

Why Project Management?

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Biographical Sketch . . .

Carl Pritchard is a veteran project-management lecturer, author, and instructor. As an author and researcher, he has published articles on project-management maturity, the international trends in PM, advances in risk management, and the nuances of training on the Internet. His work as an instructor has taken him around the world, training with some of the leading international training organizations, as well as for private clients and the Project Management Institute. He is the U.S. correspondent for the U.K. project-management journal *Project Manager Today*. Carl has authored several texts, including *Risk Management Concepts and Guidance* (2nd Edition), *Precedence Diagramming: Successful Scheduling in the Team Environment* (2nd Edition), *How to Build the Work Breakdown Structure*, and *The Project Manager's Drill Book—A Self-Study Guide*.

Why Project Management? Project management makes money. That's the heart of it. For all of the potential posturing and for all of the arguments over the leverage that project management may or may not afford an organization, project management makes money. Some of the business best-sellers of the past decade make the case extremely well. In Jim Collins's *Good to Great*, he provides metric evidence that principles of consistent leadership, excellent personnel selection, clear objectives, disciplined practices and staff, and consistency are the cornerstones of taking businesses from good performance to long-term *great* financial performance.¹ For anyone versed in best-practice project management, those practices sound familiar. They are also practices common to project management.

In another best-seller, *Execution: The Discipline of Getting Things Done*, Bossidy and Charan look at the operations process and, in essence, spend a chapter discussing the vital link between operations, strategy, and people.² Again, without using the terminology, they describe many of the practices of quality project management, ranging from project leadership to risk management.

Project management should be an easy sell because it enhances business performance. Yet some organizations still only approach the practice half-heartedly, or remain skeptical about its long-term value. Because of this unenthusiastic approach, project management is not implemented fully or is only implemented in extreme instances, minimizing the amount of help that the practices and processes of project management could bring to bear for the organization.

Project Management Enhances Business Performance

In conventional business and government organizations alike, project management is a proven means of improving business performance. The state of Michigan (U.S.A.) learned this during its three-year excursion into building better practices in project management. The state was driven to try project management improvement because of a series of failed technology implementations. By institutionalizing its project management practices and applying them consistently, the state saw a significant decline in the number of technology projects that failed early in their implementation.³ Now other states are seeking Michigan's advice and support to improve their technology records.

In Michigan's case, the effort was to improve the success rate of software and information technology implementations. Other organizations have other distinct goals they are trying to achieve. The case for project management can only be made effectively if there are clear goals identified that project management is to achieve. In the U.S. federal government, some sectors are now establishing project success criteria to establish the goals of specific projects.⁴ The value of project management will only effectively be determined (and shared) where the organization can identify what the practice is *supposed* to accomplish.

In most organizations, the overarching goals of project management are similar:

- They want to apply a proven practice.
- They want to save time.
- They want to save money.
- They want to optimize their resources.
- They want to serve customer needs.

Over time, numerous organizations have recognized these qualities but have been reluctant to implement modern project management because of the perceived challenges and barriers associated with putting it to work.

Project Management Is a Proven Practice

Project management has been in practice for anywhere from 50 to 5,000 years. As a modern management practice, project management evolved out of World War II and U.S. Department of Defense projects.⁵ These projects required organizations to break the existing functional boundaries and find new ways to accomplish complex work. Resources from a variety of skill areas had to be drawn together toward a common goal. Objectives were carefully outlined, including performance criteria, schedules, and budgets. The foundations were set for modern project management.

During the past 50 years, more public and private organizations have embraced project management. The construction industry was among the earliest to take on the trappings of modern project management, with network diagrams, work-breakdown structures (WBS), and Gantt charts. Other major sectors of commerce also came in the first wave, including the aerospace and pharmaceuticals industries. As the technologies for project management became more refined, other types of business joined in the practice, ranging from technology firms to the telecommunications industry. With the ongoing refinement of project-management tools, few business sectors are untouched by project management.

