THE BENEFITS OF TAILORING

MAKING A PROJECT MANAGEMENT METHODOLOGY FIT

By Sean Whitaker, BA, MSc, MBA, PMP
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Introduction

With Implementing Organizational Project Management: A Practice Guide (PMI, 2014), practitioners have a broad and general introduction to ways an organization can integrate its portfolio, program and project management practices into its overall organizational management. A key part of this publication, chapter 5, How to Develop a Tailored Organizational Project Management Methodology, presents a process to enable practitioners and organizations to develop their own tailored methodology.

Many organizations have unsuccessfully tried to implement an off-the-shelf, or ready-made, project management methodology and found that it was unsuitable for their particular projects, their organization, and their level of organizational project management maturity. This often results in a lot of money, time and effort spent with little return. While the original intent was an increase in successful projects, the actual outcome was the opposite—often accompanied with a decrease in staff morale.

Before committing to any initiative to introduce a project management methodology, it is important to answer the question, "Why have a methodology at all?" Furthermore, if an organization chooses to have a defined methodology, why a tailored methodology and not an off-the-shelf methodology? Answering these questions will reveal the link to more successful projects; and delivering projects more successfully is the goal of any professional project management practitioner.

The PMI (2013a) Pulse of the Profession® report found that "organizations with developed project management practices, benefits realization processes, portfolio management practices and program management practices and those with high organizational agility all have significantly better project outcomes than their counterparts who are less advanced in their project management practices" (p.11). This paper spotlights project management methodologies tailored for organizational fit and examines how they are a key component of those effective project management practices.

This paper proposes a model and process for the initial and ongoing tailoring of a project management methodology. The goal is to enable organizations and project management practitioners to develop and tailor their own project management methodologies to improve efficiency, effectiveness and the likelihood of project success.

A secondary goal of this paper is to explore the links between project management methodologies and project success. We conducted research that invited project management practitioners from a range of industries to provide accounts of their experience with project management methodologies, project success and organizational project management maturity. The second part of this paper presents the findings of this research and reveals a link between a tailored project management methodology and the successful delivery of a project.
Project Management Methodologies and Tailoring

A Guide to the Project Management Body of Knowledge (PMBOK® Guide) (PMI, 2013b) defines a methodology as “a system of practices, techniques, procedures and rules” (p. 546). More specifically, a project management methodology is a defined, documented and discoverable set of policies, practices, processes, tools, techniques and templates that provide guidance on how projects are run within an organization. A methodology can be extensive or minimal; rigorous or lightweight; complex or simple; linear or highly iterative; described in phases or described for the entire project lifecycle. There is no one, single project management methodology that should be applied to all projects all of the time. A project management methodology should reflect the size, duration and complexity of each individual project, and be adapted to the industry, organizational culture and level of organizational project management maturity of the organization. A methodology is typically derived from a project management framework document or standard such as the PMBOK® Guide.

Tailoring is the process of referencing framework documents, standards and other relevant sources and utilizing those elements that provide processes, tools and techniques that are suitable for that particular organization. It also includes modifying existing processes currently in use by the organization. As such, the process of tailoring is a process of customizing a project management methodology. The result of tailoring is that the project management methodology will be suitable for use in specific types of projects, and a tailored methodology will reflect the size, complexity and duration of the project as appropriate for the organizational context along with adaptation to the industry within which the project is undertaken.

General examples of tailoring include the trend for IT projects to use agile-based approaches, while construction projects more often use a waterfall approach. Organizational culture is another dimension influencing tailoring. An organization with a low tolerance for risk may have many processes and procedures to guide project management throughout its lifecycle; while a similar company operating in the same market—but with a high tolerance for risk—may have fewer processes and procedures. For example, in American Productivity & Quality Center’s Effective Project Management Offices study (APQC, 2013), Dell Services, a business unit of Dell, Inc., reported using a four-level ranking system to categorize project complexity. At the highest level, projects use a high degree of rigor. As the level of complexity decreases, so too does the level of rigor and level of monitoring. Project performance is monitored using an established framework for consistent reporting across all projects.

