Effective Complex Project Management
An Adaptive Agile Framework for Delivering Business Value

Robert K. Wysocki
We’re trying to change the habits of an awful lot of people. That won’t happen overnight, but it will bloody happen. —John Akers, former CEO, IBM

The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew. We must disenthral ourselves. —Abraham Lincoln, 16th President of the United States

Markets change, tastes change, so the companies and individuals who choose to compete in those markets must change. —Dr. An Wang, Founder and CEO, Wang Laboratories

CHAPTER LEARNING OBJECTIVES

Provide readers with the knowledge or ability to:

• Discuss the critical success factors (CSFs) of project success, as they relate to the Adaptive Complex Project Framework (ACPF).
• Build a project management environment that capitalizes on the reasons for project success.
• Understand the foundations of ACPF as a competitive weapon in dealing with complexity and uncertainty.
• Discuss the Ideation, Set-up, and Execution Phases of ACPF.
• Comprehend the importance of the relationship between ACPF performance and continuous process and practice improvement.
• Start on a journey to "becoming a chef in addition to being a cook," and know why.
• Recognize the fact that the ACPF is a lean approach to project management and why this is important.

THE NEED FOR AN ADAPTIVE COMPLEX PROJECT FRAMEWORK

The genesis of this book came from a report by Samuel Palmisano, former CEO of IBM (IBM, 2010):

IBM Report

The significant finding from the 2010 report was that over half of the 1,541 executives from the 60 countries that were interviewed admitted that they were not prepared to support the complex and uncertain environment in which they were forced to do business and they didn’t know what to do about it. Furthermore, they expected complexity and uncertainty to continue to increase.

If this isn’t a clarion call to action, I don’t know what is!

Most businesses lack the tools and staff to deal with the realities of complexity and uncertainty, and the resulting impact on market position and business growth. This book applies directly to the issues and concerns presented in the IBM report, and it spans the entire project life cycle, from ideation through solution deployment. As a companion to a book targeted to executives and those responsible for the infrastructure to support complex projects (Wysocki, 2010a), this book is a practical “how-to” publication targeted to project management consultants and practitioners.

The IBM report highlighted the efforts of a few standout organizations to manage complexity. Project management, business analysis, business process management, and systems engineering were among the enabling disciplines of the standout organizations. The IBM report provided a road map for this book.

The current business climate is one of unbridled complexity, change, and speed. Most pundits would agree that, except for the simplest of
projects or projects that are repeated frequently, it is not possible to specify complete requirements at the start of the project. This situation has placed a significant challenge on organizations and their project managers in that the traditional project management tools, templates, and processes are no longer effective. Requirements are never clearly established and continue to change throughout the life of the project. These projects are called “complex.” They are not simple. Cyclical, iterative, and recursive models to deal with complexity have been coming into vogue for more than 30 years. The “Agile Manifesto” (Fowler and Highsmith, 2001) formalized these models at the conceptual level and provided additional guidance for project management thought leaders.

The foundational principles of the project management paradigm are shifting, and any company that does not embrace the shift is sure to be lost in the rush. Much remains to be done as the industry has yet to find a way to favorably impact project failure rates. The ACPF, described in this book, has every promise of favorably impacting those failure rates (Standish Group, 2013). “Change or die” was never a more timely statement than in today’s project management environment. To be successful in managing complex projects, you must include, in your project management portfolio of processes, an adaptive model that continuously adjusts to changing and modifying conditions, even to the point of changing project management models mid-project. The ACPF is currently the only robust tool that offers an orderly framework that does just that.

A HISTORICAL PERSPECTIVE

The initial version of the ACPF was developed as part of two client engagements that date from 1994. One project involved process design; the other project involved product design. These two experiences led to the publication of the first version of the ACPF. This original version of the ACPF predates the Agile Manifesto by seven years.

The ACPF presented in this book is a second generation framework. It incorporates more than 20 years of learning and discovery from the experiences and client feedback gained from using and fine tuning the original version. The ACPF presented in this book is a matured version that is ready for prime time! It is a potent business-driven framework, which is used to define and maintain the most effective project management process for a specific project.

This current version of the ACPF embraces all known project management methodologies as special cases.
Every instantiation of the ACPF is based on the project’s characteristics, and the project’s internal and external environments. To expect a predefined recipe (i.e., an off-the-shelf methodology) to fulfill the needs of complex project management is not realistic and definitely not part of the ACPF. For example, despite Scrum’s popularity as a powerful empirical model, an off-the-shelf version of Scrum may not be the best recipe for a specific complex project. The “feeding frenzy” around Scrum abated as managers realized that Scrum was not the “silver bullet” of agile project management practice.