What makes project management progressively more attractive to such a broad industrial and commercial base? In addition to claims that project management saves time, money, and organizational effort, project management is rapidly being recognized as a value-added profession from the customer perspective. Customers recognize and want project management to support their projects. Several organizations have taken the lead in promoting project management around the world.

The International Organization for Standards (ISO)

The International Organization for Standards (ISO) is a thought leader in determining how many types of business operate today. Originating in Europe, this group has developed ISO standards for a variety of industries and practices, with a heavy emphasis on the need for consistent practice on an ongoing basis. The ISO standards are recognized as assurance that a business can perform effectively and consistently. Whenever an ISO standard is developed, it is a signal that the business practice involved is significant enough to warrant consistent practice. ISO-10006 is the project-management guideline. While not a full-blown standard with auditors and performance criteria, the project-management ISO does provide guidance

on the essential processes of project management. And it also sends a clear signal that project management warrants attention as a critical business process.

Professional Associations

In the United States, the foremost organization is the Project Management Institute (PMI), founded in 1969 to draw the industry together.⁶ PMI faced a unique challenge in building its professional association because the members came from a variety of practices. Approaches to project management varied widely, and industries were not ready to change those approaches readily. In 1981, PMI's Ethics, Standards and Accreditation (ESA) group took a major step forward, making an effort to create an umbrella of practices that would lead to professional accreditation. By 1984, the first certified Project Management Professionals were recognized. Since that time, the PMP certification has become a standard worldwide, with more than 50,000 PMPs certified through the early 2000s.

Just as project management professionalism was evolving in the United States, project managers in the United Kingdom had similar aspirations. The Association of Project Managers (APM) was founded in 1972 to promote project management in the United Kingdom. Today, APM offers its own multilevel certifications, with over 6,000 practitioners certified under their APM Practitioner certification.

The International Project Management Association (IPMA) was founded in 1965 and is based in Denmark. With a membership of over 20,000, the organization provides leadership for national project-management associations in 30 countries.

These professional associations add value to organizations, allowing them to speak a common project management language with their customers, whether internal or external. Such common understanding encourages intelligent dialogue and improves overall customer relations. By providing some measures of professional consistency, the various associations encourage project managers to carry similar skill sets and a consistent lexicon. With those parallels across organizations and industries, project managers enable and encourage clear communication and more effective overall management.

Project Management Today

Project management today is a far cry from where it was in the 1960s, when only the best-financed organizations could afford to integrate project information into software applications. Only massive projects could be evaluated against heuristic measures. Only organizations supporting massive capital-

the advancement of projects. Project management was the preserve of a small cadre of individuals who alone possessed the dark secrets of network diagrams, Monte Carlo analysis, and earned-value interpretation.

As the tools and practices slowly migrated away from huge capital projects, project-management software products became progressively more affordable. Organizations began to test project management to see how well it could function in their environments. Today, organizations of virtually every description practice project management, and they are taking full advantage of certified professional project managers. Project-management professions, who were once locked into their respective areas of expertise, are now branching out and becoming more skilled as generalists.

Project Management as a Time- and Cost-Saver

One of the major reasons that project management has become increasingly popular is its role as an organizational time-saver. In many modern projects, time is a consideration equal to, or more important than, money. However, with the attention to details required by project management, it can also cost time and money for an organization. A 1994 study of electrical utilities projects show that even with professional project management, schedule targets were more consistently exceeded than not—from about 20 percent under the projected duration to about 100 percent over.⁷ Although the study concluded that companies were less sensitive to schedule targets, the analysis may also be a tribute to organizations' general optimism in setting schedules. In many (if not most) organizations, however, project managers do not even participate in the negotiation process when it comes to establishing budgets and schedules. Instead, project managers are assigned to projects only after the initial time and cost budgets have been clearly established.