The PMBOK® Guide (PMI, 2013b) points out that the process of tailoring is the responsibility of the project manager when it says:

...[F]or any given project, the project manager, in collaboration with the project team, is always responsible for determining which processes are appropriate, and the appropriate degree of rigor for each process. Project managers and their teams should carefully address each process and its inputs and outputs (p. 48).

The alternative to tailoring is an unmodified, off-the-shelf project management methodology. There are many of these methodologies available and a simple online search reveals many types of ready-made project management methodologies suitable for different types of projects. Often, they provide descriptions of processes, phases, tools, techniques and templates to be used in projects, but are not customized to the organizational context.
Most of these methodologies come with clear instructions that they should not be applied rigorously but should be subject to a process of tailoring to determine which elements are most useful to the project manager given the particular type, size and complexity of his or her project. Some inexperienced practitioners fail to understand this and apply the methodology verbatim regardless of project size, complexity, duration or organizational context. This very rarely leads to project success. However, the fault lies not with the methodology but with the inappropriate application by the practitioner seeking an easy solution to managing his or her projects.
How to Tailor a Project Management Methodology

A tailored project management methodology produces direct and indirect benefits to organizations—generally, the greater the level of project management methodology tailoring, the greater the level of project success. Additional benefits of a tailored approach to a project management methodology include:

- More commitment from team members who helped to create it.
- A customer-oriented focus; as the needs of the customer are an important influencing factor in its development.
- A more efficient use of project resources.

In the absence of an appropriately tailored project management methodology, individuals will tailor their own solutions. Here are some signs that the methodology is not tailored correctly:

- Project team members are not using the methodology and are managing projects without any structure or uniform process at all.
- Project team members are independently modifying the methodology without guidance and are developing their own unique versions, eliminating the efficiencies gained by standardization.
- The methodology features processes for the sake of process with little thought given to whether or not they deliver benefits and contribute to project success.
- It is a one-size-fits-all approach to projects of differing types, sizes and complexity.

Chapter 5 of Implementing Organizational Project Management (PMI, 2014) gives a broad outline of how to develop a tailored organizational project management methodology. The nine-step process is categorized into assessment, development and improvement phases as follows:

A. Assessment

1. Identify types of projects
2. Identify inputs
3. Identify constraints
4. Identify resources

B. Development

5. Develop and document the methodology
6. Derive output

C. Improvement

7. Conduct continuous improvement
8. Monitor key performance indicators
9. Repeat for each of the different types of projects
It is noted that this process can “be used with minor modifications to develop portfolio and program methodologies” (PMI, 2014, p.64). These nine steps should not be seen as just a single, linear process, but a process that is repeated at three distinct stages. These three interconnected stages are represented in Figure 1.

![Figure 1: Three stages of tailoring a project management methodology](image)

Many project management methodology development and implementation initiatives fail because issues around successful organizational change management (OCM) were not considered. It is not enough to have the best project management methodology in the world if it is not successfully implemented and continuously improved. Successfully completing development, implementation and improvement of any methodology initiative relies on the ability of the person or group responsible to be a successful change agent. There are several very good models that describe successful OCM and it is recommended that any practitioner research and apply them appropriately. An excellent place to start is Managing Change in Organizations: A Practice Guide (PMI, 2013c), which “sets the practices, processes, and disciplines on managing change in the context of portfolio, program, and project management, and illustrates how change management is an essential ingredient in using project management as the vehicle for delivering organizational strategy” (p. 1).

Therefore, a complete model for tailoring a project management methodology should take into account the steps to develop a project management methodology, a recognition of the three stages at which tailoring occurs, and apply change management to ensure adoption, benefits realization and continuous improvement.

