

Project Management: The Key to Thriving in the New Project- Driven World

INTRODUCTION

Projects dominate our headlines.

Reform—in health care, in education, on Wall Street—is accomplished through projects.

Electric cars are a reality. Biodiesel, solar, wave, and wind energy are supplying an increasing proportion of energy. And the gadget factory is in high gear. Devices you'd never have dreamed of five years ago are already out of style. The constant drive to innovate makes the ability to deliver new products a core asset of technology companies.

Projects dominate our workplace.

Our project-based workforce creates advertising campaigns, repairs freeways, remodels homes, writes articles, revises compensation plans, and connects the world with cellular communication networks. We grow our organizations as we open new stores, merge with rivals, and expand or consolidate distribution networks. We are constantly transforming our global civilization in tiny increments.

Projects help us react, survive, and thrive. A global economy on the rise or in recession creates constant change, and the pace is increasing. The changes are disruptive for some: those whose companies and industries have become irrelevant faster than they could

imagine. For others, it is an endless opportunity. For everyone, it is a challenge to navigate and prosper in an environment where we are forced to learn, to adapt, and to contribute our own changes.

In the past it was possible to leave the management and mastery of projects to innovation leaders like Boeing, Apple Computer, Ford, or Disney. But the new pace of change affects every organization, and those that don't adapt don't survive. Project management is a must-have capability for every organization and a personal job skill that will only become more valuable in the years ahead.



Projects Are the New Way to Work

Project management is not new. The pyramids and aqueducts of antiquity certainly required the coordination and planning skills of a project manager. While supervising the building of St. Peter's Basilica in Rome, Michelangelo experienced all the torments of a modern-day project manager: incomplete specifications, insufficient labor, unsure funding, and a powerful customer. But Michelangelo was the exception in his day. He lived at a time when economies were dominated by agriculture. It took centuries, but eventually economic drivers evolved from agriculture to manufacturing, and in the twenty-first century our global economy is powered by innovation.

The world is experiencing a fundamental shift from rewarding excellence in ongoing operations to rewarding the ability to chart an effective path of change and deliver on the goals. The discipline of project management provides the methods and techniques to meet the challenge.

Before we can explore the growing necessity for project management, we must first understand projects. Projects are all the work we do *one time*. Whether it's designing an aircraft, building a bakery display case, or creating a business logo, every project produces an outcome and every project has a beginning and an end. Fundamental to understanding the importance of projects is realizing that each one produces something unique. Designing and tooling up to build a new sports car is a project (actually a lot of projects), but manufacturing thousands of sports cars is not. Manufacturing and other repetitive processes are defined as ongoing operations.

In a globally connected economy it is still critically important to perform ongoing operations with excellence. The reliability and performance of automobiles, for example, continue to be deciding factors for consumers. But in addition to refining their manufacturing processes to reduce defects and drive down costs—a traditional process-improvement focus—auto manufacturers are also rewarded by

finding new ways to produce cars that are fuel efficient or use alternative sources of fuel.



Project Management Is Keeping Pace with Global Change

Project management is a discipline—a set of methods, theories, and techniques that have evolved to manage the complexities of work that is unique and temporary. Even as the discipline continues to evolve, it can claim a proven track record. Millions of projects around the globe routinely rely on the concepts found in this and other project management books. The Project Management Institute (PMI), headquartered in the United States; the International Project Management Association (IPMA), serving Europe, Asia, and Africa; and other standards organizations have formalized this discipline over the past 50 years.

Project management techniques cover a range of topics:

- Communicating with team members and stakeholders from project conception through completion.
- Estimating the effort, cost, and time it will take to deliver a project, and evaluating whether the benefits of the project will justify the forecasted costs.
- Rapidly building cohesive project teams that are highly productive even though team members have not worked together before.
- Coordinating the actions of a diverse workforce, assembled specifically for a project, to achieve the goal for the least possible expense and in a reasonable time frame.
- Accounting for progress and productivity to provide accurate forecasts of project completion dates and budget amounts.
- Managing the varying staffing needs that result from constantly running multiple projects concurrently, all of which share a common pool of personnel.