EXAMPLE. A project manager at a telecommunications company tells of her dismay at being assigned to a project with an unrealistic schedule. Undaunted, she went to her management, diligently reporting that the project would take two weeks longer than the schedule allowed, unless significant additional resources were provided. Management expressed confidence in her capabilities but refused to grant the additional time or resources. They told her that they were sure she would "figure out a way." At project completion, the project was four days late, based on the original schedule. As the project manager, she was ecstatic. She had been able to trim six days off a very tight schedule. Management did not reward her, however, preferring to acknowledge only the fact that the customer's schedule expectation had been exceeded. Based on a realistic schedule, the project manager had saved the organization time (and the associated cost of the resources for the additional days). Based on the preordained schedule, the project manager—and the application of project management—looked less than effective.

EARLY INTERVENTION

Project management saves time and money most effectively when it is used from the beginning of a project. At Sun Microsystems, Dr. William Scally defends the need for early intervention of the project manager in their educational project to ensure the success and effectiveness of testing and test criteria.⁸ Scally points out that early intervention is crucial in terms of establishing tests that will ultimately serve operational and organizational objectives. At the National Aeronautics and Space Administration (NASA), the administration's Continuous Risk Management policy is driven in some measure by the need for early intervention and identification of risks.⁹ The policy adds a third dimension of "time frame" to the conventional perspective of risk as probability and impact. By emphasizing that some risks have near-term implications (less than 30 days), the authors drive home the need for timely application of project management practice if cost- and time-consuming risks are to be avoided.

In other words, project managers need to be brought in at the very beginning of projects because project managers are supposed to *plan* the projects on which they work. They're supposed to outline the work to be done and then work to that plan. For project managers to save time on projects, they must have some measure of control at the outset.

AUTHORITY AND CONTROL

Control is a critical issue in developing project management as a time- and cost-saving practice. The project manager who is simply assigned to monitor tasks and oversee personnel performance will not have the opportunity to maximize the project schedule. If the project manager is granted some measure of control early in the process, and allowed to monitor it (and take action on it) over time, the odds for success increase greatly. In many cases, it is the project manager who first identifies impending (costly) delays, as well as the causes for those delays. Many are not the fault of the project manager or the project, but instead rest with the organization, which dilutes the resource pool or modifies the project approach in the middle of the effort.¹⁰ Chapter 32 covers legal reasons for giving project managers authority and control in contract agreements.

ORGANIZATIONAL SUPPORT

Project management as a time-saving practice involves a variety of organizational support functions. In the proposal-analysis phase, the project manager has the opportunity to contribute to the project approach, the promotional methodology and the technical solution. In developing the schedule, the project manager has the opportunity to establish what time-saving workarounds will function and which time-saving approaches are overly optimistic. Historically, many of these tasks have been taken on by functional specialists or by proposal writers, neither of whom may understand the intricacies of the work involved. The project manager can both

As the project evolves, the project manager saves time for the organization by tracking which activities are ahead of or behind schedule. Although that sounds like a simple task on the surface, it is the nuts and bolts of project management. Project managers must take it upon themselves to review failures and successes, taking home the lessons learned from each. Prior to the evolution of project management, such activities were the province of the functional managers. These activities, however, detracted from what they perceived as their “real” job.

Project managers save time for upper management as well, serving as buffers between the executive suite and members of the project team. In any organization, team members sometimes feel the need to address issues with the upper echelons of the organization. Although project managers cannot universally resolve such concerns, they can shield upper management from some of the day-to-day issues raised by the team members. Conversely, project managers may also serve as shields for team members against executive intervention. Some higher-level managers like to intervene in team member activities, providing insight and guidance. Although such guidance may be helpful, it can also detract from team-member performance (and from the project manager’s authority). Project managers save team members’ time by serving as communications conduits.