**Initial tailoring**

The first stage in developing a custom-fit methodology is the initial tailoring. This develops and selects those processes, tools, templates, techniques and practices that will form the elements of an organizations’ particular baseline tailored project management methodology. Once this initial process is complete, a baseline methodology is established. The value in doing this is that the organization has guidance that will deliver more successful projects and real bottom-line value to the organization.

The checklist in Appendix 1 provides guidance on potential topics or areas for which to develop material when deciding what to include or exclude in the initial development of the tailored project management methodology. The list is not intended to be exhaustive, but provides a good starting point.
The development of the project management methodology is a project in itself. As such, a project manager should be appointed to lead this effort, and a team identified to support it. Buy-in to the final methodology is increased when input from the entire team is included. This will create champions and supporters for the project management methodology once it is developed and aid in its adoption, use and improvement.

As with any other project, the decision to embark on this effort should begin with some form of justification, which should include a description of the expected benefits. Having a documented list of expected benefits will be extremely useful when assessing whether or not the methodology is working as planned.

As mentioned earlier, the steps to successfully developing a tailored methodology are grouped into the three areas of assessment, development and improvement. The following elaborates on the nine steps in these three groups and describes the activities to be completed.

A. Assessment

The assessment processes seek to measure the current level of project management maturity, and define the desired level within the organization. The purpose of this exercise is twofold: First, to get a picture of where the organization is now, and where it should be in relation to project management maturity and capability; Second to provide a benchmark against which future change (hopefully improvements) can be measured. There are a number of organizational project management maturity models available including OPM3® (PMI, 2013d). Additionally, PMI’s Standards Navigator® provides guidance in developing a methodology using PMI standards.

1. Identify types of projects: Identify and describe the types of projects the organization undertakes; including information about the size, complexity, duration and any other relevant issues. A project profile assessment is described in Implementing Organizational Project Management (PMI, 2014) and can be downloaded from www.pmi.org/methodology in the tools and templates section.

2. Identify inputs: Identify and collate all of the available inputs, including existing organizational process assets and all existing templates, software, processes, user manuals and other supporting material. Complete an inventory of what already exists to avoid reinventing the wheel. A good idea is to gather project management practitioners and project team members together and spend some time mapping out the process for how projects should work. Make note of the milestones, documents, processes and other elements that occur at different stages. Note any duplicate templates, processes or other elements. Choose which tools, templates and processes best suit the purpose. Compare what input is currently available to the process map of how projects work and identify any gaps in inputs.

Also take into account any enterprise environmental factors, organizational culture and the particular organizational structure within which the project will be delivered. Each of these inputs will influence the extent of, and type of, tailoring.

3. Identify constraints: Identify and document constraints to the methodology, including financial constraints or national, local, or industry-specific regulations that the project management methodology must take into account.
4. **Identify resources**: Identify the existing sources of information and guidance available, including sources such as:

- Standards (i.e. ISO21500: Guidance on Project Management [ISO 21500:2012]);
- Framework documents (i.e., the *PMBOK® Guide* (PMI, 2013b));
- Existing proprietary methodologies and approaches (i.e. Method123, TenStep, Prince2, Scrum, Crystal, XP);
- Methodologies used by others in the same industry;
- Professional project management associations (i.e. PMI);
- Professional project management communities (i.e. Agile Manifesto for IT Projects);
- Consultants;
- Project management practitioners;
- Users of the project management methodology; and
- Stakeholders actually or potentially affected by the project management methodology.

B. **Development**

5. **Develop and document the methodology.** Build the methodology iteratively by using project management practitioners and project team members to document resources such as a process flow chart, user guides, standardized templates, lexicons, tools, techniques and other aspects of the methodology. Don’t worry about building everything right away; focus on the most important aspects first. Then, take into account the size of the organization, the size and types of projects undertaken, the organizational and project team culture, the range of complexity of projects, the project duration, and the level of organizational project management maturity.