The closest thing that we have to a silver bullet is access to a portfolio of vetted tools, templates, and processes from which the sponsor, client, and project team can jointly create a project management approach. This portfolio is called the “ACPF/kit” and it is a major focus of this book. This approach is realistic, and has proven to be very effective. The ACPF/kit is customized and will contain what your organization needs in order to align its approach to complex project management in the face of the complexity and uncertainty that dominates a dynamic business environment.

There is a need for vetted tools, templates, and processes like the ACPF/kit. According to a statistic from the Standish Group’s Chaos Manifesto (2013), project failure rates range upwards of 65 percent. Those rates are obviously unacceptable. The same percentage was also reported by the Project Management Institute (2013). The Standish Group Report lists the most recent prioritized CSFs for project success. They are shown, in priority order, within the following box:

<table>
<thead>
<tr>
<th>Critical Success Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executive support</td>
</tr>
<tr>
<td>2. User involvement</td>
</tr>
<tr>
<td>3. Clear business objectives</td>
</tr>
<tr>
<td>4. Emotional maturity</td>
</tr>
<tr>
<td>5. Optimizing scope</td>
</tr>
<tr>
<td>6. Agile process</td>
</tr>
<tr>
<td>7. Project management expertise</td>
</tr>
<tr>
<td>8. Skilled resources</td>
</tr>
<tr>
<td>9. Execution</td>
</tr>
<tr>
<td>10. Tools and infrastructure (Standish Group, 2013)</td>
</tr>
</tbody>
</table>

See Chapter 8 for a discussion of how the ACPF directly impacts each of these CSFs.
Project failure rates are not a new problem, but little seems to be happening to bring about the change needed to improve the likelihood of project success. Project managers continue to force fit new project situations into old project management approaches, leading to a waste of time and resources.

**FOUNDATIONS OF THE ADAPTIVE COMPLEX PROJECT FRAMEWORK**

The range of ACPF applications that I have seen, together with my clients, has exceeded initial expectations for its robustness. For example, the ACPF has been used in drug research and development, product design, business process improvement, state government operations, and counter terrorism operations planning. It is through these and other applications that the ACPF has matured.

The journey to the current version of the ACPF has been an agile project. Although mature and ready for prime time, it has not yet reached my desired end state. I continue to learn and discover its hidden treasures; I share them with you now and will continue to do so. The ACPF creates a totally vigorous environment within which even the most complex project can be successfully managed, so as to deliver maximum business value.

If this is your first exposure to the ACPF, welcome to the first day of the rest of an effective complex project management life! As you read, please keep an open mind. The ACPF requires a new mindset and the courage to implement it. However, from the outset, if the ACPF is used properly, it works every time!

**What Is in a Name?**

This next generation ACPF continues with the name that was carefully chosen for its predecessor. Those who studied the original ACPF (Wysocki, 2010a), and adopted all or some of its features, will find a treasure of new and revamped ACPF tools, templates, and processes in this book. This ACPF moves project management processes and their attendant practices much closer to a robust solution for the complex project world than any other previous approach. But the journey is not over. Further refinements of ACPF will surely come, as it is an agile “work in progress.” Your experiences and feedback are the fuel for those improvements.

**Adaptive**

From its very beginning, the ACPF was designed to continuously adapt to the changing situations of a project. No other project management life cycle
(PMLC) model does this in an organized way. A change in the completeness and understanding of a solution might prompt a change in the project scope or the management approach being used. Environmental changes (both internal and external) are powerful, and will also impact change to the management approach for the project.

<table>
<thead>
<tr>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppose you are managing a project that is a year away from introducing a new product, and a major competitor just put a new product on the market that will dominate your new product. What do you do?</td>
</tr>
<tr>
<td>• Terminate your project immediately.</td>
</tr>
<tr>
<td>• Redesign your new product to be competitive.</td>
</tr>
<tr>
<td>• Switch to an incremental product roll out.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the ACPF as an approach in which decision models will help in selecting the best course of action.</td>
</tr>
</tbody>
</table>

The ability to deliberately change the approach to the management of a project in midstream is a unique property possessed only by the ACPF. Some will find this change disruptive, but experience suggests that it is necessary. The ACPF does not come with a crystal ball. There will be surprises, but the ACPF comes with a decision process to maintain a best fit alignment. Learning and discovery in the early cycles may lead to these changes. For example, starting with an initial agile approach, you and the client may discover the complete solution after only the first few iterations. Should you continue with the agile approach, or transition to a more familiar linear or incremental approach? The decision to change your project management model is complex and not to be taken lightly. The new characteristics of the solution, and the financial impact of the change, will be the bases for deciding to change the approach. Details about deciding on an approach are given in Chapters 5 and 6.

