changes
- 40% improvement in employee satisfaction
- 75% improvement in employee productivity
- 32% improvement in employee motivation

For IT organizations [2]:

- 28% return on investment
- 38% improvement in customer satisfaction
- 37% improvement in aligning projects to strategic business goals
- 22% improvement in time to market
- 33% improvement in time and budget to date
- 32% improvement in schedule performance
- 32% improvement in quality
- 26% improvement in labor hours performance
- 24% improvement in cost performance
- 23% improvement in staff productivity
- 38% improvement in schedule estimating
- 33% improvement in cost/hours estimating
- 13% improvement in defect rate estimating

The Value of Project Management

WHAT IS A PROJECT MANAGEMENT IMPROVEMENT INITIATIVE?

The CBP surveyed senior practitioners with knowledge of their organizations' project management practices and business results. The results showed improvements to the organization correlated to the implementation of project management initiatives. Organizational initiatives included implementing a project office, a project management methodology, project management software, integrating project management into key company processes, training staff in project management tools and techniques, and deploying a development program for project staff. The survey revealed that most companies strategically rely on multiple, coordinated project management improvement initiatives rather than just one or two. Over 70% of the organizations implemented three or more initiatives within the past three years.

HOW WE MEASURE THE VALUE OF PROJECT MANAGEMENT

Previous industry research measured the value of project management in terms of efficiency (time, cost, scope) and finance, and was generally limited to a specific project return on investment. Today, however, there are broader valuation practices that extend to the organization as a whole, and that lend a much clearer, accurate, and useful view of the effects of implementing project management in organizations.

What should you measure to determine the benefits of implementing a project management improvement initiative? In the past, and in some cases today as well, the measure most often used is return on investment. ROI is a measure of profitability computed by dividing the amount of operating income earned by the average investment in operating assets required to earn the income. ROI measures how effectively assets are used to earn income. Financial measures alone, however, don't present a clear picture of the value. They are too unreliable as either a clear gauge of success or a clear sign of the future measures. Unlike financial measures, most operational measures are leading indicators. When they improve, improvement in the financial measures follow, albeit often indirectly, and with a time lag. To drive success, financial measures must be supplemented with operational ones. Many, if not most, Fortune 1000 organizations are taking a balanced scorecard approach to measure and manage their organizations. The balanced scorecard approach is a multidimensional performance-measurement system designed by Robert Kaplan and David Norton that provides a clear prescription as to what companies should measure in order to 'balance' the financial perspective.

The Value of Project Management

Research has shown that creating value for stakeholders is the key to organizational success. Companies that focus on their shareholders, customers, and employees outperform firms that do not. Since deriving advantage through stakeholders drives strategic success, the best way to create measures is to look at which key stakeholder groups most help drive the strategy and devise measures to fit these groups.

So, what metrics should you use to determine the benefits of project management to your organization? Simple financial measurements are not enough. A balanced scorecard approach is needed to get an overall picture of the health of your organization and its project management practices. A balanced scorecard can evolve into a powerful system for executing strategy. The measures help to define the strategy, communicate it to the organization, and direct its implementation at every rung of the hierarchy, from the corporate level to the individual. They also keep everyone's efforts aligned, because they link strategy to budgets, to resource-allocation systems, and to compensation programs. Demonstrating how project management initiatives measure up using this balanced scorecard is critical to any business justification for a project management investment.

ABOUT THE RESEARCH STUDIES

The Value of Project Management Study

The CBP surveyed senior practitioners with knowledge of their organizations' project management practices business results.

Conducted July 2002; Responses from 65 organizations

- Responses to the survey were almost all significantly positive, for all measures, all industries, and all size organizations - project management definitely adds value to organizations.
- Implementation of project management is new to most organizations - within the last four years.
- 69% of respondents implemented three or more project management initiatives.

The Value of Project Management in IT Organizations Study

The CBP surveyed senior practitioners with knowledge of their IT organizations' project management practices and business results.

Conducted September 2001; Responses from 43 IT organizations

- Responses to the survey were almost all significantly positive, for all measures, all industries, and all size organizations - project management definitely adds value to IT organizations.
- A large percentage of respondents (41.9%) represented Fortune 1000 organizations.