As a broad overview, start by developing an outline or process flow chart using the Plan-Do-Check-Act cycle, or the *PMBOK® Guide* (PMI, 2013b) process groups of: initiating; planning; executing; monitoring and controlling; and closing to define major parts of the process.

In addition to the checklist of possible methodology elements contained in Appendix 1, Appendix 2 has a generic project management methodology process flow chart, which may be useful as a starting point.

There are many excellent resources available to help develop the templates needed including *A Project Manager’s Book of Forms, 2nd Edition: A Companion to the PMBOK® Guide, 5th Edition* (Snyder, 2013).

6. **Derive output.** The output derived from this process is the documented, discoverable, tailored project management methodology ready to be used across the organization. Make sure everyone knows where to find the elements of the new methodology. There have been instances of organizations with methodologies stored away that nobody knew existed.

Once the methodology has been documented, go ahead and use it as planned. Note whether it is working as expected and be prepared to make changes to improve its suitability.
C. Improvement

7. **Conduct continuous improvement.** A commitment to continuous improvement is one of the hallmarks of a high level of organizational project management maturity. In order to carry out any activities associated with continuous improvement, an organization needs to have resources devoted to the task. Normally these resources are found within a project management office or center of excellence. The process of continuous improvement includes audits to ensure that the project management methodology is being used as intended—including the method for tailoring to specific needs of the project—and that it is contributing to an increased level of project success. The audits will reveal opportunities for continuous improvement as well. Update the methodology as required.

8. **Monitor key performance indicators.** Improvement also includes an assessment that the project management methodology itself is delivering the benefits expected. These benefits and key performance indicators should have been outlined in the initial project business case. Now they should be revisited and the actual results measured against the forecasted results.

9. **Repeat for each of the different types of projects.** The final step utilizes the initial tailored project management methodology and further customizes it for different project types the organization is delivering. The pre-project tailoring also includes customizing or tailoring a project management methodology, not just for types of projects, but for each individual project.

If the organization’s projects are largely similar, then chances are there will be a single, standardized methodology that will be used without much change. If, however, the size and complexity of the projects varies considerably, then this first stage will result in a scalable and flexible methodology that can be adapted to be used on all projects. If this is the case, then a written description of how and under what circumstances the methodology should be tailored would be useful to those using it to run their projects.

It may be that tailoring means the development of distinct and separate methodologies for use on different projects that the organization delivers; therefore, it would be prudent to also develop a project management methodology selection matrix to determine which of the methodologies should be used on which project. Figure 2 shows an example of a project management methodology selection matrix where there are four different methodologies and each is tailored to suit a project of different levels of financial value and complexity.

<table>
<thead>
<tr>
<th>Project Value</th>
<th>Project Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Methodology</td>
<td>Complex Methodology</td>
</tr>
<tr>
<td>Very Simple Methodology</td>
<td>Medium Methodology</td>
</tr>
</tbody>
</table>

*Figure 2: Project management methodology selection matrix*
Pre-project tailoring
The second stage in tailoring recognizes that in addition to the efforts involved in tailoring a comprehensive baseline project management methodology for the organization, there must also be tailoring to individual projects—not just types of projects. This involves selecting the processes, tools and templates that are applicable to the project at hand. This works best when the baseline methodology includes guidance on how to further customize it, including a checklist of compulsory and optional elements. This process is not about adding in new or unique elements, but is instead about refining the existing baseline methodology to more perfectly suit each project.

A central concept to the idea of tailoring is that it must be fit for purpose. Prior to using the project management methodology on any specific project, a project manager should take responsibility for tailoring it even further to suit his or her project. The second stage is the tailoring done before starting a project to determine what elements of the project management methodology should be used. This process should involve both the project manager and the project management office (PMO). In the absence of a PMO, the project sponsor should decide which elements are appropriate for the particular project. An easy way to do this is to classify projects as: very simple; simple; medium; and complex using a matrix similar to Figure 2. Then, have a checklist to identify the different sets of processes, tools and templates for each category.