Because nothing in the ACPF is fixed, every part of it is variable and can be modified at any time to maintain alignment to the changing characteristics of the project and its environment. The client and the complex project manager (CPM) are both involved in these modifications. The changes that can be made are not taken from a predefined list of possible changes. The changes in approach are a creative response to the changing needs of the project and the business situation.
The ACPF requires meaningful involvement of the client and the project team, acting in an open and trusting partnership, in order to effectively make these changes. Anything short of that will invite failure.

To be successful with the ACPF, you have to “think like a chef and not like a cook!” The cook can only follow a given recipe, and if an ingredient is missing in the recipe, it is useless. The cook may be at a loss as to how to continue, if at all. A chef, on the other hand, has the skills and experience to adapt to the situation and create recipes that work within the constraints of available ingredients (the portfolio of tools, templates, and processes vetted by the enterprise).

My significant other provides an excellent example of the difference between a cook and a chef. Heather makes a pumpkin cheesecake that is to die for. Late one Sunday evening she asked if I would like her to bake a cheesecake for us. That’s a no brainer for me and so I said “you bet.” A few minutes later I heard some rummaging around in the cupboards followed by a moan from the kitchen. She reported that there was no vanilla extract and that was an essential ingredient of her recipe. It was too late to go to the market, so I suggested she put the batter in the fridge and we’d pick up the vanilla extract in the morning. A few minutes later I could tell she had put a cheesecake in the oven to bake. Maybe she found the vanilla extract? No she hadn’t. Instead she found a container of vanilla frosting and vanilla extract was one of its main ingredients. She figured out how much vanilla frosting would equal the vanilla extract called for in the cheesecake recipe and used that instead. Once she fixates on a project she is not easily dissuaded. The cheesecake was awesome! So what does this have to do with complex project management? My point is that if all you can do is blindly follow someone else’s recipe for managing a project, you won’t have a chance of successfully completing a complex project. The recipe author could not have anticipated every eventuality. But if you can create or modify a recipe based on the specific characteristics and environment of the project, you will have planted the seeds for complex project success.

The traditional project manager is, in a certain sense, a cook and is captive to a specific project management model. To be a successful CPM you have to “think like a chef and not like a cook”. The cook can follow a given recipe. However, if an ingredient is missing in the recipe, the cook may be at a loss as to how to continue. A chef has the skills and experience to adapt to the situation and create recipes that work within the constraints of available ingredients (the portfolio of tools, templates, and processes vetted by the enterprise).
So, you should have concluded that *adaptive* is a stronger word than you might have expected. To be adaptive means to embrace scope changes, changes to project plan or execution, as well as being open to changing to a different project management model altogether. Thus, adaptation is far more than plan revision for a chosen project management model. To my knowledge, the ACPF is the only robust approach that is adaptive to this extent.

The robustness of the ACPF removes all constraints on the execution of project management.

The bottom line in every project should be to deliver the expected business value that justified doing the project in the first place. Just as projects are unique and dynamic, so also is ACPF unique and dynamic! The responsibilities placed on the shoulders of the CPM are significant.

**Complex**

The ACPF has demonstrated that it can deliver acceptable business value, even in the most complex and uncertain of situations. *Complex* projects are of three different types (Agile, Extreme, and Emertxe; further explained in Chapter 3). Their effective management calls for a creative and courageous commitment from not only the project manager, but also the sponsor, client, client team, and development team. These persons’ roles in complex projects are different than their roles in traditional projects. And therein lies the challenge to the enterprise to effectively manage such projects and generate the business value expected from such ventures. An ACPF team is designed unlike any other (Wysocki, 2014a). ACPF teams and how they are organized are further discussed in Chapter 3.

