

Chapter

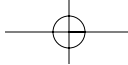
Understanding Project Methodologies

Many project management methodologies used today are either the wrong methodologies or are not applied fully. Some project managers see methodologies as impractical and bureaucratic, relying on their gut instinct when it comes to managing projects. This book will reassure you of the importance of methodologies. If project management methodologies come across as too complex to use in real world projects, project managers will look for their own shortcuts. Given enough time, anyone can be trained to adhere to a project methodology. Good project management is the key throughout this book. There is no right or wrong project methodology—provided you apply it in the right situation.

Miyamoto Musashi, a seventeenth-century samurai, stated:

One can win with the long sword, and one can win with the short sword as well. For this reason, the precise size of the sword is not fixed. The way of my school is the spirit of gaining victory by any means. . . . (p. 20)

If an organization's business is project orientated, it must master project management to be successful in the marketplace. This applies to construction, engineering, finance, education, government, information technology, or any other type of industry. The key point is: How can we build and



2 ◀ PROJECT MANAGEMENT METHODOLOGIES

deploy quality projects or services? Just look at Disney, Nokia, J&J, Vodafone, and Virgin as prime examples of how companies have produced phenomenal products, starting with innovative ideas, designed and built against their own project/development methodologies, and then deployed globally. What is the secret to their success? These companies used project/development methodologies that allowed them the innovativeness to deliver their projects more quickly to market than their competitors. If a methodology looks orientated to information technology (IT), you can use it effectively elsewhere, in the energy, aeronautical, social, government, construction, financial, or consulting industries.

Using project methodologies is a business strategy allowing companies to maximize the project's value to the organization. The methodologies must evolve and be "tweaked" to accommodate a company's changing focus or direction. It is almost a mind-set, a way that reshapes entire organizational processes: sales and marketing, product design, planning, deployment, recruitment, finance, and operations and support. It presents a radical cultural shift for many organizations. As industries and companies change, so must their methodologies. If not, they're losing the point (Figure 1.1).

■ WHAT IS A METHODOLOGY?

In my quest to define *methodology*, I started by asking colleagues and associates some questions with the intent of "stirring the

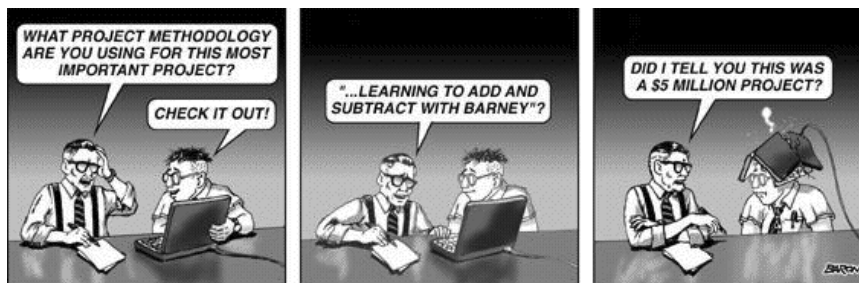


Figure 1.1 Cartoon showing importance of using correct methodology.

Understanding Project Methodologies ► 3

pot.” I received at least 20 different definitions of what a methodology is and used only those definitions that seemed helpful. The questions I posed were: What is a *methodology*? Should there be many methodologies? Is one better than another? How would you know which phases to adopt? How can we apply these results to a project? The answers to those questions resulted in the following definition of a methodology:

A *methodology* is a set of guidelines or principles that can be tailored and applied to a specific situation. In a project environment, these guidelines might be a list of things to do. A methodology could also be a specific approach, templates, forms, and even checklists used over the project life cycle.

A methodology can also be defined in other ways; for example:

- A process that documents a series of steps and procedures to bring about the successful completion of a project.
- A defined process for accomplishing an end.
- A series of steps through which the project progresses.
- A collection of methods, procedures, and standards that define a synthesis of engineering and management approaches designed to deliver a product, service, or solution.
- An integrated assembly of tasks, techniques, tools, roles and responsibilities, and milestones used for delivering the project.

A formal project methodology should lead the work of all team members throughout the life cycle of a project. All members of a team should be familiar with and use the chosen methodology throughout their projects. Many project management methodologies address the management of a single project, without appreciating that many other projects in a company compete for the very same resources and attention. The project management methodology should also provide

4 ◀ PROJECT MANAGEMENT METHODOLOGIES

project managers with the perspective that there is a project management framework and associated methodologies present in the company. It may be useful to think about what a project management methodology *is not*:

- ▶ A quick fix.
- ▶ A silver bullet.
- ▶ A temporary solution.
- ▶ A cookbook approach for project success.

▶ **How Many Methodologies Are There?**

There is no one-size-fits-all methodology. Some companies have methodologies that cover everything from an initial sales call to operational support, while others cover merely the aspect of design and development. Most published books discussing methodologies focus on one role—the IT community. These books elaborate on how specific IT designs should be performed, discussing a few techniques and a few drawing standards for a specific methodology. Fitting this into your company's idea of a project methodology framework is sometimes difficult to understand, impractical, and not always easy to implement.

There is an additional problem with the single universal project methodology approach. Many project managers have found that, in practice, you cannot simply use a methodology exactly as it stands. They soon realized that they needed to modify and tailor whichever methodology they selected to suit their own company project needs. They followed a “pick-and-choose” approach, using what they needed.

When examining methodologies later in this book, we see that a methodology is “larger” when it contains more elements. Because a methodology exists primarily for project managers to coordinate project team members, coordination is appropriately larger on a large project. The methodology grows proportionally to the number of roles and work product types. Therefore, we should not expect a small-team methodology to

Understanding Project Methodologies ► 5

work properly for a big team, or a big-team methodology for a small team. Thus, you need to be practical about selecting an appropriate methodology.