Intra-project tailoring
The third stage reflects and confirms the customizing nature of tailored project management methodologies throughout the project lifecycle. This intra-project tailoring is completed throughout the project lifecycle by checking that the particular combination of elements selected is still appropriate and the project is not being over- or undercooked. Tailoring is an iterative process done throughout the entire project lifecycle. The PMO, if one exists, should have an input into this review process and oversee and approve any changes. Capturing lessons learned about the application of the selected methodology helps other project managers in the future.

By using these nine steps in three stages and organizational change management practices, a project management practitioner can successfully deliver a tailored project management methodology including processes, templates, tools, techniques and user guides.
Observations From the Field

We conducted a convenience survey of project management practitioners to gauge their use and experience in utilizing tailored project management methodologies. We asked a variety of questions that sought to determine whether or not they used a project management methodology, the level of tailoring, the level of project success and the level of organizational project management maturity. (See Appendix 3 for details regarding the research.)

The first question asked whether or not the respondents’ organization had a defined project management methodology. Figure 3 shows that 42% of organizations do not have any form of defined project management methodology. This means that there were no standardized processes, templates, tools or techniques. In contrast, a total of 58% of respondents used some form of defined—and to a greater or lesser degree—tailored, project management methodology.

Of the 58% of respondents who indicated that they used some sort of defined project management methodology, well over half of them drew inspiration from a ready-made methodology, but had mostly built and tailored it themselves. This is an important point to remember: development of a tailored project management methodology does not need to begin from scratch.

Respondents who indicated that they had no project management methodology were asked whether or not they believed one would help them deliver a project more successfully. Somewhat surprisingly, 71% of them indicated that they thought a defined project management methodology would help them deliver their projects more successfully, as shown in Figure 4. This may indicate that while individual practitioners see benefit in a defined project management methodology, the organizational culture and senior decision makers do not see this benefit. It suggests that successfully implementing a defined project management methodology requires support from a wide range of stakeholders including practitioners, executives, senior technical staff and others who can influence its adoption and use. A starting point may be to use research, such as presented here, that demonstrates the benefits a defined and tailored project management methodology brings to an organization.
Other sources of research demonstrating the general and specific benefits of project management practices include the PMI Pulse of the Profession® report (PMI 2013a), and Researching the Value of Project Management by Thomas and Mullaly (2008).

One of the reasons given for not having a project management methodology—and particularly a tailored project management methodology—was respondents did not know how to develop and implement one, as reported by just under 30% of the respondents who indicated that they did not have a project management methodology.

When asked the main reasons they did not have a project management methodology, the respondents provided the responses shown in Figure 5.

37% 32% 31% 29% 17%
Our projects are too unique to have a defined methodology Our projects are too small to have a defined methodology We prefer an ad-hoc approach to managing projects We don’t know how to build a methodology It is too complicated or costly to develop or buy a project management methodology

**Figure 5: Why do you not have a defined project management methodology?**

From this information it can be seen that practitioners who do not use a defined project management methodology do so predominantly because they believe their projects are either too unique or too small. This implies that for each project they are undertaking, they are inventing their own unique set of tools, templates, processes and documents to help manage their projects and, as a result, there is little or no standardization across the organization.

It is doubtful that there are many projects so truly unique that they must have one-off sets of tools, templates, and processes developed that are never used again. There is also no project too small that it cannot benefit from standardized basic elements of a project management methodology. Small projects require small methodologies that are tailored to provide benefits that exceed the costs incurred in developing them.