**Project**

*Projects* are unique and are never repeated under the same set of circumstances. So, why isn’t the approach to managing them unique as well? This book does not advocate a wholesale change in management approach, but rather a thought-out approach—one that takes into account and deals with the vagaries of the project and its environment. There are project-specific, as well as organizational and environmental characteristics to account for when choosing the best fit project management approach (see Chapter 5). Any combination of the project characteristics discussed in Chapter 5 can cause a change in how the project is managed.
For example, if the project approach requires heavy client involvement, and you know from experience with a client that this is not likely to happen on the project, then you would not choose an approach like Scrum that depends on heavy client involvement. This situation means that you have to compromise and choose a less-than-ideal approach to work around the lack of meaningful client involvement. Alternatively, you might build a workshop on client involvement into the project definition phase and, based on the results of the workshop, make a mutual decision on which project management approach to use.

Or, suppose that your organizational environment is characterized by frequent reorganization and realignment of roles and responsibilities. In such an environment, sponsorship and priorities of active projects will change, which puts the project schedule and its priority in harm’s way. Your best fit project management approach should be one where deliverables are introduced in increments or short intervals, rather than all at once at the end of a long project. This new strategy will reduce the risk of wasted resources and loss of business value due to the event of early termination of the project. This discussion continues in Chapter 9.

**Framework**

The ACPF is not a methodology. It is a framework for generating a unique and dynamic management approach for one-time use on a specific project. The success of that approach is measured by the delivered business value.

The ACPF is a framework that the CPM uses to create a recipe for the management of a specific project. The CPM needs to understand the situation and adapt a vetted portfolio of tools, templates, and processes—the ACPF/kit—to fit the situation. The ACPF allows for that adaptation as the project situation changes. The CPM and client are in charge of the approach, rather than the approach being in charge of the project manager, as is often the case with traditional projects.

An effective CPM must be a chef.
Cooks need not apply.

In order to place ACPF in the proper context, envision the various project management approaches as being mapped into a simple project landscape. We will review this in depth later. It is the topic of Chapter 2.
For now, it is important to understand that the complex project management environment is ever-changing and is defined by seven interdependent variables:

- The characteristics of the project itself
- The characteristics of the environment in which the project will be executed
- The skill profile of the project team
- The skill profile of the client team
- The business process life cycle
- The project management life cycle
- The hardware/software technology to support the whole endeavor

While these variables may seem overwhelming, they are not. The complexities of this multidimensional environment are explored in Chapter 5, showing you how to obtain and sustain an effective project management presence in a changing environment.

**Effective Complex Project Management Is Organized Common Sense**

Every instantiation of the ACPF follows directly from the uniqueness and interaction of the variables in the project environment that were listed in the previous section. Adopting a “one-size-fits-all” mentality works if, and only if, those who developed the project management methodology were clairvoyant enough to actually design a methodology that fits any project that you would ever encounter and the instantiation of the seven interdependent variables. That is either impossible, or, “a solution out looking for a problem.” You are probably familiar with consultants whose practices are based on adopting a “one-size-fits-all” mentality. A better approach that will work is to first understand the problem or business opportunity, and only then, design a project management approach that fits it. To design that approach, you will draw upon your ACPF/kit. The depth and breadth of that kit is an indicator of your design capabilities. Welcome to ACPF-land!

As a son of first generation Americans, who is of 100% Polish descent, I consider myself to be a pretty good problem solver. However, I like to keep things simple and intuitive, as applied to the following definition.
The Adaptive Complex Project Framework

The ACPF is a robust portfolio of vetted tools, templates, and processes that can be customized to the exact needs of the enterprise to efficiently and effectively answer the following questions:

Project Ideation Phase

1. What business situation is being addressed?
2. What do you need to do?
3. What will you do?

Project Set-Up Phase

4. How will you do it?

Project Execution Phase

5. How will you know that you did it?
6. How well did you do?

The customized ACPF environment delivers an acceptable management solution that results in achieving maximum business value within the time, cost, and resource constraints of the project.

The answers to these six questions reduces effective complex project management to nothing more than organized common sense. If it were not organized common sense, why would you want to do it at all? A good test of whether or not your project management approach makes sense lies not only in your answers to these six questions, but also in the extent to which the project team uses them. So, effectiveness is measured by both the delivered business value of the project and how well the management process worked.

Let’s put on our new ACPF hat and take a quick look at how ACPF answers these six questions. At the highest level, the ACPF consists of three phases: Project Ideation, Project Set-Up, and Project Execution. Each phase answers one or more of the same, six questions.