Project management practices continue to evolve, playing a leapfrog game with the needs of the project-driven workplace. Solid project management practices enable firms to take on more complex projects, which in turn demand more complex project management techniques.

The proliferation of projects has led to substantial growth in the number of people who call themselves project managers, and project manager is now a common role in nearly every kind of organization. The related phenomenon is the rise of the certified

project manager. PMI and IPMA both offer professional certification programs to formally recognize skills, knowledge, or both.

The growth in projects has created an organizational phenomenon: excellence in project management is increasingly in the hands of specific people or departments typically referred to as the project management office (PMO). (Chapter 14 describes the many forms that PMOs take and their associated responsibilities.) PMOs are now commonly found throughout all levels of organizations. The investment in the PMO can be compared to the investment in the office of a CFO or controller—somebody must be responsible for building and maintaining the accounting infrastructure. Likewise, the PMO is responsible for the project management infrastructure.

Examples of how project management is spreading to new parts of our global workplace can be found in the profiles at the end of this chapter on two organizations, OrthoSpot and PM4NGOs. The first is a business start-up, and the second is a nonprofit that is promoting the use of project management in developing countries by aid agencies. In both cases, these organizations have used the proven project management framework as a starting point, and then adjusted it to meet the needs of their unique audience.

Another example of adjusting the proven discipline of project management is the emergence of agile techniques. *Agile* was originally a term that applied to a particular style of developing software, and was meant to counter extremely linear or rigid software development practices when the circumstances seemed to demand more flexibility. Agile methods are still primarily applied to information technology (IT) and software development projects, but its principles have application in other projects as well. (Read more about the agile approach in Chapter 17.)



Project Management as a Strategic Strength

Given the importance of thriving in a project-driven world, the people who lead projects—who turn visions of what might be into tangible products and services—stand out. But it has been proven that project managers alone can't carry the burden of creating mature organizations whose project management capability produces a strategic advantage. In fact, as the pace of change continues to increase, leaders at every level must be able to speak the language of project management.

- *Executives* select projects. They also stand behind projects as champions or sponsors, overseeing project progress and providing advice to the project manager and team. Every major project

or program has an executive who is ultimately accountable for its success. Executives are also accountable for the project portfolio, the collection of all active projects that have been selected as the best way to achieve the organization's goals.

- *Functional managers* sponsor, lead, or oversee projects within their departments. They make decisions about project priorities as they assign their staff to project teams.
- *Team members* who understand project management make the entire project run more smoothly. They make the project manager more effective because they make better estimates, identify risks, and participate in planning and problem solving.

If projects are the way we work, and if project management takes an organizational commitment, it is worth asking if your organization is included among those that find excellence in project delivery to be a strategic advantage.

- Is a significant portion (20 percent or more) of your budget related to delivering projects? Twenty percent is a pretty big proportion of your budget. How would it transform your organization to be able to produce 20 to 40 percent more products or services for that same amount of money because you are more efficient at delivering projects? This applies to nonprofit organizations as much as government agencies or for-profit businesses.
- Is the ability to deliver new products to the marketplace part of your competitive situation? What if you could consistently deliver a new product faster or more cheaply than your competitor? What if you can't?
- Do you work for a service-based firm that bids on projects (engineering, roofing, information services, etc.)? If so, you stand to either improve your ability to win new work or perform the work at a higher profit.
- Are you in a growth industry? Growth is fueled by projects. Those who deliver projects faster and more cost-effectively will leave the others behind.
- Are your projects large and complex? New product development for pharmaceutical companies and defense contractors is extremely expensive, and on top of that, the products are so complex that without strong project management the product development efforts fail. Large information system projects too often fail because of poor project management. Spending millions (or hundreds of millions) of dollars on a project only to have it produce nothing could fatally cripple a business and dramatically reduce the effectiveness of a government agency.