Therefore, all projects, regardless of how unique or small they are, should have the basic management processes defined and documented. These basic, essential elements should include some form of project justification, some way of defining the scope of work to be completed and some way of managing changes to the project. Defining each of these three basic elements constitutes a minimalist project management methodology—but still a defined project management methodology along with reusable tools and templates.
When asked about the impact practitioners thought their methodology had on the success or failure of their projects, only 2% of respondents who indicated they used a defined project management methodology indicated that it played no role at all in whether the project succeeded or failed. Figure 6 shows that 65% of respondents who use a project management methodology believe that a methodology plays a major role in determining project success or failure.

Respondents were asked to provide a self-evaluation of project success, which was measured against whether or not they had any form of methodology; and, if they did, how much tailoring or customization was done to it. The data shown in Figure 7 indicates that having a tailored project management methodology of any sort may be related to greater levels of project success than not having a project management methodology. Furthermore, the data suggest that the more tailoring of a project management methodology, the greater the level of project success.
When the respondents were asked to assess the level of organizational project management maturity of their organizations, there appears to be a relationship between those with no methodology compared to those with a defined methodology. As Figure 8 shows, those organizations that used a defined project management methodology reported a higher level of maturity than those organizations that did not.

![Figure 8: How mature is your organization in relation to professional project management practices?](image)

When asked whether or not their organization had a PMO, there was a difference between those organizations that did not have a project management methodology and those that did. Figure 9 shows that 78% of organizations with no project management methodology had no PMO at all. It also shows that of those organizations with some form of tailored project management methodology, 65% have a PMO.

![Figure 9: Do you have a PMO?](image)
The existence of a PMO is an important consideration because the development, implementation, use and improvement of any project management methodology are important responsibilities of a PMO—whatever form it takes within the organization. This data suggests that the absence of a PMO often has an adverse impact upon an organization’s project management methodology.

Figure 10 shows a graphical representation of the way in which a project management methodology would normally be found within a PMO—which itself is often a sign of project management maturity. However, the organization’s level of project management maturity may dictate what type of PMO the organization has and whether or not the organization has any form of defined project management methodology.
Figure 11 shows the areas of project-related activities included in the respondents’ project management methodology for those respondents who indicated that their organizations had some form of one and who indicated that their projects were successful more than 75% of the time. These activities, along with the list in Appendix 1, form a fairly comprehensive set of areas to consider when developing a tailored project management methodology.

![Figure 11: In which of the following areas does your project management methodology provide guidance?](image)
Summary

Industry research suggests that there is a direct relationship between a tailored project management methodology and project success. Undertaking the development of a tailored project management methodology using the model presented here, and based on the processes outlined in *Implementing Organizational Project Management: A Practice Guide* (PMI, 2014), can improve the efficiency and consistency of project execution and improve project success. This is especially relevant to practitioners who do not have a project management methodology because they don’t know how to build one. The model provides guidance to assist project management practitioners in building and improving their own tailored project management methodology.

The data from the survey seems to support the conclusion that there is a benefit to organizations for implementing a tailored project management methodology and suggests that the greater the level of project management methodology tailoring, the greater the level of project success. Using the data gathered, the following key points were observed:

- Approximately 40% of organizations manage their projects with no defined project management methodology.
- Projects managed without a defined project management methodology reported project success only 66% of the time while projects managed with a defined project management methodology reported project success at an average of 74%; while organizations using a fully tailored, or customized, methodology reported an 82% project success rate.
- Over 70% of project management practitioners working without a defined project management methodology believed a defined project management methodology would help them deliver projects more successfully.
- 65% of organizations with a defined project management methodology reported having a PMO.

The data presented suggests that there is a relationship between the presence of a defined project management methodology, and the degree of tailoring of that project management methodology, and project success. A defined project management methodology tailored to suit the size, complexity, duration and organizational context, as well as the organization’s industry, can contribute to a higher level of organizational project management maturity and, as such, either directly or indirectly contribute to higher levels of project success.
References


Appendix 1 - Project Management Methodology Checklist

Use this checklist to determine which elements the tailored project management methodology should have.

