Chapter 6. Iteration 0: Preparing for the First Iteration

People only see what they are prepared to see. —Ralph Waldo Emerson

There are no secrets to success. It is the result of preparation, hard work, and learning from failure. —Colin Powell

In This Chapter
This chapter discusses what needs to be accomplished prior to actually building working code in your first iteration. It offers a checklist for a minimum set of “critical mass” prerequisites that can help ensure the success of a new Lean-Agile project. If any of these logistics are not in place and visible, the chance for success is compromised and the project risks pitfalls that might have been avoided.

NOTE

In chapter 3, The Big Picture, we talked about the importance of product thinking. In this chapter, we use the word “project” to mean “a defined enhancement to a product that is focused on adding value for customers via the product being enhanced.”

Takeaways
Key insights to take away from this chapter include:

- Some amount of planning is advisable in anything more than very small projects
- Too much planning is not a good idea
- Prepare for the first iteration by looking at project, team, environment and architecture issues

Getting Ready for Iteration 1
A common cause of project failure is beginning without properly setting up for success. While Waterfall projects, tended to spend too much effort on setting up; in Agile and Scrum projects, many failures occur from not doing enough. Better is a middle ground—just enough to start up the project effectively, so that it will develop and deliver incrementally, but not so much that we get overburdened before we even begin.

Start with the question, “What do the team and the organization each need to do to prepare for the first iteration?” That is, what is required so we can begin building value in the first iteration?
This question is the basis for the rest of this chapter. To answer it, we need to consider four general areas, as shown in Table 6.1.

### Table 6.1. Focus Areas for Iteration 0

<table>
<thead>
<tr>
<th>Focus on...</th>
<th>Think about how you will...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td>Establish and make visible the vision and the pipeline of work that the team will do</td>
</tr>
<tr>
<td><strong>Team</strong></td>
<td>Ready the team with knowledge, skills, tools, and processes</td>
</tr>
<tr>
<td><strong>Environments</strong></td>
<td>Install, configure, and test tools; set up workrooms and collaboration spaces, creating visibility</td>
</tr>
<tr>
<td><strong>Architecture</strong></td>
<td>Defining the high-level architecture and design goals to guide emergent and incremental delivery of business value</td>
</tr>
</tbody>
</table>

The time required to complete Iteration 0 will vary; it depends on the needs of the team and the product. Typically it takes one week for each three months of scheduled project-time. The team should time-box each week of Iteration 0 to ensure they don’t spend more time than needed.

## Set Up the Product

In order to drive software delivery from business value, the team needs a Product Champion who can clearly describe the vision of the undertaking and make it visible to the team. The Product Champion needs to be able to speak for the customer and the stakeholders. She answers the question, “Why are we here?” and establishes line-of-sight between the team and the business requirements.

For the team, line-of-sight ensures they understand the highest priority—for the day, the iteration, the release, and the product vision. Transparency and visual controls need to be established that create visibility of all work underway. Visual controls provide a powerful mechanism for keeping the development team tightly coupled to, and aware of, the product backlog—which the team should review regularly.

The Lean portfolio (described in chapter 4) can provide insight into what feature or features can be delivered for the most return on investment (guided by what business the organization is in). This portfolio, and the release plan, must be established, estimated, and made visible before any attempt is made to execute an iteration. This preliminary work is necessary because the time it would require to decompose and estimate a high-level plan, and establish enough stories ready to be broken down into tasks, would overload the first iteration undertaken. In other words, we need to “prime the pump” of high-value work so that the team can focus on delivering business value and have the right amount of visibility into future work. The structure should support “responsible looks ahead,” but not so much that the team focuses too far into the future and risks doing unneeded analysis or building unneeded features.
Set Up the Team

Lean guidance dictates that limiting work to the team’s capacity is fundamental to efficient workflow. This environment is created by forming dedicated teams that pull work from a prioritized backlog and focus on completing it before starting new work. Iteration 0 is the time to form and locate the team(s) and assign roles well-established in Lean-Agile methods, including Product Champion and Scrum Master. Decide on the following:

- The logistics for daily stand-up meetings and visual controls (product portfolio, roadmap, release plan, and iteration backlog)
- How to manage impediments
- How to ensure transparency (WIP, impediments, status)

Lean mandates that the team focus on quality and preventing waste, particularly delays. Additionally, the development process should help prevent the creation of technical debt\(^1\). It is recommended that the team transition to a test-first approach. If this transition is not underway, Iteration 0 should include a plan for the team to establish testing approaches at the unit, functional, system-acceptance, and user-acceptance levels. The agreed-upon strategies for driving all work under the context of testing should be documented, and incremental creation of a fully automated test suite, with visual controls in place to monitor progress, should be a clearly stated goal.