► **Shortcomings of Many Project Methodologies**

There are shortcomings to any methodology. Before we start by describing the best way to proceed with project methodologies, we need to first understand where methodologies can possibly go wrong. In my search for the über-methodology to recommend, I realized that many project methodologies:

- Are abstract and high level.
- Contain insufficient narratives to support these methodologies.
- Are not functional or do not address crucial areas (i.e., QA, CM, testing).
- Ignore the industry standards and best practices.
- Look impressive but lack real integration into the business.
- Use nonstandard project conventions and terminology.
- Compete for similar resources without addressing this problem.
- Don't have any performance metrics.
- Take too long to complete because of bureaucracy and administration.

► **Projects Influence Methodologies**

Not one single project methodology can solve every project across all industries. For example, the Channel tunnel project linking the United Kingdom to France came with many problems and had major cost and schedule overruns. Project methodologies were developed to prevent such problems. Many project methodologies come close to preventing problems, and many are tailored to specific uses, but it finally boils down to

6 ◀ PROJECT MANAGEMENT METHODOLOGIES

applying solid project management principles. Methodologies affect project management; they affect any project universally in the sense that each methodology:

- ▶ Contains project phases.
- ▶ Measures progress.
- ▶ Takes corrective actions based on defects found.
- ▶ Assigns resources to various phases.

Project methodologies are useful to companies only when the tasks are appropriate and applicable. In many project studies, project plans are seldom updated. Why is this? Many projects focus only on satisfying clients during the initial deployment phases instead of conforming to the actual plan as the project proceeds throughout the project life cycle.

In Figure 1.2, we see that Project A has no methodology and is filled with process issues as well as problems that actually increase as the project moves along. Additionally, Project B, which has a structured methodology with defined and operational project processes, minimizes the number of problems that may occur on the project. I do not contend that there will never be any problems if a project methodology is in place; it does, however, mean that you have planned for all areas of the project to function while trying to meet the objectives.

In assessing any company, we see that project management (PM) methodology does not exist in isolation. Instead, there

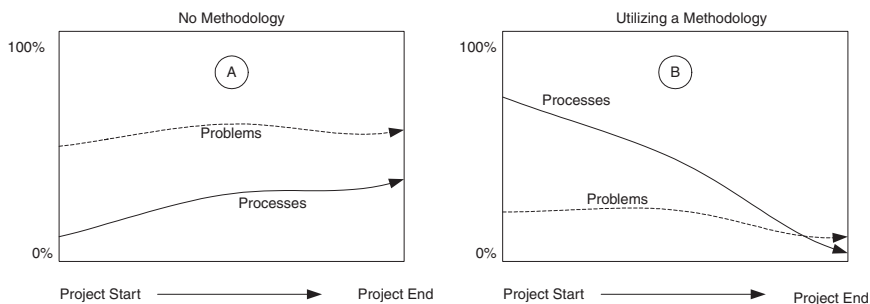


Figure 1.2 Difference in using a methodology.

Understanding Project Methodologies ► 7

are other interrelated, connected methodologies, which have a dependency on one another. Figure 1.3 illustrates that there is more than one methodology in an organization, and you need to be prepared for the one you will be using or interacting with. There is a relationship between the various methodologies, including:

- Sales and marketing methodology.
- Recruitment methodology.
- Project management methodology.
- Development methodology (i.e., specific technical build). This implies that the software or product is built more from a technical perspective than the way a project methodology is managed (e.g., when you think about building a new car, you think about the project methodology you'll be using, but hidden within the project methodology is the specific development methodology, which is precise technical steps).
- Operations and support methodology.

It is crucial to understand the bigger picture of what is involved before undertaking any project. For example, the fastest house builders in the world—Habitat for Humanity International—broke the world record in 1999 by building an entire four-bedroom house in 3 hours 44 minutes and 59 seconds in Auckland, New Zealand, including electrical and plumbing

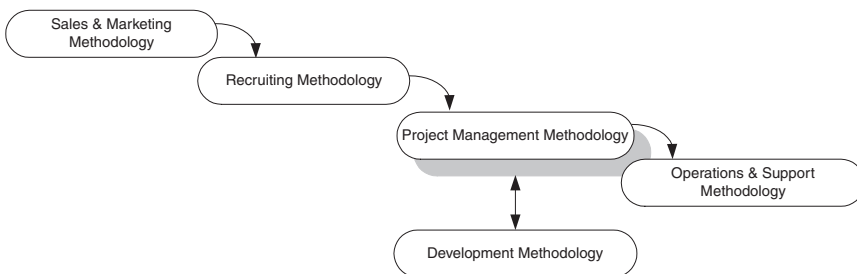


Figure 1.3 Typical methodologies used in an organization.

8 ◀ PROJECT MANAGEMENT METHODOLOGIES

systems. However, the planning and coordination of this project took 14 months, which is another matter. You should not focus just on the actual “build” phase, which the record focuses on, but see which other methodologies contributed toward making this possible. Habitat for Humanity International used the following methodologies to build this house:

- ▶ A marketing methodology to market the idea to their stakeholders.
- ▶ A recruitment methodology to recruit the necessary volunteers to build the house.
- ▶ A basic project management methodology to estimate and plan this effort.
- ▶ A well-orchestrated development methodology emphasizing teamwork and multiple tasks being performed at the same time.

■ DEFINING A PROJECT

Although this book focuses primarily on various project management frameworks and development methodologies, we first clarify what a project is—a temporary effort of work, a one-time event that meets the following criteria:

- ▶ Has a start and an end date.
- ▶ Has schedule, cost, and quality constraints.
- ▶ Is a unique endeavor and contains risk.
- ▶ Has a certain scope that needs to occur.

