

CHAPTER 1

The Project Landscape

The first bit of business for you as a member of the senior management team (SMT) is to understand the project environment within which your project, program, and portfolio managers and their teams must work, and within that environment, the challenges you will face in establishing and supporting an effective project management environment. The needs of that environment have changed dramatically in the last 15 years especially with respect to the tools, templates, and processes that support it. The result is confusion and the introduction of yet another silver bullet every Tuesday. Those silver bullets appear very enticing, but let me make it clear that there are no silver bullets now nor have there ever been. There are strategies and you are going to learn them from this book but they will require work on your part in order to implement them and continuing attention from your office for them to become and remain effective in your organization. I recognize your dilemma in the faces and through the reactions of my client organizations as they attempt to support complex project management and offer you what I have learned over the years.

Let me try to put this in a context that relates directly to the SMT. A recent worldwide survey (IBM, "Capitalizing on Complexity: Insights from the Global Chief Executive Officer Study," 2010) conducted by IBM from September 2009 through January 2010 reported that over half of the 1541 executives from the 60 countries that they interviewed admitted that they were not prepared to support the complex and uncertain environment in which they were forced to conduct business and they didn't know what to do about it. If that isn't a wake-up call to action, I don't know what is.

The following quote from that IBM report highlights the efforts of stand-out organizations to manage complexity. Their efforts provide a roadmap for us.

The effects of rising complexity call for CEOs and their teams to lead with bold creativity; connect with customers in imaginative ways,

and design their operations for speed and flexibility to position their organizations for twenty-first century success. To capitalize on complexity, CEOs:

- **Embody creative leadership.** *CEOs now realize that creativity trumps other leadership characteristics. Creative leaders are comfortable with ambiguity and experimentation. To connect with and inspire a new generation, they lead and interact in entirely new ways.*
- **Reinvent customer relationships.** *Customers have never had so much information or so many options. CEOs are making “getting connected” to customers their highest priority to better predict and provide customers with what they really want.*
- **Build operational dexterity.** *CEOs are mastering complexity in countless ways. They are redesigning operating strategies for ultimate speed and flexibility. They embed complexity that creates value in elegantly simple products, services, and customer interactions.*

The messages from this survey are clear and validate the goal of this book. The solution offered herein is a logical approach to mitigating the complexity problem that over half of the CEOs interviewed admitted having. Which half of the population do you align with? If you want to prepare yourself to handle complexity, this book is mandatory reading and prepares you to take action. If you are a standout organization, congratulations but you should still read this book because in these pages you will find some gems to help you stay on top of changing complexity and uncertainty.

There was a time when you may have distanced yourself from projects. Your feeling was that projects were operational level activities and of little importance to someone at your management level. In the past 20 years you've probably rethought that position and now see projects as investments and part of a portfolio that has an investment strategy. You may in fact be the manager that determines that strategy. For that reason you are challenged to do what you can to maximize the return on investment (ROI) to your organization from the projects you recommend for the portfolio and that you support directly. How you have responded to this situation depends on your roles and responsibilities with respect to the project, the project teams, and the portfolio. You may have primary responsibility for supporting or managing project managers or have a role supporting those who do have primary responsibility for supporting or managing project managers. In any case, this book offers you the advice you will need to help you and your organization succeed.

The business environment has changed significantly in the last 20 years and has ushered in new project management challenges that the old ways

simply cannot support. Business as usual with respect to projects no longer works and may have never worked. Contemporary projects are projects of high complexity and great uncertainty and you must deal with them under those conditions. All of the simple projects have been done! Specifically:

- Complex project managers need the confidence and support of their management.
- Complex project teams must be empowered so they can be successful.
- Complex project portfolios must be aligned with staff resources.
- Complex projects are unique and so are their management approaches.
- Complex projects are high-risk projects.
- Complex projects require a creative approach to discovering solutions.
- Complex projects require meaningful client involvement.
- Complex projects require flexible support services.

In the pages that follow you will see just how you can and must positively impact all of these challenges. So let's get started with a brief introduction to the complex project environment. Understanding that environment is the foundation on which you will be able to build your support strategy.