These are the factors that justify investing in the project management capability of your organization. For individuals, the questions are similar but more fundamental: In an economy that is pushing each of us to learn and adapt, how much change do you expect in your job over the next decade? If the new normal is continuous transformation, isn't the ability to navigate new territory the most enduring skill?



THE ART AND SCIENCE OF PROJECT LEADERSHIP

Project management has been called both an art and a science. In these pages, you will see how mastering the science of project management provides a foundation for the art of leadership. The necessary skills are common to both. There is no question that the best project managers are also outstanding leaders. They have vision, they motivate, they bring people together, and, most of all, they accomplish great things.

Indeed, when we characterize the attributes of the great project managers, their skill can seem mysterious and magical, as though the good ones are born and not made. Fortunately, that is not the case. Through over 20 years of listening to many thousands of professionals and observing the most successful project leaders, it has become very clear to me that project management is a skill that can be taught and learned. Far from magical or mysterious, I've learned that certain characteristics are consistently found on successful projects in every industry. Boiled down, they consist of these five project success factors:

1. *Agreement among the project team, customers, and management on the goals of the project.* The importance of having clear goals seems so obvious that it's almost embarrassing to bring it up. Yet thousands of projects, at this very moment, do not have clear goals, and the results of this fuzziness can be devastating. In this book, you will find at least half a dozen techniques that clarify goals, and you will discover how to make these techniques work together. This means you'll employ at least six different methods to make sure that all the stakeholders want the same thing. You'll find that this process of arriving at clear goals together can be invigorating and powerful.
2. *A plan that shows an overall path and clear responsibilities and that can be used to measure progress during the project.*

Since every project is unique, the only way to understand and execute it efficiently is with a plan. Not only does a good plan show who is responsible for what and when, but it also demonstrates what is possible. It contains the details for estimating the people, money, equipment, and materials necessary to get the job done. And because the plan is the basis for measuring progress, it can also act as an early warning system for tasks that are late or over budget. In Chapters 5 through 8, you'll find a systematic planning model that integrates the traditional planning techniques. This model presents a logical, step-by-step approach to creating and executing a detailed plan.

3. *Constant, effective communication among everyone involved in the project.* People—not plans or software—complete projects. A successful project is a result of people agreeing on goals and then meeting them. From concept through implementation, success depends on the ability to come to agreement, coordinate action, recognize and solve problems, and react to changes. All of these things require that people communicate well. Every technique in this book is a communication technique, designed to improve the formal and informal ways we communicate critical project information.
4. *A controlled scope.* Success is in the eye of the beholder. This is why, from the very start, the successful project manager will ensure that everyone involved understands exactly what can be accomplished within a given time frame and budget. This is called managing stakeholder expectations, and it is an important, ongoing task throughout the project, especially if changes are introduced. Stakeholders must not only agree to the original scope of the project, but also understand any changes in scope. This book contains a systematic method for establishing realistic goals for cost, schedule, and quality, as well as techniques for keeping the goals consistent throughout the project.
5. *Management support.* Project managers rarely have enough formal authority to make all the decisions it takes to complete a project. They rely on people in traditional management roles to supply people and equipment, make policy decisions, and remove organizational obstacles. Even the most enthusiastic, creative, motivational project leaders will stumble if they do not enlist the people with authority to act on their behalf. The good news is that many of the techniques in this book can be used to manage upward, that is, to guide the people with power toward timely decisions that keep the project moving.

Far from being mysterious, these five essential factors can be achieved through the diligent, persistent use of the science of project

management. That is not to say that success comes without art—on the contrary, art is immensely important. Art encompasses political and interpersonal skills, making creative decisions when complete information is lacking, knowing intuitively when to delegate work, and more. But learning the basic science is requisite to practicing this art.