Typical everyday examples of where we could apply a project management methodology and a development methodology include:

- ▶ The development of a new freeway as part of an existing road network.

Understanding Project Methodologies ► 9

- The creation of a new business unit in an organization.
- The design and development of a new computer system.
- The search for a pharmaceutical drug for a life-threatening virus.
- The development of a naval or space vessel.
- The creation of a new political party.

Project managers should realize that any repetitive continuous process is not a project. They should be focusing on a one-time event. Traditionally, a business unit decides that an organization should develop a product and turns it over to the relevant project group to establish a plan and manage the project. Additionally, the project manager must ensure that the project actually fits into the project plan that was built. Executives or clients then routinely scrutinize this plan to check for variances and request the necessary corrections or deviations. Project management thus has an important role to play. Project changes and new requirements will always be present because of legislative, regulatory, technological, or new strategic initiatives. We see why in the next section.

► **Project Management Demystified**

Before looking more closely at methodologies, we need to be aware of the key tasks that a project manager performs on any project (see Table 1.1). These are not all the objectives that you might encounter on a specific project, but the list will give you a basic feeling for what objectives are to be met.

Many companies don't have sufficient resources to perform multiple projects concurrently because of (1) turnover, (2) untrained staff, (3) unavailable staff, or (4) functional restrictions in their departments. It is important that project managers be aware of the resource commitments to other projects in their organization. A complete project management framework can determine these requirements upfront and well in advance of any crippling resource problems.

10 ◀ PROJECT MANAGEMENT METHODOLOGIES

Table 1.1 Project objectives

Objectives	Responsibility	How
Obtain the user requirements	Analyst/PM, client	Interviews, URS
Define the project	PM, Client	Definition report, Business case, Feasibility study
Plan the project	PM	PBS/WBS, Gantt
Negotiate for resources	PM, Sponsor	Resource plan
Create the project team to perform the work	PM	Team contract, R&R
Execute the project, including changes	PM	Implementation plan, Change requests
Control and monitor the actual versus planned	PM	Status reports, Issue and Risk logs
Close the project and release the resources	PM, Client	Closure report
Review project and support postproject	PM, Client	Questionnaire review

► **Project Management Responsibilities**

Throughout the life of any project, project managers are responsible for the key areas. Some of these responsibilities, which tie in directly with any project methodology, follow:

- Obtain approval for the project to proceed.
- Determine the project scope and its feasibility to the overall business.
- Ensure the necessary project resources are identified and allocated.
- Plan the project to the relevant detail it requires.
- Ensure that the project methodology and associated processes are adhered to.
- Monitor the project in terms of cost, quality, and schedule.

Understanding Project Methodologies ► 11

- Identify and monitor project issues and risks.
- Provide updated reports and summaries to key stakeholders.
- Provide leadership to the project team.

► Status of Projects Today

Across all industries—whether IT or construction—we are encountering many of the same problems time and time again, irrespective of geographic location. I have heard project managers in China, Brazil, Amsterdam, and Munich complain bitterly about similar issues on their projects. Problems such as cost and schedule overruns, poor sponsorship, no user involvement, and many other problems are encountered daily. These project managers either don't use their project methodologies effectively or don't use them at all. Project management is not simple; our primary role is to resolve or eliminate daily challenges. We now examine some of the universal challenges facing project managers, which are listed in Table 1.2.

Table 1.2 Challenging project issues

Challenge	Questions Facing Project Managers
Competition gaining ground	How do we develop projects faster than before?
Constantly changing requirements	What do we need to meet both project and client needs?
Larger and more complex projects	How do we ensure quality is built into our projects?
Inaccurate designs	How do we ensure our methodology captures an effective design?
Ineffective documentation	How do we know which templates to use per project type?
Inadequate resources	How do we address resource requirements and plan for them?
Postproject support	How do we address handoff of our project to operations?

12 ◀ PROJECT MANAGEMENT METHODOLOGIES

■ WHY DO PROJECTS FAIL?

One of the best project management oracles of all time—Dr. J. Davidson Frame—states that projects fail mainly because of two reasons: (1) a failure of estimation and (2) a failure of implementation. The following are reasons projects fail:

- Initial cost and schedule estimates are not revised when more information becomes available as the project progresses.
- Plans are not used correctly or used to guide the project forward.
- Project managers are not trained to acquire the necessary skill base; subsequently, the same mistakes are made repeatedly.
- The theory of project management is not put into practice. This point can be seen in the attitude of many managers who view theory as a waste of time—yet time is found to repair errors later. Isn't that a sure sign of the wrong approach?
- The project scope changes.
- The incorrect project methodology is used.
- Requirements have major changes.
- Communications are poor.
- Testing and/or inspections are poorly done.

Figure 1.4 shows familiar issues that cause problems on projects. However, any problem can be resolved by carefully drawing a problem matrix. If we have a project that is “over schedule,” we can follow this through on the matrix and see that it was caused by a “waterfall approach.” The solution to this problem is selecting an iterative methodology.