EXAMPLE. The classic proof of project management as a time-saver came in 1992 in San Diego, California, where the local Building Industries Association set out to prove its effectiveness by constructing a home in world-record time. Prior to the San Diego construction, the world record for conventional home construction was just over four hours. After six months of extensive project planning and analysis, the implementation phase was ready to begin. For the San Diego project, the actual construction (including pouring concrete, frame construction, roof-truss construction, heating, plumbing, wiring, wall placement, and landscaping) lasted less than three hours.¹¹ Three hundred and fifty team members on-site were perfectly coordinated. With each project phase detailed to the minute, the project ran almost flawlessly. Project management can save time. But, as this example points out, investments have to be made in planning and providing resources for the project to ensure that the schedules can be met.

The old adage says *time is money*.¹² But project management saves money in other ways, in planning, resource deployment, tracking, use of reserves, and project close-out. If the project manager is allowed to pursue these basic practices, project management can be an effective money-saver. By doing a project right the first time, an organization can avoid rework and warranty service that can prove cost-prohibitive.

PLANNING

Planning costs are historically the lowest costs an organization faces during the project life cycle. Virtually all project cost models begin with a low, smooth, slow gradient during the planning phase (see Figure 3–1). Costs are

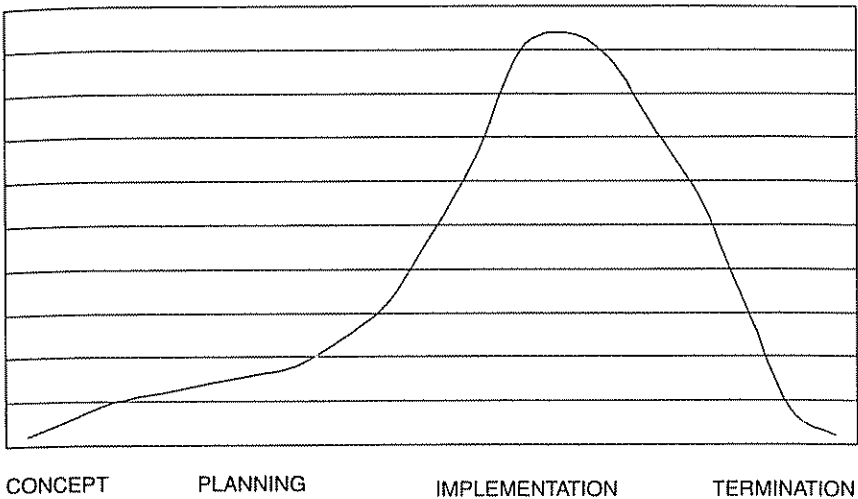


Figure 3-1 Project Cost Utilization Curve

low because most of the costs in this phase are personnel, rather than material.

Careful and extensive planning allows for intelligent use of resources later in the project. It also allows for more thorough project reviews.

The project plan must be made early, but it must also be based on sound business judgment.¹³ If the business plan is weak, it will lose integrity because the project will be evaluated against a false model through its life cycle. If the plan is not realistic, it cannot be used as a barometer for project success. A good business plan is not a guarantor of success. But if the plan is sound and maps to reasoned business judgment, the chances of success improve significantly.

Without a clear, well-defined plan, there can be no honest baseline. Without an honest baseline, there can be no objective evaluation of project success. Without an objective evaluation of what constitutes project success, success (or failure, for that matter) can never be achieved. Before project management became an accepted practice, functional managers were, in large part, responsible for establishing the baselines. Although they proved highly skilled in their own areas, they lacked the cross-functional frame of reference essential to building a valid baseline for a project as a whole. Project management affords organizations that frame of reference.

RESOURCE DEPLOYMENT

Project management also saves organizations money by deploying resources more effectively. In an era of downsizing and corporate efficiency, each individual must be encouraged to broaden his or her skills and knowledge by participating in a broader portfolio of projects. Although training and on-

takes on the responsibility of a mentor to foster personnel development. Functional managers have the knowledge and skills to build insight within their functional areas, but project managers encourage greater cross-functional understanding and capability.