The Nature of Project Complexity and Uncertainty

Kathleen B. Hass (*Managing Complex Projects: A New Model*, Vienna, VA: Management Concepts, 2009) offers the most in depth treatment of complexity that we have. She describes complexity in terms of:

- Time, cost, and size
- Team composition and performance
- Urgency and flexibility of cost, time, and scope
- Clarity of problem, opportunity, and solution
- Requirements volatility and risk
- Strategic importance, political implications, multiple stakeholders
- Level of organizational change
- Risks, dependencies, and external constraints
- Level of IT complexity

In a paper written shortly after her book was published (presented at the 2010 PMI Global Congress Proceedings, Washington, DC) she updates the complexity definition with a four-point scale (Independent Projects, Moderately Complex Projects, Highly Complex Projects, and Highly Complex Programs) and displays the values for a specific project in the form of a spider chart. Figure 1.1 is a hypothetical example adapted from her updated definition and published with her permission.

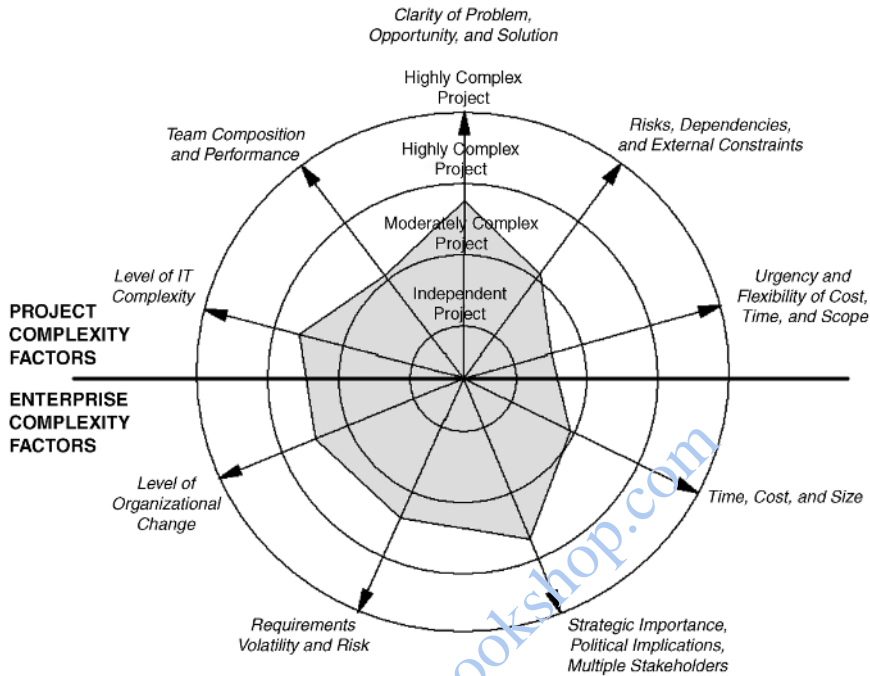


FIGURE 1.1 Project Complexity Spider Chart

Adapted from: Project Complexity Model 2.0, Kathleen B. Hass © 2010, Kathleen B. Hass & Associates, Inc.

The project illustrated in Figure 1.1 is highly complex as indicated by the project complexity score on Level of IT Complexity and Clarity of Problem, Opportunity, and Solution. At the Enterprise Level the complexity scores on Level of Organizational Change, Requirements Volatility and Risk, and Strategic Importance, Political Implications, and Multiple Stakeholders are suggestive of a very complex project. All five of these factors should alert senior managers that corrective actions on their part should be in place to mitigate the potential adverse effects. This book offers infrastructure and support advice to that end.

Goal and Solution Clarity

I like simple and intuitive models and I spent a lot of time defining and redefining project categories before I found a classification scheme that met my criteria and my specific needs. The one I am using here I have used for almost 20 years. It works and has never failed to live up to my expectations.

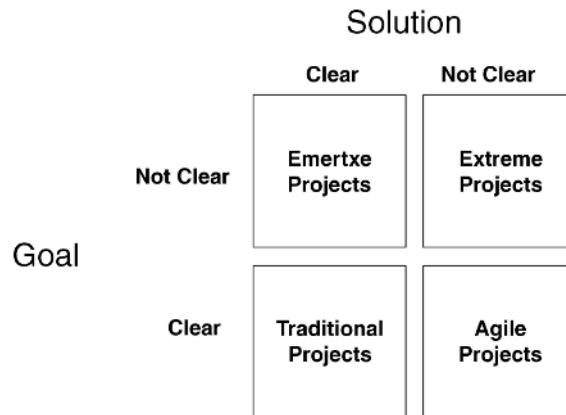


FIGURE 1.2 The Four Quadrants of the Project Landscape

Every project has a goal and hopefully there is a plan that defines how you will reach that goal (a.k.a. a solution). So I define the project landscape around the two fundamental project variables: goal and solution. In my classification scheme these two variables can have only one of two values: clear or not clear. I experimented with more than two values for each variable but that only added complication without adding value. Those two values for each variable generate the four-quadrant matrix shown in Figure 1.2.