The Value of Project Management

WHAT THE RESEARCH REALLY SHOWS

Project management definitely adds value to organizations. All size organizations in all industries reported improvement. Organizations cited significant improvements in financial measures (ROI), customer measures (customer satisfaction), project/process measures (cost, scope, time, quality), and learning and growth measures (employee satisfaction, productivity). The exact value you should expect to receive by implementing project management will, of course, depend on a variety of factors: how well you implement it, how much executive buy-in you have, the kinds of projects you implement, and so on. Given that, however, the CBP research goes a long way in validating the considerable gains an organization can make by planning and instituting formal project management improvement initiatives. Those organizations that do not implement project management will be at a competitive disadvantage to those who do.

FURTHER ANECDOTAL EVIDENCE OF THE VALUE OF PROJECT MANAGEMENT

Improved earnings and stock value

In research on project failures, Tom Ingram correlated information about project failures reported in newspaper and magazine articles with stock price declines of the host organization. For the companies he defined as experiencing "major" project management problems, the stock price declined from 20 to 91%. Seven firms analyzed lost an average of 59% of their stock value during the time the projects were underway and receiving adverse publicity. Ingram estimated that had the projects not failed in 13 of the companies evaluated, average net earnings would have increased approximately 6%.

- Frank Toney, *The Superior Project Organization*, Marcel Dekker/Center for Business Practices, 2002.

If a project is late for an amount of time equal to 10 percent of the projected life of the product, there will be a loss of around 30 percent of the potential profit. If the project goes 50 percent over budget, but is delivered on time, there is a loss of about 3 percent of the potential profit.

- Preston Smith and Donald Reinertsen, *Developing Products in Half the Time*.

Reduced time to market

Willardi Zanwill's extensive study of concurrent engineering or multifunctional project management disclosed numerous specific examples of improvements. AT&T reduced total process time on new products to 46% of an original baseline. At Boeing, parts and materials lead time was lowered by 30% and design analysis time by 90%. Deere & Company cut development time by 60% on the project evaluated. In like manner,

The Value of Project Management

Hewlett-Packard cut development cycle time by 35%, and IBM experienced a 40% reduction in design cycle time.

- *Frank Toney, The Superior Project Organization, Marcel Dekker/Center for Business Practices, 2002.*

By implementing a project management culture, the IT team at National City Corp. cut average project duration from 216 days to 120-a 45% reduction.

- *Kathleen Melmuka, Beating Back Bureaucracy, Computerworld, April 22, 2002.*

Averting project failure

Chaos research shows that 46% of successful projects used a formal project management methodology compared to 30% of challenged and failed projects. Therefore, this factor should increase chances of success by about 16%.

- *James H. Johnson, Standish Group Chaos Study, 2001.*

Through 2004, IS organizations that establish enterprise standards for project management, including a project office with suitable governance, will experience half the major project cost overruns, delays and cancellations of those that fail to do so (0.7 probability).

- *Matt Light and Tom Berg, The Project Office, Gartner, Inc., August 1, 2000.*

According to research and advisory firm Gartner, Inc., about \$75 billion is spent yearly on failed IT projects, and poor management is the culprit. In a report titled "What Skills Will Characterize Top Project Managers?" Gartner reveals that most projects fail because of poor methodology. Successful project management, on the other hand, is related to good business and interpersonal knowledge, and skill levels of the project manager.

- *Jennifer Mateyaachuk, Training Addresses Project Management Needs, Informationweek, October 25, 1999.*

Project success rates are rising. The percentage of successful IT projects has grown from 16% in 1994 to 28% in 2000 because better tools have been created to monitor and control progress and better skilled project managers with better management processes are being used. The fact that there are processes is significant in itself.

- *James H. Johnson, Standish Group Chaos Study, 2001.*

IS organizations that lack stringent risk assessment procedures will continue to cancel more than 20 percent of AD [application development] projects in the execution phase through 2002 (0.7 probability).

- *Matt Light and Tom Berg, The Project Office, Gartner, Inc., August 1, 2000.*

The Value of Project Management

Cost savings

Some companies that have adopted the project portfolio management model said they're seeing a real bottom-line impact. For instance, Merrill Lynch & Co. has saved between \$25 million and \$30 million over the past year by slowing down or stopping planned initiatives and redirecting project funding faster and more effectively than it used to.