The importance of the project manager's role in resource deployment can be seen in the range of commercially available software. Virtually every project-management software package is built, in large part, around resource loading. With this level of attention given to employees' tasks and responsibilities, the organization is assured that individual team members are being fully deployed. Project management allows for greater tracking and understanding of employees' roles and responsibilities both in the project and in the organization as a whole.

TRACKING

Project managers save money by tracking project progress. "That which is not documented does not exist" is a maxim long supported by project managers. Early identification is often touted as the key to effective risk management, as well as effective cost management. Since project problems often turn into small-scale projects on their own, early identification of those problems allows for greater planning. Better planning means lower overall costs for implementation. Tracking also encourages increased accountability from all project participants.

USE OF RESERVES

One way in which project management can save money is through the deployment of reserves. Project managers in the field rarely get access to a contingency reserve account, even though such practice is acknowledged and encouraged time and again in the project-management literature.¹⁴ Reserves allow project managers to reduce or eliminate the tendency to build padding into the project budget at the work-package or control-account level. Reserves allow project managers to manage problems by applying funds as appropriate.¹⁵ Organizations that establish reserves provide project managers with a valuable tool to identify specific problem areas and respond accordingly.

PROJECT CLOSE-OUT

One other way project managers save organizations money is by ensuring a thorough, effective close-out. Project termination is a key role for the project manager and ensures that all parties involved are aware that the project has drawn to a close. As simple as that may sound, it is actually a process that is forgotten or lost on some projects, prompting them to linger beyond their time and drain an organization's resources.

Project Management Optimizes Resources

Project management drives organizational efficiency. As far back as 1959, project managers were lauded for their ability to corral organizational re-

sources from a task-oriented (rather than a function-oriented) perspective.¹⁶ Project managers enable cross-functionality, team development, and employee growth while maximizing use of employees' time.

CROSS-FUNCTIONALITY

Project management evolved out of a need to draw upon the resources and insights of the entire organization. Throughout the early 1900s, the need for functional organizations evolved, affording businesses a structure to bring together the individuals capable of performing a single mission and doing it effectively. Functional organizations allowed individuals to develop within their areas of expertise and encouraged upward mobility through the ranks. The mid-twentieth century brought new diversity, challenges, and possibilities. To achieve these possibilities, it was essential to draw on the capabilities of individuals from a variety of functions. Customers were demanding more from their product providers. They began to expect service as well. Integration became a buzzword.

In the past decade, the term *mass customization* has come into vogue, sufficiently that there is now an international symposium on the topic, the Interdisciplinary World Congress on Mass Customization and Personalization, with a focus on how to integrate professionals and team members from a host of disciplines into a customized, uniform solution specific to a single customer need. Management guru Tom Peters has not been left out of the mix, promoting the notion of "Wow! Projects" and the need for team integration and collaboration. Peters takes the notion of cross-functionality a step further, contending that virtually all work can be reconfigured into projects.¹⁷

Modern project management is flourishing in this environment. For any integration effort, it is essential that there be a focal point of responsibility, insight, and oversight. Project management takes the pressures of cross-functionality off the backs of functional managers. Project managers are responsible now as second bosses for many of the employees they oversee. In this role, project managers become both blessing and curse to functional managers. No longer must functional managers learn the business of the other line organizations. But they must now cope with the project managers, who make demands for resources and support.

As a result, project managers become versed in the policies, politics, and protocols of each organization with which they deal. They become conduits for both information and corporate attitude. They serve as the bellwethers of conflict or calm between the factions within the organizational hierarchy.

TEAM DEVELOPMENT

On a much smaller scale, project managers also provide organizations with opportunities for extensive employee development. In the functional organization, employees might spend their entire careers wedded to a single function. With promotions built on a blend of politics, longevity, and ca-

dividual hoping for the executive suite. In today's organizations, however, that is changing. Careers are built in a series of organizations, rather than a single employer. Organizations grow and shrink rapidly. Today's opportunity may become tomorrow's reengineering project.