I don't know where the dividing line is between clear and not clear but that is not important to this landscape anyway. These values are conceptual not quantifiable. A given project can exhibit various degrees of complexity and uncertainty that position it in one of the four quadrants at a particular point in time. As a project is undertaken the complexity and uncertainty originally associated with it will often change. That could justify changing its quadrant and also changing how the project is managed. The implications of that change can be significant and you will want to be involved. In Chapter 2 this situation is discussed.

If you impose a quantitative metric on each factor represented in the spider chart in Figure 1.1, you can create a project complexity score and an enterprise complexity score on every project and rank them in terms of complexity. That would be an interesting academic pursuit but is beyond the scope of this book. At this time I prefer a qualitative interpretation of a single project's complexity. Knowing each project's complexity extends to the complexity level of the project portfolio. In Part III, Improving Project Return on Investment (ROI) Using Agile Project Portfolio Management, we discuss the alignment of portfolio complexity with staff resources. In this book my interest will be on Enterprise Complexity and how the SMT can take action that will mitigate the impact of project and portfolio complexity.

Traditional Projects

Traditional projects are the simplest of the four types and are the ones you probably think about when you first envision a project. You assume there is a nice, neat, and clean statement of the goal, and a statement of how that goal will be achieved, and that all the relevant players have the same understanding of what that means. Nice but not too likely. Testimonial data that I have collected from all over the world suggests that about 20% of all business projects are of this type. Does that surprise you?

Until recently you probably haven't paid much attention to these projects. You viewed them mostly like operational projects and not worthy of your time or attention. Let the appropriate business unit managers worry about them. That attitude is no longer appropriate because these projects are at last recognized as investments and part of a portfolio of other similar projects. There is now an ROI component to projects and portfolios and someone has to be responsible for protecting the investment and assuring the delivery of business value. This applies to projects in all four quadrants.

Traditional projects are well-defined and low risk and generally follow a fixed methodology. The plan is developed along with a schedule of deliverables and other milestone events. A formal change management process is part of the game plan. Progress against the planned schedule is tracked and corrective actions are put in place to restore control over schedule and budget. These projects often take advantage of templates that have been developed over the course of repeating similar projects. A nice neat package, isn't it? All is well until the process gets in the way of product development. For example, if the business situation and priorities change, and result in a flurry of scope change requests to accommodate the new business climate, an inordinate amount of time will then be spent processing change requests at the expense of value-added work. The schedule slips beyond the point of recovery. The project plan, having changed several times, has become a contrived mess. Whatever integrity there was in the initial plan and schedule is now lost among the changes. Had this situation been a possibility, a better choice of management approaches could have been made.

Agile Projects

Next in the order of complexity are those projects whose goal is clearly documented and understood, but how to achieve that goal (the solution) is not. Maybe only minor features of the solution are not yet decided and no one is too worried. On the other hand, maybe most of the solution has evaded discovery and everyone is (or should be) worried. Testimonial data

that I have collected from all over the world suggests that about 70% of all business projects are of this type. Does that surprise you? Is that a call to action for you? To further complicate the situation suppose the project is a critical mission project and an acceptable solution (one that delivers a specific level of incremental business value) must be found.

These are called agile projects and you have probably depended on the business managers and technical staff to craft management approaches to find these elusive solutions. Without senior management intervention there will be dozens of management approaches with little coordination or standard practices linking them. Such a situation is chaotic from a management perspective and certainly contributes to the conclusions reached in the IBM study quoted previously. This is not a hands-off situation for you. It is very much a hands-on situation requiring your attention. There is a management role for you with significant responsibilities. A major focus of this book is to help you understand those roles and responsibilities and how to take charge. I hope I have your attention.

Agile projects are all together different than Traditional Projects. Managing an agile project is really nothing more than organized common sense. So when the process you are using gets in the way, you adapt. The process is changed in order to maintain focus on doing what makes sense to protect the creation of business value. Unlike traditional projects, agile project management processes expect and embrace change as a way to a better solution and as a way to maximize business value within time and budget constraints. That means choosing and continually changing the PMLC Model to increase the business value that will result from the project. Realize that to some extent scope is a variable in these types of PMLC Models.