Project Ideation Phase

The ACPF project life span begins with a Project Ideation Phase. This phase marks the birth of an idea that its proposer hopes will result in a project that delivers business value. The business case is the heart of this first phase. The ACPF extends the boundaries of the project life span to include the creation of the project. To understand the ACPF requires knowing where the project came from, and why. The Project Ideation Phase launches an investigation
of how an unsolved problem might be solved, or how an untapped business opportunity might be exploited. It consists of answering the first three questions as discussed below.

1. **What business situation is being addressed by this project?**

   The business situation is either an unsolved problem or an untapped business opportunity. If the business situation is an unsolved problem, the solution may be clearly defined and the delivery of that solution should be rather straightforward. If the solution is not completely known, then the project management approach must accommodate the learning and discovery of that solution. That will be done through a sequence of consecutive iterations or cycles. Obviously, these are complex projects and will be a higher risk than traditional projects, simply because the deliverables are not clearly defined and may not be discovered despite the best efforts being extended. The ACPF is designed to take on such complex projects, especially when they are critical mission projects in which solutions have not been forthcoming. Obviously, these will be challenging projects that carry high risk.

   If the business situation is an untapped business opportunity, the ACPF needs to provide direction in finding and evaluating ways to exploit that business opportunity. This type of project has more of a business focus than a technical focus, than would be the case in the unsolved problem situation. Both, however, are complex situations and require creativity, courage, and flexibility to achieve an acceptable result. These projects are subject to risks from external changes and technological advances. Their successful execution depends on approaches that expect change.

   Despite the risks, both of these types of projects must be undertaken and the best outcome produced within the time, cost, and resource constraints. Keep in mind that your project may be competing for resources with other projects that are addressing the same problem or business situation. The importance to senior managers of finding that solution or taking advantage of that untapped business opportunity will compete with the importance of other project proposals and how they framed their costs and benefits. Complex projects require nimble management models.

2. **What do you need to do?**

   Deciding what you need to do is the call to be creative and innovative. The obvious answer is to solve the problem or take advantage of the untapped business opportunity. This is all well and good, but given the present circumstances, it may not be possible. Even in those rare cases where the
solution is clearly known, you might not have the skilled resources, and if you do have them, they may not be available when you need them. When the solution is not known or only partially known, you might not be successful in finding that unknown solution. In any case, you need to document what needs to be done.

To answer this question, the ACPF will draw upon the many “games” that have been developed for creative thinking. One of those games is called the ACPF Brainstorming Process (see more about this game in Chapter 4). One of the major challenges faced by the ACPF Brainstorming Process is to generate new ideas that can stand the test of delivering sustainable business value. (For a collection of similar tools and processes, see also Gray, et al., 2010.)

3. What will you do?
The answer to “what will you do?” will be framed in the project goal and objectives statements. Maybe you and others will propose partial solutions to the problem or untapped business opportunity. In any case, your goal and objective statements will clearly state your intentions to the furthest extent possible. The answer is documented with a Project Overview Statement (see Chapter 4).

Project Set-up Phase
The Project Set-up Phase is a differentiating part of the ACPF. No other project management approach that I know of has anything similar in it. Because of the nature of every complex project, the Project Set-up Phase is a necessary component of an effective project management approach. It is based on the assumption that every project is unique, and so is the most effective way to manage it. The deliverable from the Project Set-up Phase will be the specific project management approach designed to be used for this project. It may never be used again.

If projects are unique, shouldn’t how we manage them also be unique?

4. How will you do it?
There are four steps to the Project Set-up Phase:

• Determine the project quadrant.
• Choose the best fit PMLC model template.
• Assess the project’s characteristics and its environment.
• Modify the chosen PMLC model template.

These four steps answer the question and identify your approach to the project.

The term “PMLC model template” deserves some clarification. The PMLC model conjures up models like Scrum, the Feature-Driven Development model, and others. In the ACPF, these are not the models implemented, but the model you start with because it is the best fit among the PMLC model choices available to you. Once chosen, the model is adapted to the specific project conditions. The word “template” was added to the term to suggest pending changes and details.

This goes to the real heart of ACPF, for it is here that a best fit PMLC model template is chosen and adapted to the unique characteristics of the project and its internal and external conditions. Conditions are affected by the seven interdependent variables, discussed above. Further, the adapted PMLC model template is not a static entity. Change is constant in the complex project space, and so is the potential for change in the adapted PMLC model. As learning and discovery take place iteratively, the clarity of the solution and goal will change. Just as the project is unique, so are the ways that we choose to manage it.