➤ **Examining the Need for Methodologies**

Today, projects require much tighter integration and innovativeness than what we have seen during the past decade; this

Understanding Project Methodologies ► 13

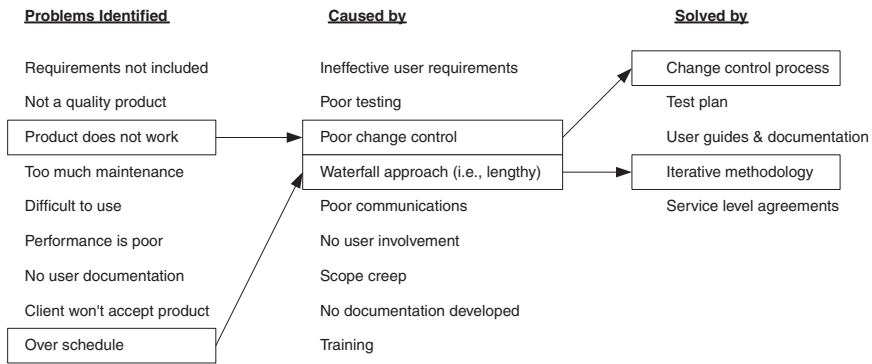


Figure 1.4 Problem resolution and fault-finding technique.

alone necessitates the use of more creative ways to design, build, test, and deploy products and services. A manager can no longer create a project schedule by filling in one or two templates. Companies require more out of their projects than ever before. One way to achieve a more efficient result is to adopt newer, swifter, and “lighter” project methodologies. Gone are the days of using a bureaucratic life-cycle approach, unless you have a very simple project that requires serious coordination and control. Table 1.3 shows us that project managers and executives have to be innovative and creative if they want to resolve historical problems.

Companies are increasingly looking to project management teams to provide solutions to many of the challenges listed previously. Methodology can assist in the sharing of information across a “virtual project enterprise.” Projects have significant technical, resource, and data components that require management through their life cycle. Projects must comply with the correct standards and guidelines to protect the users’ investment in such systems.

How do we select a comprehensive project management methodology that is very useful to anyone managing projects? A methodology that can be applied to a cross section of industries can be customized to reflect a specific project environment in an industry. When implementing a project, a multitude of areas should be investigated to determine what course of action to

14 ◀ PROJECT MANAGEMENT METHODOLOGIES

Table 1.3 Drivers for using methodologies

Reasons for Change?	What Do We Want to Change?
Shorten project schedules	Improve the planned schedule.
Reduce project costs	Improve the overall project profits without affecting quality.
Be flexible on project execution	Adjust the project within the boundaries.
Improve customer support	Address client needs.
Be able to fast-track projects	Perform common tasks simultaneously.
Increase project quality	Introduce quality and testing from day one.
Improve client participation	Improve requirements gathering and client participation.
Constant changes	Reduce constant change by defining a change process.
Unpredictable results	Have repeatable results and be able to measure performance.

pursue. The many variables that require management in the complex environment also represent areas that can be exploited to achieve productivity and cost advantages during project execution.

Projects have definite life cycles that determine how the projects are actually managed from the initial discovery phase through detailed design, construction through to the delivery, and eventual operation of the product. The secret to the success of any methodology is this: It uses solid, repeatable processes that serve as the foundation for any successful project initiative, supported by sufficient documentation and relevant processes providing (1) repeatable best practices, (2) consistency of results, and (3) a quicker path to results.

Project managers often ask: "How can we speed up the development or execution process?" Many times, they see the process as slow and painful with too many policies and procedures. The answer is either (1) by selecting a more agile methodology or (2) by cutting back on your heavyweight methodology to make up lost time and cost. Have you ever heard key staff say: "We considered developing our own methodology, but we rejected that

idea after not being sure what methodology was right for us”? The best answer is to first look at your overall company strategy.

■ STRATEGY WITH METHODOLOGIES

For any company to be world class, the strategy is clear—survey the entire landscape and then put the objectives—*the what*—into a game plan—*the how*. In negative economic times, always remember that what comes down must come up. If you have formulated the right strategy and can execute (i.e., project management/development methodology), you will most likely succeed at improving the bottom line. Remember that many executives look at whether you are adding to or taking cash from the company coffers.

For example, assume a fixed price project has been awarded to Company ABC, which could possibly bring in about \$1 million in revenue. Unfortunately, Company ABC doesn't adhere to any formal PM methodology, and instead relies on the project manager's experience to meet project objectives. However, the project is soon bombarded by constant change and new requirements by the client, and Company ABC realizes after a few weeks that it is losing dollars that it wouldn't have if the project manager had adhered to a PM methodology using the appropriate project templates in the concept or design phases.

In addition to having the best product or service, companies need to think about deploying innovative concepts to get their products and services to market more quickly than their competitors can. A delivery methodology is the key. Look at some examples of strategies where companies used project/development methodologies:

- You are able to go to Morpheus or Kazaa Web sites and download or purchase single music MP3 files instead of going to the local music store, where you have to purchase a complete CD with multiple music tracks that you may not want.
- You can both order and customize your Dell computer directly online through Dell Direct instead of purchasing

16 ◀ PROJECT MANAGEMENT METHODOLOGIES

directly from a supplier. Their flexible product lines and ease of use gives Dell a huge competitive edge.

- ▶ Virgin One has a dynamic Web experience where you can bank directly using their Virgin One Account. You need only one account instead of multiple accounts for checking, savings, mortgage, credit, and so on. Virgin has proven that it can save 8 out of 10 people thousands of pounds sterling and reduce paperwork through this innovative strategy. Virgin is setting the benchmark standard for banking.
- ▶ Boeing is redefining its strategy from commodity-driven (aircraft engines) to service-driven. Boeing Company monitors aircraft (flight hours) and its engines in the air, literally extending this concept into multiyear contracts with British Airlines, USAir, and Southwest.

Project/development methodologies are not just about focusing on product life cycles, but also about shortening any strategic life cycles a company may have. No matter how efficient your company is, you need to adapt and you need to do so constantly.

Bill Gates has stated, “Microsoft is always two years away from failure.” He’s really saying that Microsoft needs to understand the reality of competition. The bottom line is “How are you going to make the jump?” Whatever your industry—be it IT or not—trends have shown that it will likely take a total newcomer with a radical approach to show you how quickly you should move. Just look at the example of how Richard Branson’s Virgin group got into banking. It wasn’t their immediate field of expertise, music, but they had the innovation and ability to break into an industry, which used formal “heavy-weight” methodologies. Try extending this same concept to your own industry and identify newer ways of doing business. Do you think there’s an outdated methodology or something missing that you would change?