Extreme and Emertxe Projects

Next in the order of complexity are those projects whose goal is not clearly defined and whose solution is either not known (extreme projects) or known (emertxe projects). Emertxe is not a nonsense quadrant but is a new term for you and is defined in Chapter 2. Emertxe is a type of research and development project where the solution is known but its application to a business goal is not. These two quadrants are discussed together because the roles and responsibilities of the SMT are the same regardless of which quadrant we discuss. These two quadrants house a variety of research and development projects. It is a world that demands creativity and bold ventures. Both types of projects are very complex, they present a great deal of uncertainty and are high risk. They exhibit a high failure rate. The role and responsibilities of the SMT members in extreme and emertxe projects are

very different from the agile projects and even more different from the traditional projects.

Significance of Project Type to the SMT

Every project that ever existed or will exist falls into only one of these four quadrants at any point in time. This landscape definition is robust and is not affected by external factors or change of any kind. It is a landscape that will remain in place regardless of technology or its impact on the business environment. The quadrant in which the project lies will be an initial guide to the project team when choosing a best fit PMLC Model and adapting its tools, templates, and processes to the specific project. As the project work commences and external factors are at play, the goal and solution may change or become clearer and the project's quadrant may change and perhaps the PMLC Model will then change as well, but the project is always in one quadrant. The decision to change the PMLC Model for a project already underway may be a big change and needs to be seriously considered. The SMT will want to understand that there are the costs of change, abandonment, benefits, advantages, and disadvantages associated with a mid-project change of PMLC Model. More on that in Chapter 2.

Beyond goal and solution clarity and completeness there are several other factors to consider in choosing the best fit PMLC Model and perhaps modifying it to better accommodate these other factors. By way of example, one of those factors is the extent to which the client has committed to be meaningfully involved. If the best fit PMLC Model requires heavy and meaningful client involvement, as every agile, extreme, and emergent project does, and the project team doesn't have their meaningful involvement, you may have to ask the project manager to fall back to an approach that doesn't require as much client involvement. Alternatively you may want to recommend a workshop or other strategy to encourage that client involvement before the project begins. In such situations I have had good results imbedding the client orientation and involvement training into the project work itself.

Regardless of the type of projects the question you need to answer is "On which of these projects am I going to invest my resources?" I'll help you answer that question in Part III, Improving Project Return on Investment (ROI) Using Agile Project Portfolio Management. For the human resource executive the question is "How can I build a cadre of professionals to continuously align with the demands of the project portfolio?" I'll help you answer that question in Part II, Improving Project Success with Human Resource Strategies and Processes. If you are a project support office director the question is "What functions and services must I provide in order to improve the likelihood of the portfolio achieving its ROI?" I'll help you answer that question in Part IV, Establishing and Maturing an Enterprise Project Support Office.

Through the Eyes of Senior Management Team Members

I suspect that for many of you this chapter was your first exposure to just how broad and deep the world of projects can be. It never ceases to amaze me that even after more than 40 years of practicing project management I am still encountering new challenges and learning wondrous things about this amazing and evolving discipline of project management. It all starts with a project and they can be as varied as anything you can envision. I've been involved in a three-month project where I was the project manager, the client, and the entire project team. At the other extreme I have participated in a project where the project team was over 10,000 members spread out over a seven-year timeline. Projects are unique and you should begin to appreciate the fact that their management is also unique and that means that the infrastructure and support of the SMT must be flexible so that it can adapt to a variety of changing situations. Project management is not just a matter of blindly following processes and procedures, or routinely filling in forms and writing reports, but rather it is a challenging world where project managers and clients may be called upon to function at the limits of their creativity and to be courageous at all times. It is a world in which you will continually face situations you have never faced before and will have to look inside your toolkit and concoct workable strategies to support projects and project portfolios. It is a project world filled with risk.

For those of you who were once project or program managers it's no secret to you that the project management landscape has changed and continues to change. With the change comes a constant challenge to the project team and their clients to reassess project conditions and adjust their approach to managing the project. While you are no longer in that role the challenge extends to your office. You live in a world where the characteristics of the project, the portfolio, and the environment within which these take place are constantly changing and those changes should inform senior managers as to the tools, templates, and processes that will be most effective in meeting their infrastructure and support needs. Resign yourself now to the reality that you are going to have to pay attention all the time and be ready to respond with changes that will continue to support the project managers, teams, and clients and keep success within their grasp.