**Project Execution Phase**

If you subscribe to the *Project Management Body of Knowledge (PMBOK® Guide), 5th Edition* (Project Management Institute, 2013) you will recognize the 10 knowledge areas and 47 process groups in the details of the Project Execution Phase. This is the point where most project managers envision the start of a project. Executing an ACPF project is very different. Execution starts only after considerable preparatory work has been done to characterize the project and assess the impact of its environment. Thus, the Project Execution Phase takes the best fit project management approach delivered from the Set-up Phase and begins the project.

**5. How will you know that you did it?**

Your solution to the problem or untapped business opportunity will deliver some business value to the organization. That is your success criteria. It was used as the basis for project approval. That success criteria may be expressed in the form of increased revenue (IR), avoided costs (AC), or improved services (IS). *IRACIS* is the acronym that stands for these three
types of business value. Whatever form that success criteria takes, it will be expressed in quantitative terms so that there is no argument as to whether you met the expected business results, or not. As part of the post-implementation audit, you will compare the actual business value realized to the estimated business value proposed in the project plan. In some PMLC models, business value might be realized in increments and be used as performance measures to validate continuing the project.

No one knows if business value will be achieved based on satisfaction of the requirements. This is the province of the sponsor and the client to validate. It is in the realm of possibility that the search for the unknown solution will not be as successful as expected. All that the project team can state is that they will do everything possible to achieve the expected business value. It should be clear here that meaningful client involvement is essential. Chapter 7 discusses client involvement in detail.

6. How well did you do?

There are six parts to the answer to the question of how well you and the team did on a complex project:

- How well did your deliverables meet the stated success criteria?
- How well did the development team perform?
- How well did the client team perform?
- How well did the ACPF and the project management approach work for this project?
- What lessons were learned that can be applied to future projects?
- What requirements can be further improved in the next version?

The answers to these questions are all part of the ACPF post-implementation audit. The post-implementation audit is discussed in Chapter 6.

ACPF and PMBOK® Guide Compatibility

The Project Management Body of Knowledge (PMBOK® Guide), 5th Edition (Project Management Institute, 2013), is a portfolio of the tools, templates, and processes that should be included in every effective project management methodology, including the ACPF. Similarly, the PMBOK® Guide should be included in every organization’s ACPF/kit (see Chapter 3). Contrary to what many project managers and their managers think, the PMBOK® Guide is not a methodology. It does a fairly complete and thorough job of describing the
tools, templates, and processes that one would expect to use in a traditional approach to project management, but it leaves to the discretion of the enterprise how it chooses and packages those tools, templates, and processes into their own project management methodology.

The ACPF is fully compatible with the PMBOK® Guide, even though the PMBOK® Guide must be supplemented with the ACPF/kit designed specifically for the management needs of complex projects. The effective use of the ACPF/kit is supported by the business rules and decision models you will need. In other words, the ACPF is the complete environment for effective complex project management.

**ACPF Alignment**

The ACPF is totally aligned to the 7 Principles of Continuous Innovation that define Radical Management (Denning, 2011), which are:

- **Principle #1: Focus Work on Delighting the Client.** The ACPF is client-focused and client-driven. That means the content, prioritization, and evaluation of the deliverables from the work must meaningfully involve the client. The client is the principle decision maker in a complex project.

- **Principle #2: Do Work through Self-Organized Teams.** The team will consist of experienced professionals who can operate without supervision. They must be given the freedom to decide with meaningful client participation what to do, and through their own discussions how and when to do it.

- **Principle #3: Do Work in Client-Driven Iterations.** The client is meaningfully involved in the entire project life span. Their input is focused on what is to be done and in what order priority. The project and client teams collaboratively decide on how and when it will be done.

- **Principle #4: Deliver Value to Clients Each Iteration.** The business value may not be actually realized for some time following deployment, but the eventual delivery of that value will be achieved.

- **Principle #5: Be Totally Open about Impediments to Improvement.** Every ACPF effort will include a risk management program because the project will encounter obstacles and must have mitigation plans in place. In the complex project world, risk of failure is often very high.

- **Principle #6: Create a Context for Continuous Self-Improvement by the Team Itself.** At the completion of each iteration, a checkpoint will
review not only the solution performance, but also the team’s performance. Lessons learned is a critical part of that checkpoint.