For a clear, concise snapshot of my point, review Figure 1.5. It illustrates the macro view of how Company ABC—in the center—is driven by an effective strategy (A) and then proceeds

Understanding Project Methodologies ► 17

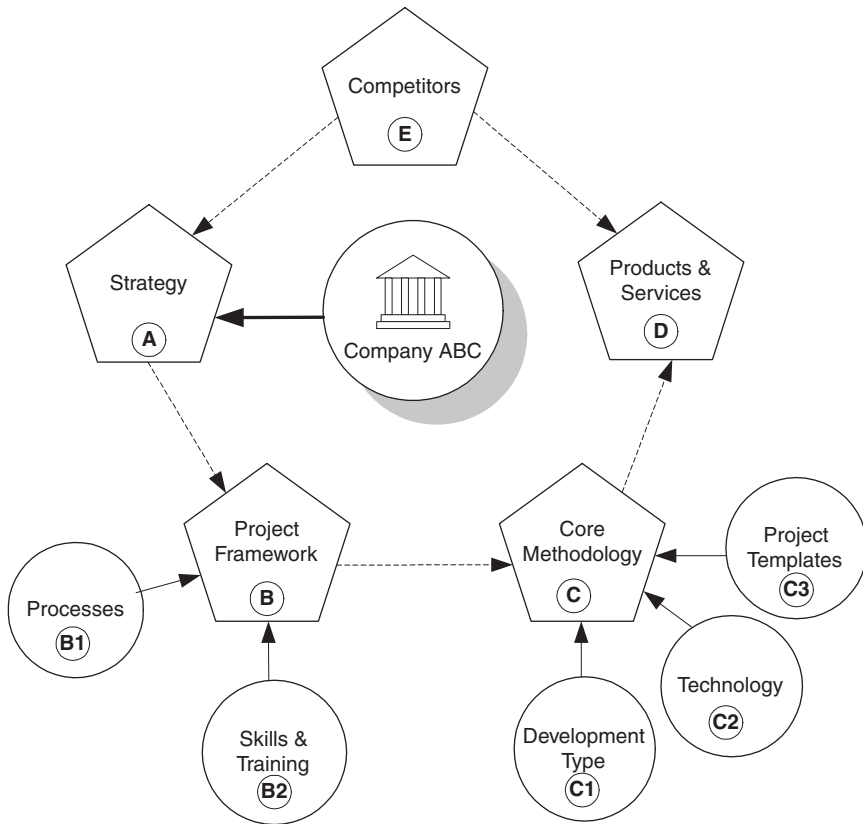


Figure 1.5 Strategy for selecting a methodology.

putting the strategy into tactical perspective by first having a project management framework (B) in place, which is fueled by its supportive processes (B1) and project skills training (B2). After this is in place, a core project management methodology is needed (C). Additionally, this is dependent on the development needed (C1) and the technology (C2) you will be using, as well as the project templates (C3) that are thought helpful. When completed, the company is free to proceed to deliver its products and services (D) to the marketplace before any of its competitors (E) do.

18 ◀ PROJECT MANAGEMENT METHODOLOGIES

► **Project Framework versus Development Methodology**

There is a distinct difference between a project framework and a project methodology. The framework has always meant the various segments of the project and the development methodology are the means of getting from segment to segment. The following metaphor helps solve this subtle difference: If the project framework is seen as the “skeleton” of a building, the “floors” are seen as the different development methodologies allowing you to get through the building. Some get you there more quickly than others would.

Projects vary widely, depending on the size of the company, the size of the solution, the number of project staff assigned to the project, whether the testing is conducted in-house or in test labs, and so on. The question then arises as to what exactly project methodologies should offer us? Table 1.4 lists some of the most beneficial offerings of a good project methodology.

In other words, after identifying and selecting the correct methodology, it may be the best defense if you want to:

- Avoid mistakes.
- Reduce cost.
- Reduce risk.
- Meet project schedules.
- Identify and correct errors early.
- Avoid excessive documentation.

Many project managers are faced with developing products within a specific time with limited resources. Adopting an incorrect methodology or having no project framework in place can very easily cause you to have schedule and cost slippages, as well as miscommunication within the team. Some methodologies consume many hours, and you must follow project templates and processes, making the daily execution of the project difficult. Selecting the correct methodology allows you to develop a saleable “fit to sell” product within the correct time frame, forcing you to focus on the most appropriate documentation

Understanding Project Methodologies ► 19

Table 1.4 Benefits offered by a project methodology

Benefits We Achieve	Allows Us To
Better process	Define processes and introduce improvements.
Flexibility	Adapt from project to project.
Integrated metrics support	Gather metrics during the project.
Quality focus	Ensure that all areas of quality are addressed.
Managing complexity	Manage complex situations.
Proper project documentation	Complete critical documentation per approach.
Standard approach	Provide all projects with a common approach.
Consistency	Deliver projects using a similar approach.
Containment of all project phases	Reassess the project per phase.
Project planning	Better plan projects.
Ability to get the job done	Guide the team to completion by the various phases.
Elimination of crises management	Reduce or eliminate any crisis.
Ease of use	Easily use and implement.
Knowledge	Review and improve future projects.

and processes, without wasting time on administrative tasks that have no purpose. You do not have to use the most detailed processes. But how do you know which methodology is right for you? It's like trying on a pair of shoes—you have to select the right size, color, make, and style. We examine this question in detail in Chapter 3.

► **Understanding Methodology Trends**

Some of the most common questions that arise on the topic of project methodologies are:

- Do we honestly say that we understand the working of a basic project management methodology?