That's important for all of us, because it means that success at leading projects is not reserved for the lucky few born with the skills; rather, it is a discipline that can be taught and learned.



Processes Are Not Leadership

Project management can be viewed as a science composed of techniques and methods, and even software. It can also be viewed as the ability to inspire a team to achievement, to make tough choices, and to act with integrity when mistakes are made. In fact, project management can be all of these things. To grow, we must recognize the difference between knowing the science and practicing the art.

The art of project leadership embodies skills that are gained through experience, sensitivity, and a thorough knowledge of the basic science of management. Learning the basics of project management can be your first step on the road to becoming a skilled and inspiring leader. While developing all these skills will take time, the basic science can be learned fairly quickly; able students can read and practice the lessons in this book on their very next project.



THE PRACTICAL FOUNDATION FOR SUCCESSFUL PROJECTS: HOW THIS BOOK WILL HELP YOU

This book is written for people who need to understand the time-tested techniques of project management and how those methods are being put to use on projects every day. It is for people who need a complete foundation in the discipline, whether they are recent graduates, experienced executives, midlevel managers, or team members wanting to be team leaders. This book is primarily about *how*: how to get agreement on goals and how to reach them, how to enlist team members and project sponsors, how to negotiate schedules and budgets, and how to reduce risk and increase the odds of success. In addition to practical advice applying proven techniques, this book has several additional features that make it easier to apply this advice:

- Access to webinars describing new developments in project management or expanding on topics within the book.

- Downloadable forms of common project management deliverables.
- Tips for using Microsoft Project, the most popular project management software application.
- Practice questions and advice for passing the Project Management Institute's Project Management Professional exam.

Webinars to Explore New Topics or Learn in a New Way

Books are one medium for learning. Live, interactive webinars with the author and his team provide another medium to stay up-to-date on new trends or explore a new twist on topics within the book. Be notified of free webinars by registering for updates at www.versatilecompany.com/FFMBAinPM.

Downloadable Forms for Putting the Discipline to Work

The distance from concept to application can be shortened for all of us by using standard forms and templates. This book contains more than 20 checklists, forms, and templates for managing your own projects. We've titled these forms the *Fast Foundation in Project Management*, because together they form a basic project management methodology. Download these forms from www.versatilecompany.com/FFMBAinPM. Look for them at the ends of Chapters 3, 4, 5, 7, 8, 11, and 16. Since these forms were included in the second edition of this book, many firms have used them, adjusted them to fit their own projects, and adopted them as their own standards.

Microsoft Project Best Practice Tips

There are many effective project management software tools in the market, but by far the most common is Microsoft Project. Project is designed to apply the project management techniques described in this book. This book has three resources to help you gain the most from Project: Chapter 20 contains recommended practices for getting the most value from Project with the least effort when planning and managing projects. In addition, purchasers of this book are entitled to download tutorials for the basic use of Project from www.versatilecompany.com/FFMBAinPM. The third resource is live webinars conducted by leading experts on Project.

PMP Exam Preparation Guidelines and Test Questions

Many project managers benefit from earning PMI's Project Management Professional certification. One requirement for earning this certification is passing a lengthy exam. As an aid in exam preparation, sample exam questions are provided at the ends of Chapters 2 through 12. The questions are intended to provide a hint of what the exam is like. Don't be surprised if some of these questions have answers that aren't in this book; the exam covers a broad range of content. These exam questions, along with Chapter 19, which contains general advice on preparing for the exam, have been contributed by Tony Johnson, author of a leading PMP exam preparation course series.



PROJECT MANAGEMENT RELIES ON OTHER DISCIPLINES

Practicing the discipline of project management is important and will improve the results of individual projects. Improving the overall effectiveness of a project-driven organization relies on many other disciplines as well. Part 5 of this book establishes connections to other disciplines and shows how they also contribute to productivity when an organization is regularly managing a portfolio of projects.