- **Principle #7: Communicate through Interactive Conversations.** An open and honest exchange of information between client and development team is essential. Both parties play a critical role. For the client, it is the business expertise that helps guide the solution. For the project team, it is the effectiveness of the process used to discover the solution.

ACPF is also aligned to the 7 Lean Principles (Poppendieck and Poppendieck, 2003). The ACPF is robust and not constrained to any domain, such as software development. It works well in both product and process development. Experience has borne that out. The 7 Lean Principles are:

- **Eliminate waste.** If a process step does not add business value, it is defined as “waste.” Something that is laying around and not being used is a waste. Find out what the client wants and deliver it ASAP. The ACPF utilizes just-in-time planning as one tool, and colocated teams is another tool, for minimizing the waste associated with creating plans that are never executed or frequently changed.

- **Amplify learning.** The ACPF, like all agile processes, uses iteration in the project execution phase, and through iteration, learning and discovery about the solution takes place. The ACPF is different from all other empirical agile processes (like Scrum) in that it includes experimentation as part of its iteration strategy. It does this using “probative swim lanes,” whereas other agile processes utilize only “integrative swim lanes” based on observations from previous iterations.

- **Decide as late as possible.** The ACPF processes create learning and knowledge. Decisions should be based on as much information as can reasonably be gathered. Keep all options open until a decision must be made. Then, make it based on as much information that has been gathered to that point. Just-in-time planning is a defining characteristic of ACPF.

- **Deliver as fast as possible.** Clients learn from the ACPF process just as developers do. Giving the client deliverables ASAP gives them additional input on which to base further learning and discovery efforts.

- **Empower the team.** The team must work in an open, honest, and creative environment and not be shackled by heavy process and procedure. Their environment appears informal and unfettered by management constraints, but from a creative standpoint is the most effective
way to search out a heretofore undiscovered solution. They are clearly
a self-directed team. The ideal ACPF team environment will be a hy-
per-productive environment (Tendon and Muller, 2014). These are
rare.

• **Build integrity in.** The success of a deliverable, when the client says
  it is exactly what they had in mind, speaks to integrity. The ultimate
  market success of the final deliverables also speak to integrity.

• **See the whole.** Specialists are often fixated on the success of their
  piece of the solution and give little thought to the overall effectiveness
  of the whole solution. That tunnel vision has to take a back seat in
  any effective agile process, including the ACPF. The ACPF focuses on
  creating maximum business value, always! “Seeing the whole” means
  reaching back to the Project Ideation Phase and the rationale for the
  project.

**Using the ACPF in Your Organization**

A collaborative workshop will help your team and our professional staff
design and implement an ACPF environment specific to your organization’s
needs. The workshop is designed to answer these questions:

• **Where are you now?** This is a definition of the current state of proj-
  ect management in your organization. Usually, a needs analysis or a
  strengths, weakness, opportunities, and threats analysis is appropriate
  for answering this question.

• **Where do you want to go?** This is a definition of the end state of proj-
  ect management processes, practices, and expected business value. An
  ACPF Brainstorming Session (described in Chapter 4) is the preferred
  approach.

• **How will you get there?** This is accomplished through a series of ex-
  ercises done by your team under the guidance of a trained facilitator
  and their team. Implementation planning is included. Developing the
  answer is the heart of the workshop.

• **How will you know that you got there?** As part of the workshop deliv-
  erables, your team will have defined success criteria against which the
  performance of the end state will be continuously evaluated over time.

These questions are part of the Blended Training/Consulting Workshop de-
scribed in Chapter 8. See the Web Added Value (WAV™) section of the
publisher’s website at www.jrosspub.com for additional details.
PUTTING IT ALL TOGETHER

The ACPF is a bold step forward in project management approaches. To be successful requires that you reach inside yourself and summon up all the creative juices and out-of-the-box thinking that you possibly can. The ACPF requires the same from the client. They must be meaningfully involved in an ACPF project if it is to be successful. The ACPF is not for the faint of heart. It requires seeing the project as the unique entity that it is, and drawing upon a vetted collection of tools, templates, and processes to craft the best fit management approach for your project.

There is no silver bullet. So, don’t expect one. There is no recipe. So, don’t look for one. But take comfort in the fact that you are about to become a chef, and not just a cook! If you apply what is offered by the ACPF, you will be prepared to effectively manage any project from the perspective of generating expected business value, no matter how complex and uncertain the project might be. I have “been there and done that” many times, and found that the ACPF works all the time!