20 ◀ PROJECT MANAGEMENT METHODOLOGIES

- ▶ Do we understand why the various project management methodologies differ?
- ▶ Why does the life cycle vary between project types?
- ▶ What does this tell us about the generic practice of project management?

If technology managers repeatedly tell us they need more time to plan the implementation and that they should have used fewer tools, hired more outside consultants, and allowed more time for training users and retraining staff, what does it tell us about our project? It tells us that the project planning was inadequate and that, most likely, the project methodology was not followed correctly.

Instead of following a standard methodology for conducting projects, many companies have been relying on technical wizardry to get projects done. In fact, communication is often so bad that it outweighs their tool-centric approach to managing the project. This leads to project management burnout. Project management is not about deadlines; it is about tracking, controlling, and improving the process of change. Lack of time may be the excuse, but why isn't the initiative planned more carefully? Perhaps it is that organizations compelled to reengineer their business processes don't have the luxury of time due to the amount of projects being undertaken by organizations as well as the speed-to-market factor. Are competitive pressures so intense that project management succumbs in the triage of crisis management?

The methodology process itself is sometimes part of the problem because when you start fiddling with the building blocks of your business, projects take on a life of their own. Therefore, an assessment of the business components must be brought into a more realistic relationship with the methodology that is going to be used. The relationship among these variables is often not linear, and this needs to be noted.

Perhaps we all have unrealistic expectations of the power of technology and the human dynamics of change. No matter how rapidly business requirements shift and technologies improve, some steps in project management cannot be combined. To

Understanding Project Methodologies ► 21

keep a project methodology in sync with reality, learn from those who have gone before you. Brian Hurley, founder of Musk industries succinctly defined the situation: “Deliver your projects as you would a newborn. Conceive decisively. Gestate, prepare and then again. Don’t bash your ship on the siren of complacency. Procrastination will lure you past your due date, and no late-stage boom in the headcount of gestating mothers will hasten the outcome” (p. 15).

► Strategic Focus

Strategy always comes before any tactics. It’s similar to thinking before doing. The strategy must be correct before we select a project or development methodology. In other words, you must be doing the right thing and only then can the necessary tactics support that newfound strategy. (It’s like executing a certain methodology only after we know what our objectives are.) Strategy—as it has always been and will always remain—is the perpetual struggle for advantage. The objective of strategy is to take actions that build, sustain, and compound advantage. Acquiring and retaining customers are functions of your advantages. Parrying competitors is a function of your advantages. Competitive organizations that parry with their competitors do so in order to understand their competition, allowing them to understand, maintain or build leaner, quicker processes, eventually coming in earlier to market with better products.

History proves that the best strategy and tactics are achieved in areas fundamental to the core strengths of the company (i.e., having a project management discipline). With the right strategy, the battle is only half won; the strategy succeeds only with professional execution of tactics. Many problems arise when planning is separated from that execution. The important thing is to get started. Too much time spent on planning is also not good. You get caught up doing so much planning and strategizing that you never move forward—you end up wasting time on planning and that breeds indecisiveness and error.

It is often better to engage in some form of simultaneous planning and implementation (e.g., this is where concepts

22 ◀ PROJECT MANAGEMENT METHODOLOGIES

such as RAD, OO&D, and concurrent engineering make huge impacts on project executions). A common mistake is to consider planning as only a mental process, an idea in our heads that looks at the past and adjusts to the future. If your plan is not in writing, you really don't have a plan at all. A simple written plan works best.

The purpose of strategy is to provide rapid direction and concentration of effort as organizations continually strive to improve their position or gain the upper hand in the marketplace. Speed is the ultimate factor here. Throughout history, winning generals developed ways and means of moving faster than their opponents. Napoleon's troops marched at 120 paces per minute while his opponents marched at only 70 paces. Because Napoleon's troops marched almost twice as fast as his opponents' troops, speed gave him a tremendous advantage, which was a major contributor to his success. Using this analogy, project managers also need to use a methodology that is not only faster than the competition, but also that is disciplined enough to ensure that the products or systems are developed, tested, and implemented properly. Figure 1.6 depicts two scenarios. The left side shows an organization faced with an unprofitable situation—the strategy is not correctly aligned to its portfolio of projects. On the right-hand side of the illustration, we see an organization that has undergone an assessment; as a result, its objectives are aligned to its project portfolio.

► **Strategy versus Methodology**

Projects of varied size and complexity require different project management skills and techniques to effectively and economically manage project risks. Shareholders now and in the future demand results, which means that companies must be innovative in how they get their products to market; they must use efficient methodologies, concepts, tools, and techniques.

Project management stands out as the enabler to make this happen. Identify the project management disciplines and techniques you would need to send some people to Mars and back. The answer: You would need them all. The challenge for most project environments, however, is to tailor or scale the methodology so it makes sense for projects of lesser size, risk,