- *Thomas Hoffman, IT Investment Model Wins Converts, Computerworld, August 5, 2002.*

Meta Group research indicates that CIOs who embrace project portfolio management have shown record improvement in sustainable IT efficiency and effectiveness – a large number of Global 2000 organizations report first-year cost savings of up to 28%.

- *Business Wire, November 28, 2001.*

Through 2003, organizations using rigorous gating criteria to move projects from the requirements phase to the development phase will save more than 25 percent in organizational costs for canceled projects.

- *Matt Light and Tom Berg, The Project Office, Gartner, Inc., August 1, 2000.*

Through 2004, IS organizations with no strategy for blending internal and external resources to achieve "best-in-class" staffing will incur 25 percent higher labor costs than those that do (0.7 probability).

- *Matt Light and Tom Berg, The Project Office, Gartner, Inc., August 1, 2000.*

CONCLUSION:

Using value statistics to justify project management improvement initiatives

Just what do you want to know about the value of project management and why? You want to know what value others have attained by implementing project management improvement initiatives in their organizations. You want to be able to develop a system of your own to measure the value of project management within your own organization. And you want to learn how to sell project management to your senior executives.

We've shown you what other organizations are achieving by implementing project management improvement initiatives through our research on the value of project management. The measures we used in our research can be used as a model for measuring the value of project management in your own organizations. We've also provided you with anecdotal information on different kinds of value that organizations have shown by implementing project management. So, now that you have some data, how do you sell project management to your senior executives?

The Value of Project Management

Research by Janice Thomas et al. [3] on communicating the benefits of project management to senior executives identifies the following effective strategies used to sell project management to executives:

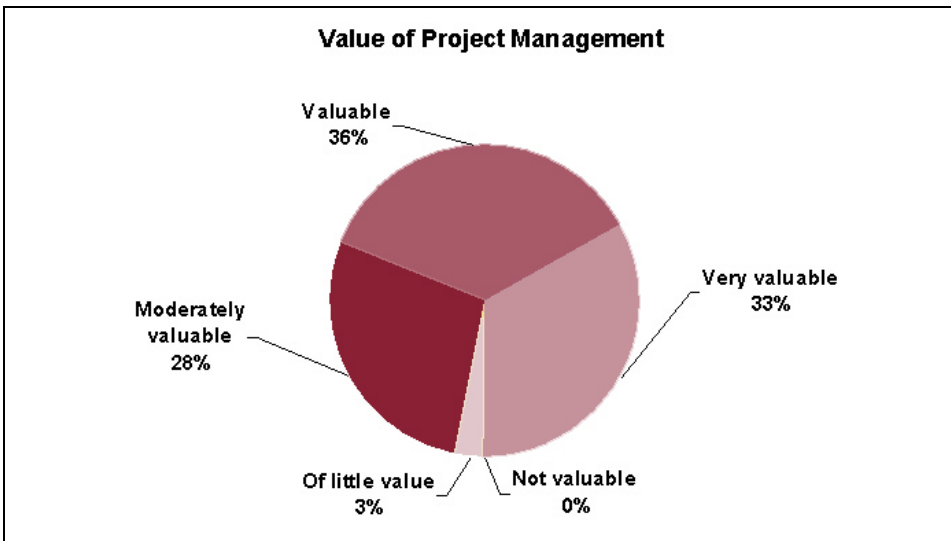
- Emphasize business results: understand your organization's key business priorities and discuss project management in the context of measurable quantitative outcomes as well as effectiveness outcomes.
- Explain project management value in terms of time, cost, and scope without overemphasizing project language (tools, techniques).
- Understand how project management fits the organization in terms of operational and strategic goals and discuss it in contexts that make sense to senior executives.