We are not in Kansas anymore! The discipline of project management has morphed to a new state; and as this book is being written, that state has not yet reached a steady one. It may never reach a steady state. The business world is in a constant state of flux and change and that will always be a factor influencing the effective management of the accompanying projects. That will continue to influence how you approach supporting projects and the project team. Expect your approach to also be in a constant state of flux and change. Take courage; it's not as grim as it may seem. In this book I am

going to clearly point the way for you. I want to imbue you with some basic principles that should transcend change and protect you from the latest silver bullet. If you really understand what I am presenting, you will have an enduring strategy for delivering effective project management support for every type of project.

A Creative Environment Must Be Flexible

Burdening the project manager or portfolio manager with excessive meetings, reports, and formal documentation does not add business value and may in fact adversely compromise the likelihood of success. The new environment is one of greater trust and empowerment of the project manager and their client. Give them the flexibility to succeed and stay out of their way. Their efforts must be spent on value-added work and they must avoid wasting time on non-value added work.

This does not mean they have complete freedom to do as they please. They don't. If you are a senior manager directly responsible for their performance, request them to state the progress they expect at milestone events and hold them responsible for delivering it. Chapter 2, Project Management Life Cycle Models, and Part III, Improving Project Return on Investment (ROI) Using Agile Project Portfolio Management offer more details for your consideration.

Flexibility here refers to the project management process. If you are imposing a one-size-fits-all approach on your project teams, they have no flexibility. Complex project failure is almost a dead certainty. The process is the process. Not a very comforting situation if the process gets in the way of common sense behaviors and compromises your project manager's ability to deliver value to your client. Wouldn't you rather be following a strategy that allows your project managers to adapt the project management process to the situations rather than being bound to a process that just gets in the way? One of my clients allows their project manager to submit their reason to management and the client for not following a required process and they are held responsible for the outcome. This empowerment has increased team morale and improved project success. Rather than follow a management by exception rule wouldn't it be better to have a process that includes these management choices as built-in features and then depend on the competency of the project manager to make the right choices? Then you can fairly hold them accountable for the results.

Adaptability Is the Key to Project Success

The less certain you are of project requirements, functionality, and features the more you will have to be adaptable with respect to process and procedure. Adaptability is directly related to the extent to which the team

members are empowered to act. The ability of the team to adapt increases as empowerment becomes more pervasive. Remember make it possible for the team members to be productive by staying out of their way as much as possible. One way to stay out of their way is to clearly define and agree with them about what they are to do and by when but be careful not to overstep your role as an effective manager of project managers by telling them how to do it. Don't impose process and procedure that stifles team and individual creativity! This would be the death knell of an agile project. Rather create an environment that encourages that behavior. Don't encumber the team members with the need to get sign-offs that have nothing to do with delivering business value. Pick them carefully and trust them to act in the best interest of the client.

Change Is Essential

Plan-driven project management approaches like those used for traditional projects are not designed to effectively respond to change. They are change intolerant. Change upsets the order of things as some of the project plan is rendered obsolete and must be redone. Resource schedules are compromised and may have to be renegotiated at some cost. The more that change has to be dealt with the more time is spent processing and evaluating those changes. That time is forever lost to the project. It should have been spent on value-added work. Instead it was spent processing change requests.

Agile and extreme projects are different. For those projects to succeed there must be change and it must be frequent. Remember the project team and clients are searching for something that does not presently exist. The journey to find that missing solution must continually adapt to learning and discovery, and that won't happen in the absence of change.

Meaningful Client Involvement Is a Critical Success Factor

As the project type changes from traditional to agile, to extreme, and to emergent meaningful client involvement changes from nice to have, to critical, and even essential. The most recent Standish Group CHAOS Report ("Chaos Summary for 2010," The Standish Group International, Inc.) lists lack of user input as the major factor that causes projects to become challenged. In that same report the three major reasons why projects succeed are:

- User involvement
- Executive management support
- Clear statement of requirements

These three themes run continuously through this book.

Putting It All Together

So in this chapter you gained some insight into the contemporary world of projects. This may be enough depth for you to effectively discharge your role and responsibilities to supporting the project environment. If you support those who support project and program managers, you should read Chapter 3, The Complex Project Team. If your role and responsibility is to directly support project and program managers, you should read Chapter 2, Project Management Life Cycle Models, and then read Chapter 3.

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