Understanding Project Methodologies ► 23

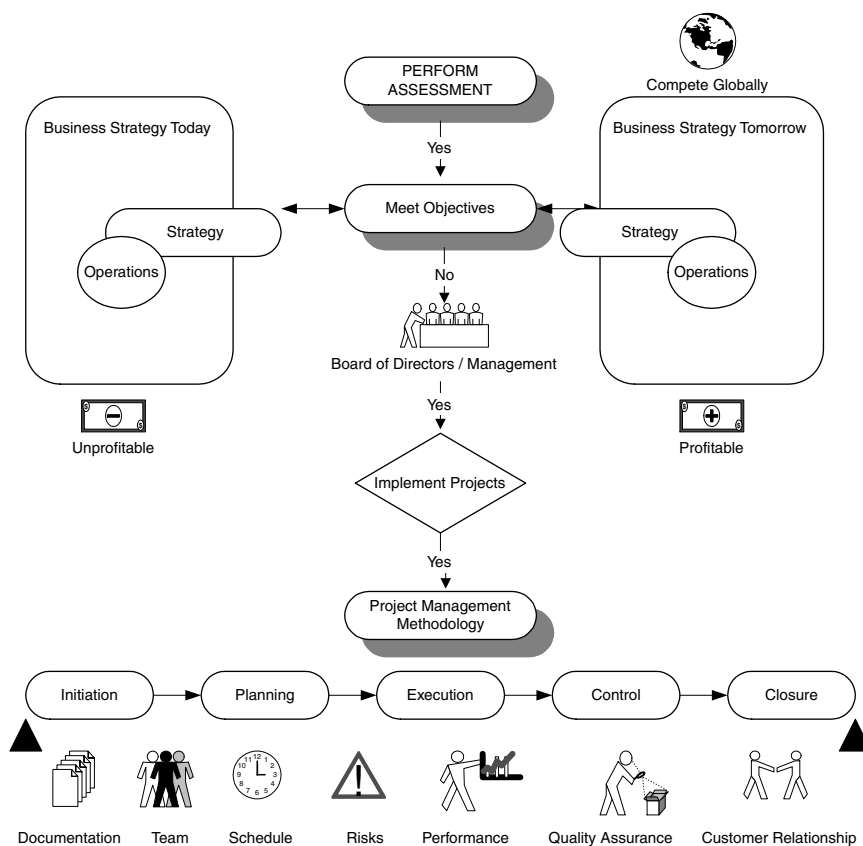


Figure 1.6 Rationale for considering a methodology.

and complexity. Additionally, project management methodologies can be thought of as a set of principles and techniques for controlling project risks, quality, change requests, and for capturing any opportunities as projects are brought to fruition. Because of economics and common sense, project management techniques need to be tailored to the specific risks and opportunities of each project. The methodology provides a means for selecting the degree of project management attention appropriate for your particular project.

You may encounter projects in which the apparent risks are so small in certain areas that, while those areas should be monitored, no formal project management techniques may be

24 ◀ PROJECT MANAGEMENT METHODOLOGIES

needed. In these areas, you should simply use good business management practices. For example, with an internal project whose resource needs consist of three people working for a year, you might forego a written cost estimate or cost controls because the costs would be inherent in the allocation of labor. Using elaborate or even simple cost tracking systems in such a case would be a waste of time and money. The point of project management is not to drive up your overhead or to require mountains of administration. Project management provides a set of structured techniques to help you think about project goals and risks; helps you define, structure, organize, and plan your project; and enables you to effectively monitor and control your project as it progresses toward completion.

The traditional ways of thinking about strategy and how to build advantage are no longer working. Executives need a fresh strategic imagery and analysis of how to cope with the virulent hyper competition and a prescription of how to build advantage in this new environment. How do they do this? Look at Harley Davidson's return to fame from a near collapse. Today, their production lines produce some of the best roadsters. Improved processes, as well as cutting administrative burdens, have done well for the company.

You can buy many things—technology, advice, assets, and, often, even time. What you cannot buy is commitment. Commitment is something that is earned and must be won. It is something that must be planned for and managed. The absence of commitment, not the poor selection of technology, is often the primary cause of strategy failure on a project. As hyper competition defines the competitive landscape into the new millennium, the basis of advantage will be the agility of project management methodologies. This important insight must be acted on. This insight ultimately separates the winners from the losers and the successes from the failures.

► **Why a Project Methodology?**

Many companies today do not use any formalized project methodology. They run their businesses as they always have. However, the business and technology landscape is changing

Understanding Project Methodologies ► 25

rapidly. Business today calls for dynamic methodologies and processes, gearing companies to reinvent themselves so that they can produce products and services faster than ever before. Additionally, being able to produce gadgets of the right quality and specification is key. How does a company change virtually overnight, to become a company that can deliver such gadgets for their clients? Jim Highsmith of Agile Software Development Ecosystems (Addison-Wesley, 2002) states: "In a world of constant change, traditional, rigorous software development methods are insufficient for success" (p. 22).

The secret to success is the project-based company. With this comes certain provisos:

1. A set of flexible project management methodologies.
2. Processes that can be updated to support these methodologies.
3. Resources that need to be aligned with the methodology.
4. Business functions that need to support these projects.

If you are not efficient or not getting a quality product developed in time or to specification, you need a new project methodology.

► **Selling the Project Methodology to the Company**

You feel it in your bones. You're excited about a new project methodology, and you'd like to propose this new way of managing projects to your company executives. However, you hesitate to move forward because your neophyte boss, who has a black belt in corporate politics, doesn't like the idea. What should you do?

First, sell the idea to as many people as possible and never give up. It is crucial that companies needing a project or development methodology and all of its associated processes understand that if it doesn't exist, a methodology will have to be developed from scratch, purchased from a third-party vendor, simply obtained from a mutual friend in the business, or tailored from existing processes.

26 ◀ PROJECT MANAGEMENT METHODOLOGIES

However, before you can do anything, you need to sell the idea to company executives, who are often unfamiliar with project management, especially a new methodology that would affect virtually the entire way their company does business. A typical response to you might be “Goodness gracious, are you mad? We’ve been doing business like this for years, why change now?”

A strong selling point for investing in a solid project methodology is that the greatest return on investment (ROI) lies exactly there. Few people can counsel corporations on how to identify and nurture business drivers such as brilliance, inventiveness, and thought breakthroughs. However, we can make sure that gleaming opportunities are not squandered in their subsequent development and implementation. For innovative ideas to bear fruit, sound project management principles must be followed. Maybe project managers or executives trying to sell the concept to their organizations should emphasize this feature.