- Project selection, justification and approval process
- Project phases, stage gates and/or milestones
- Project governance
- Project sponsorship
- Delegated authority limits
- Project roles and responsibilities
- Business case preparation
- Project charter preparation
- Project management software selection
- Requirements definition, management and control
- Work breakdown structure development and control
- Scope definition, management and control
- Cost estimating, management and control
- Budget development and control
- Project financial processes
- Schedule estimating, management and control
- Monitoring project performance, metrics/KPIs, reporting
- Managing project scope changes
- Project status reporting
- Quality assurance processes
- Process audit procedures
- Quality control processes
- Risk assessment, management and control
- Resource estimation, leveling and management
- Project team formation and development

- Project communications development, distribution and control
- Stakeholder identification, engagement and management
- Customer engagement and management
- Procurement and contract assessment and management
- Vendor management
- Claims administration and resolution
- Health and safety
- Environmental management
- Deliverable acceptance procedure
- Operational handover process
- Project, or phase, closure process and checklist
- Gathering, documenting and evaluation of lessons learned
- Benefits realization and/or post implementation review process
- Methodology tailoring guidelines
- Project change management
- Project complexity assessment
- Form templates
Appendix 2 - Methodology Process Flow Chart

Use this example process flow chart as a guide to develop the project management methodology process flow chart for the organization.

P1: Project Selection and Justification:
Choose the right projects for the right reasons. Document expected benefits.
Output: Business case, project charter, work order, project approval documents, etc.

P2: Project Planning:
Complete the right amount of planning in all the appropriate and relevant areas. Replan as required.
Output: Project management plan, individual plans, baselines, project documents.

P3: Execute the Plans:
Carry out the work described in the various planning documents.
Output: Corrective actions, change requests, project plans, baseline, and document updates.

P4: Check and Control Changes:
Check that what you planned to do matches what you are doing. Act according to documented change control process if they don’t match.
Output: Corrective actions, change requests, project plans, baseline, and document updates.

P5: Report Progress:
Produce project reports detailing how the project is progressing against planned metrics.
Output: Project status reports.

P6: Close the Project:
Complete project closure according to the planned checklist.
Output: Project and product acceptance, lessons learned.

P7: Benefits Realization:
Examine and document outcomes and benefits delivered. Do they match the original intended benefits?
Output: Benefits realization report, post implementation review, continuous improvement.
Appendix 3 - Data Collection

Data for this whitepaper were collected via an online survey among project practitioners using a series of questions focused on project management methodologies. A total of 202 respondents completed the survey. Respondents came from a wide variety of industries and were at different stages of their project management careers.

**Figure 12** shows the distribution of industries and **Figure 13** shows the range of project management roles held by respondents.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare and Pharmaceuticals</td>
<td>11%</td>
</tr>
<tr>
<td>Government</td>
<td>10.25%</td>
</tr>
<tr>
<td>Construction, Machinery and Homes</td>
<td>10.25%</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>7.75%</td>
</tr>
<tr>
<td>IT Systems and Hardware</td>
<td>6.25%</td>
</tr>
<tr>
<td>Utilities, Energy and Extraction</td>
<td>6.25%</td>
</tr>
<tr>
<td>Education</td>
<td>6.25%</td>
</tr>
<tr>
<td>Business Support and Logistics</td>
<td>4.25%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.5%</td>
</tr>
<tr>
<td>Communications, Technology and Electronics</td>
<td>3%</td>
</tr>
<tr>
<td>Software Development</td>
<td>3%</td>
</tr>
<tr>
<td>Retail and Consumer Durables</td>
<td>3%</td>
</tr>
<tr>
<td>Finance and Financial Services</td>
<td>1.25%</td>
</tr>
<tr>
<td>Airlines and Aerospace (including defense)</td>
<td>1.25%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1.25%</td>
</tr>
</tbody>
</table>

**Figure 12:** What industry do you work in?
Figure 13: What is your current role?