Chapter 14, "Enterprise Project Management," describes how project portfolio management and program management magnify good project management practices. This chapter also provides a model that illustrates the processes, technology, people, and organizational structures necessary to integrate project, program, and portfolio management.

Chapter 15, "Requirements Engineering," examines a major project success factor: the discipline of discovering what will benefit the customer most and gaining agreement on that vision of the product. Failure to correctly identify requirements will surely doom a project in any industry.

Chapter 16, "Project Initiation," describes the factors that must be considered when choosing a new project. The processes and techniques described in Parts 1 through 4 of this book all assume that only the right projects are commissioned. This chapter provides guidelines for that decision.

Chapter 17, "Information Technology Project Success Factors," is directed at some of the most expensive and high-risk projects undertaken by many organizations. This chapter highlights the

critical role of the business analyst and examines the shift to agile development techniques.

Chapter 18, “Project Portfolio Management,” recognizes that every organization that has a budget for projects also has more potentially good projects than it can afford. Consequently, a portfolio management process enables an organization to consistently review potential projects and select those that will bring the greatest benefit.



END POINT

Every increment of change in our rapidly transforming economies and societies is brought about by a project. As projects dominate the way we work, it is critical to understand project management.

Projects are defined as work that happens one time only and has both a clear beginning and end. This kind of work may be contrasted with the ongoing operations of an organization that involve repetitive work—such as manufacturing or retail—with no defined end.

As our workplace becomes increasingly project-driven, organizations are investing in the ability to select and manage projects. Managers at every level play a role in creating successful projects. Project managers, in particular, must understand and practice the proven discipline of project management.

The purpose of this book is to help you gain these skills. Learn them and you will have every chance of steering a project from its planning stages through to its successful conclusion. For, while employing art and creativity are also important, the tools put forth in this book—the science of project management—provide the foundation for the success of any project.

Stellar Performer: OrthoSpot **Entrepreneurs Leverage Project Management**

Entrepreneurs are the ultimate project managers. They start with an idea and create a company. The founders of OrthoSpot knew they were playing against the odds when they set up their company, which offers an Internet-based inventory management solution to orthopedic surgeons. But they made it. Within a few years they had hundreds of orthopedic practices across 44 states relying on OrthoSpot's distribution network to supply over 60,000 products.

CEO Bill Schafer attributes the company's survival and continued growth to using fundamental project management techniques from the start. "We didn't have any idea how to start a business—how to get funding or bring our product to market." So the prelaunch months were spent in planning, building a detailed picture of the work ahead of them.

They started with a fundamental question: "What do we have to do to make money?" They built an answer from the top down. "We needed a product, business infrastructure, and sales and marketing distribution structure. Our first three major tasks became: get a business model, raise money, and set up an office." Shari Cohen, vice president of customer relations, had offered her home's basement as the original offices. "The wall's were covered with sticky notes and string, showing all the tasks and what had to be done before what."

Venture capital is two-edged sword for a start-up, providing the means for growth but also giving away the future fruits of the founders' innovation. So OrthoSpot used venture capital sparingly, limiting the number of employees who could be brought on board. Schafer relied on the detailed plan to accomplish a lot with a small team. "The early-stage mentality of overcoming obstacles by intensity can lead you astray if you don't have focus and keep your eye on the objective and allocate resources appropriately."

Schafer also relied on the plan when making strategic decisions. He found that the new thinking OrthoSpot was bringing to orthopedic practices attracted other opportunities. "When you're changing the way business is done and you're making headway, a lot of opportunities present themselves—for example, do this for cardiologists. But we don't have enough people and hours to do it all, so a focus on the plan keeps energy directed. The payoff is that the team stayed incredibly energized. When they are focused they can do incredible things."