Following the success of the Prussian Army in the Franco-Prussian War, the British General staff sent a team of aristocrats to find out the secret of success. They reported that all the Prussian troops were clean-shaven with short-cropped hair. The British Army accordingly copied this. Although there was no evidence that this helped their performance, it remains a law to this day—except for special duties. The moral of this story is: You can copy from others but be cautious. Don’t copy the wrong thing (i.e., don’t copy a methodology if it doesn’t meet your needs).

■ UNDERSTANDING ORGANIZATIONS

In 210 B.C., Petronius Arbiter wrote, “We trained hard, but it seemed that every time we were beginning to form up in teams, we would be reorganized. I was later to learn in life that we tend to meet any new situation by reorganizing; and what a wonderful method it can be” (Roman author, *The Satyricon*, 210 B.C.). Many projects are instigated from the top down. Just look at how Toyota has turned its organization around and

Understanding Project Methodologies ► 27

created product lines using efficient project methodologies and processes to become a virtual powerhouse. Toyota produces one of the best-selling cars in America. Every other auto manufacturer has tried to replicate this turn around.

Harley Davidson's organizational chart has three overlapping circles—a Create Demand circle responsible for marketing and sales, a Produce Products circle for engineering and production, and a Support circle for all other functions. However, where these three circles intersect is a Leadership and Strategy Council that oversees general management functions such as planning and budgeting. This overlapping of the circles emphasizes the interdependency between areas that encourage participation and growth.

Executives and project managers who need to understand how projects are going to be managed in the organization should first understand the company structure. Figure 1.7 shows three main types of organizational structures you might encounter when managing projects. First is a matrix structure, which is extremely difficult to work in, where project coordination and follow-up is mandatory. Second is the functional structure, which relies on the functional managers to manage their projects. Third is the projectized structure, or the project approach, which has the ability to rapidly formulate the project team and move forward.

■ LESSONS LEARNED

The following lessons learned are crucial in understanding project management methodologies:

1. Sometimes, it is not feasible to adopt another methodology and reintroduce it into your current environment. A thorough assessment and gap analysis needs to be performed before implementing such a methodology.
2. Don't try to sell a Rolls Royce to an organization that requires only a Jeep. Sometimes they really don't need all the flash.

28 ◀ PROJECT MANAGEMENT METHODOLOGIES

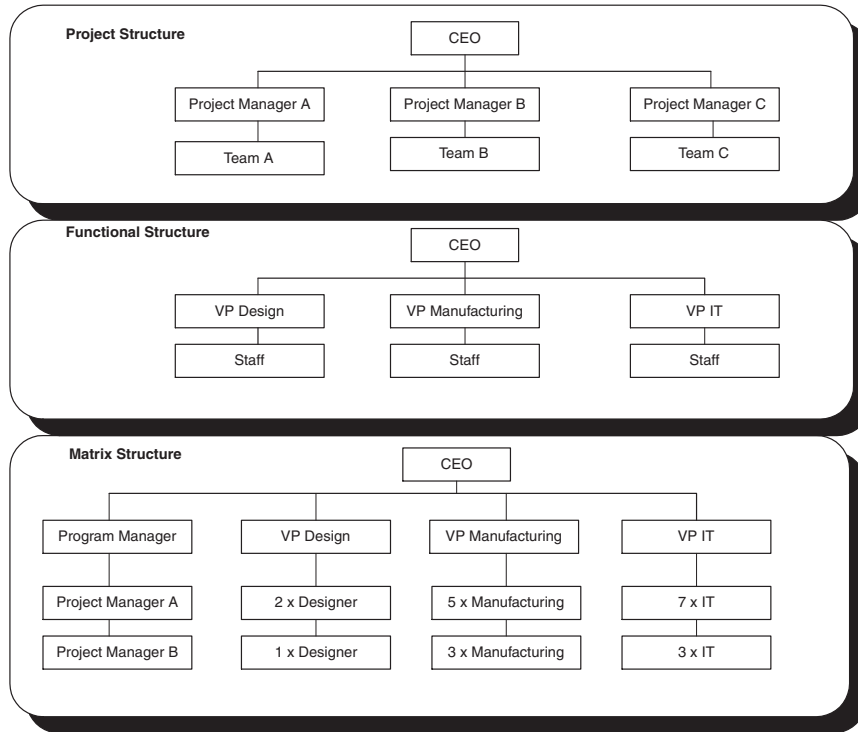


Figure 1.7 Various organizational structures to manage projects.

3. Gaining executive support for moving ahead with a project management methodology is paramount to the success of any organization. Without executive support, it becomes increasingly complex and time consuming to sell the idea of project methodology.
4. Determine your business strategy first, and then focus on the tactics you wish to employ.

■ QUESTIONS

1. Define the concept *methodology*.
2. List five shortcomings of a project methodology.

Understanding Project Methodologies ► 29

3. Apart from a project management methodology, what other methodologies would be considered relative to the project?
4. What do we mean by *project management methodology* and *project framework*?
5. What does the term *project strategy* mean? Is it the same as a business strategy?
6. How would you explain the benefits of adopting a project methodology to your client or organization?
7. Does the type of organizational structure affect the efficiency by which projects are managed through the methodology?

■ REFERENCES

- Fowler, Martin. "The New Methodology." Available from www.martinfowler.com.
- Hamel, Gary. *Leading the Revolution*, HBS Press, 2000. p. 56.
- Highsmith, Jim. *Agile Software Development Ecosystems*, Boston: Addison-Wesley, 2002. p. 22.
- Hurley, Brian. *Ispeak*, October 2002. Musk Industries, Raritan, NJ, 2002.
- Michaelson, G. *Sun Tzu, The Art of War for Managers*, Adams Media, 2001. pp. 7, 14.
- Musashi, M. (T. Cleary, Translator). *The Book of Five Rings*. Boston: Shambhala Publications, 2000.