The information in this article can be used to help you build your business case for implementing project management in your organization. It's clear that project management adds value to organizations. Now it's up to you to sell it. ■

At a Glance

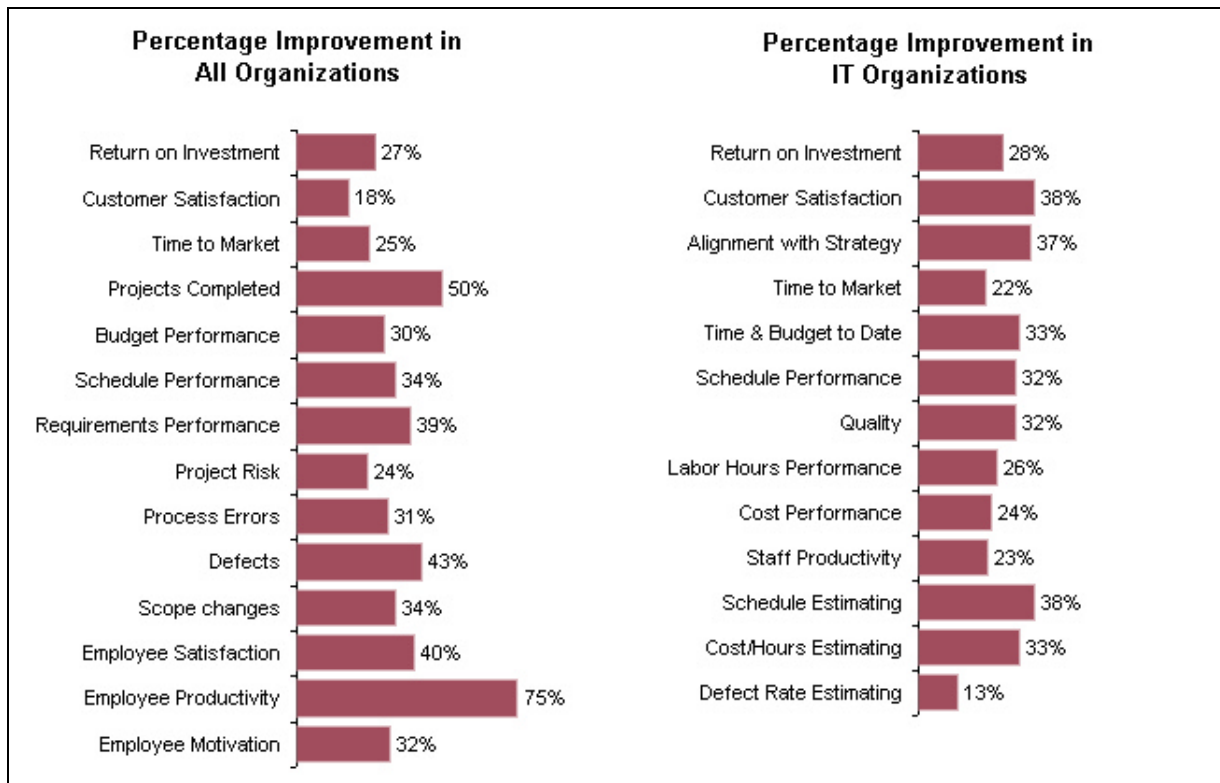
A snapshot of project management value statistics collected from CBP research studies

How valuable is project management to your organization?



The Value of Project Management

Percentage improvements due to implementation of project management



References

1. Pennypacker, J.S. (2002). The value of project management research report, Center for Business Practices.
2. Pennypacker, J.S. (2001). The value of project management in IT organizations research report, Center for Business Practices.
3. Thomas, J., Delisle, C., & Jugdev, K. (2002). In Pennypacker, J.S. (ed.), Justifying the value of project management, Center for Business Practices.

About the Author

Author James S. Pennypacker is Director of the Center for Business Practices (CBP), the research arm of PM Solutions. He is the co-editor of the books Project Portfolio Management and Managing Multiple Projects, and publisher of the newsletters Project Management Best Practices Report and People on Projects.

About PM Solutions

PM Solutions is a management consulting, training, and research firm dedicated to optimizing business performance through project management initiatives. Core services include organizational project management maturity assessments, Strategic Project Office deployment and enhancement, methodology development, corporate training, project management software integration, project portfolio management, and professional services. PM Solutions' comprehensive approach integrates business strategies with project management practices, enabling sound management decision-making and higher profitability. Headquartered in Havertown, a suburb of Philadelphia, Pa., PM Solutions has built its reputation by providing premier service to clients through the most knowledgeable and expert consultants in project management. For more information, visit www.pmsolutions.com.