The early focus on executing against a plan has seeped into every operation at the firm. New product development efforts and system implementations for customers are driven from detailed work breakdown structures (WBSs). "It's in our DNA—project planning and accountability," says Schafer. As a result, he believes OrthoSpot is positioned to be incredibly competitive. "We compete and win against companies that have a hundred times our capital."

Orthopedic practices across the United States rely on OrthoSpot to bring efficiency and lower costs, enabling them to offer better value to their patients. OrthoSpot relies on fundamental project planning and execution to serve its growing customer base and enable the OrthoSpot founders to enjoy the fruits of their vision and hard work.

Source: Interview with Bill Schafer.

Stellar Performer: PM4NGOs **Extending the Practice of Project Management to Accomplish Social Change**

“Let’s not try to solve world hunger” is an oft-used warning about scope creep. Don’t tell World Vision, Oxfam, Inter-America Development Bank, CARE, Catholic Relief Services, and the hundreds of other nongovernmental organizations (NGOs) working around the globe in developing countries to improve living conditions. Their efforts promote education and increase access to basic health care, clean drinking water, cheap solar energy, and other essentials that citizens of the developed world take for granted.

For those of us in the project management profession, it is easy to see this work as a never-ending series of projects. Key people in the NGO community have come to the same conclusion. Their passion for project management and development has created PM4NGOs.

PM4NGOs was launched in 2010. This nonprofit’s stated mission is to maximize the impact of project investments for donors and beneficiaries. To do that, PM4NGOs pursues two primary strategies:

1. Promote and enable professional project management practices to be contextualized for the development and humanitarian environments.
2. Develop and maintain standards for project management in development and humanitarian agencies.

To meet these goals, PM4NGOs has created a certification based on a description of project management that bridges the gap between the realities of development projects and the existing standards such as PRINCE2 and the Project Management Institute. The certification is called Project Management for Development Professionals, but is usually referred to as PMD Pro. The accompanying standards document is called *A Guide to the PMD Pro*.

How do another standard and another certification make a difference? Mike Culligan is one of PM4NGOs founding board members and a principal author of the standard. He explains the genesis of PM4NGOs: “After 29 years of working on projects in the development sector I was introduced to the project management standards that were commonplace in industry. That was a revelation. But it wasn’t easy to apply them. I found that they simply didn’t connect with the way development workers were running their projects.” Other seasoned development project managers felt the same way. Culligan and his PM4NGOs colleagues want to promote proven best practices, but know that to be accepted these practices must be contextualized, described in a way that makes sense to development projects. Culligan, along with all other PM4NGOs board members, is a volunteer. His full-time job is providing learning opportunities to 59 major NGOs around the world. “*The Guide to PMD Pro* creates a global standard that development workers will recognize. It can be adopted by international NGOs or small, local NGOs.” The standard can also be promoted by independent training and consulting firms, just like the PMI and PRINCE2 certification.

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PM4NGOs puts a special emphasis on serving its unique audience. "A very important role of PM4NGOs is to make certain that access to the new certification is broad and the price affordable," says Vadim Usvitsky, PM4NGOs board chair. "We work in an environment where professional credentials are very important but not often available. We want to make sure the PMD Pro reaches all project managers that are interested."

The members of PM4NGOs have donated their time and money to write the standard, to develop the certification exam, and to have both translated into multiple languages. They also strive to make the certification accessible by keeping the cost of the exams to a minimum, as low as \$20 per applicant in some cases.

Early results from the field are positive. World Vision International is using the certification as a basis for training over 1,000 field workers in 16 African countries. Dozens of development organizations in Latin America are collaborating to educate over 600 professionals using the *Guide to the PMD Pro*.

Projects undertaken to achieve social change need proven project management practices such as planning, risk management, and scope control. They also need optimism, persistence, passion, and imagination. The founders of PM4NGOs have a grand vision and the hard-won experience to make it a reality. To learn more, visit their website: www.pm4ngos.org.

<http://www.pbookshop.com>