The project manager is compelled to create temporary organizations and encourage team members to function as effectively as groups that have worked together for years.¹⁸ In the video *Four-Hour House*,¹⁹ the narrator notes that this massive team was brought together for one purpose but "they're working together like they've been doing this for years." It is evident that the clear sense of direction, the well-defined objective, and the potential for significant accomplishment all worked together to motivate the 350 people to function as a team. These lessons can be learned and applied outside this context. Project managers have the opportunity to build teams using the same approaches. The team members must have a clear understanding of the project objective, a sense of responsibility, and a role in the process. Each time the project manager succeeds in drawing together a team and making it function effectively, a significant stride is taken toward making the entire organization completely cross-functional.

EMPLOYEE GROWTH

Project managers take on a great deal of responsibility when it comes to their team members. In addition to accounting for their time, the project manager must prove that something has been accomplished through an individual's participation in the project. Without such proof, it will be far more difficult to garner resources for the next project. But optimization goes beyond whether the organization is being served. The individual team member must be served as well. Team members must have a sense that they contribute to and participate in the success (or failure) of the project.

To accomplish this, the project manager must ensure that the team members are working in the same direction, that they have contributions to make, and that they are implementing toward those goals. Working in the same direction is an issue that relates closely to cross-functionality. In many organizations, team members must serve two or more bosses. As such, the project manager's direction may be at odds with the functional manager's direction. Unifying that direction is the joint responsibility of the project and functional managers, but in many cases it falls to the project manager. Similarly, the project manager must ensure that all team members have contributions to make to the project. Although functional managers may determine which team members are assigned to the project, the project manager must validate those determinations both before and during implementation.

During implementation, the lines of authority must be clear, and anything the organization can do to support the project manager will serve both the project and the organization well. Granting project managers tools of influence, such as performance reviews, opens the door for project managers to exercise increased authority during the project. This role is crucial

to the organization that hopes to evolve with the times and meet specific customer needs (through processes like “mass customization”).

The project manager needs to be highly adaptive in building project teams. As projects are unique, the team structures are unique for each project.²⁰ That means the project manager needs to be able to create teams that can function well together and can adapt to a new type of project or project environment without the simple, clear templates that have evolved through years of functional thinking. It is yet one more area where the project manager adds value to the organization—by ensuring that team members have a sense of team in a novel environment and by ensuring they understand their roles and responsibilities (and have an opportunity to grow within those roles).

PROJECT MANAGEMENT MEETS CUSTOMER NEEDS

Customer expectations are established from the very first contact with an organization. Every meeting, every connection between the organization and the customer helps to further establish those expectations.

EXAMPLE. A project manager walked into the client site wearing khaki slacks and a polo shirt. Because the company had a dress code of “business casual,” no one said a word or thought anything of it. However, several months later a new project manager took over. This project manager arrived in a suit and tie. The new project manager was quickly assaulted with questions about his attire and whether it represented a shift in the relationship with the project organization.

Every word, every appearance, every element of presentation works together to generate expectations. Customers have expectations, but in many ways the project organization is responsible for establishing them. If the first project manager had always worn a suit and tie, no one would have said anything to the second. Similarly, had the second project manager come to work dressed casually, there would have been no questions asked.

PROJECT MANAGERS BUILD CUSTOMER LOYALTY

Although sales and marketing teams are paid specifically to set the customer expectations, many of the real-world, day-to-day expectations are established by the project management and project manager team. It goes well beyond attire. If a project manager shows a willingness to introduce minor changes at no cost, that becomes a customer expectation. If a project manager directs project team members always to leave the client facility at 5:00 p.m., that becomes an expectation as well. The project manager establishes the major tenets of the relationship, and it is up to the project manager to ensure that information is communicated across the organization.

ENDNOTES

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