At the story level, the team needs standards of work that specify the agreed-upon definition of “done.” This can be a simple document that describes the visible quality steps that the team must achieve prior to closing and demonstrating a story, including all updated compliance documentation, an updated design deliverable, code inspections, architecture review, and finally, Product Champion acceptance.

Set Up the Environment

In order to maximize the delivery of business value, the team needs to put in place as much of the technical setup as possible in Iteration 0. Install, configure, and validate all components of the development environment, including IDEs, version control, testing tools, and bug-tracking applications.

A common approach is to have the team test drive these components by pulling in at least one build story in order to verify from end to end that business value can be delivered within the environment.

---

\(^1\) There are two types of technical debt. One is merely writing poor quality code that makes future changes more difficult. The other results from not taking advantage of what you've recently learned about your system to improve its design.
TIP

During Iteration 0, have the team perform any support work (bug fixes) that they may be responsible for. This also helps to test the environment.

Set up the Architecture

Other items that require attention and buy-in from the team in order to set standards of work include high-level identification of dependencies and risks, architecture goals, and documentation. These may require enterprise review and sign-off, and should be addressed during Iteration 0. How to do this is discussed in greater detail in chapter 13, The Role of Architecture in Lean-Agile Projects.

Iteration 0 Checklist

Use the checklist shown in Table 6.2 at the beginning of a project to ensure all of the issues for Iteration 0 have been covered.

Table 6.2. Iteration 0 Checklist

<table>
<thead>
<tr>
<th>✓ Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>Product Champion has prepared vision statements for the project and release.</td>
</tr>
<tr>
<td></td>
<td>The team understands and agrees to the vision, drivers, and expected outcomes for the release.</td>
</tr>
<tr>
<td>Product Backlog</td>
<td>Features have been prioritized and estimated.</td>
</tr>
<tr>
<td></td>
<td>High level architectural milestones have been specified.</td>
</tr>
<tr>
<td>Story Estimation</td>
<td>Stories have been decomposed and right sized.</td>
</tr>
<tr>
<td></td>
<td>Validation criteria for stories are understood.</td>
</tr>
<tr>
<td></td>
<td>Stories have been estimated for first few iterations’ work.</td>
</tr>
<tr>
<td>Iteration Backlog</td>
<td>Iteration length is set.</td>
</tr>
<tr>
<td></td>
<td>Iteration backlog is established and visible.</td>
</tr>
<tr>
<td></td>
<td>The team has committed to Iteration 1 plan.</td>
</tr>
<tr>
<td></td>
<td>Stories are assigned to the first few iterations.</td>
</tr>
<tr>
<td>Team</td>
<td>The team is staffed with all of the needed roles, dedicated to the release, and co-located as much as possible.</td>
</tr>
<tr>
<td></td>
<td>The team has received required training: Lean-Agile software development, Test-Driven Development, engineering practices.</td>
</tr>
<tr>
<td></td>
<td>Artifacts and deliverables are determined (and visible).</td>
</tr>
<tr>
<td>Testing Agreements</td>
<td>Definition of done has been established and documented (unit, integration, acceptance).</td>
</tr>
<tr>
<td>Team Environment</td>
<td>Lessons learned from previous releases have been intentionally incorporated.</td>
</tr>
<tr>
<td></td>
<td>Tools for testing, coding, integrating, and building have been selected and installed.</td>
</tr>
</tbody>
</table>
The following is an excerpt from Lean-Agile Software Development: Achieving Enterprise Agility by Shalloway, Beaver, and Trott. No portions may be reproduced without the express permission of Net Objectives, Inc.

<table>
<thead>
<tr>
<th>✓ Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics</td>
<td>Logistics have been established for daily stand-up (time, location, conference-call information, portal, and so on). The ground rules for team life have been agreed to. The team workspace is organized (and cleaned up): physical, communication, collaboration issues have been addressed. The team’s project board is set up. The build environment has been established and tested.</td>
</tr>
<tr>
<td>Architecture</td>
<td>Architectural goals/approach identified and made visible. Dependencies and Risks have been Identified and made visible. Conceptual Design has been completed.</td>
</tr>
</tbody>
</table>

Summary
This chapter describes Iteration 0 (also known as Sprint 0), the work required to set the stage for the team to start work on Iteration 1 and beyond. The length of Iteration 0 can vary depending on the needs of the team and the project. There are four primary focus areas: the product, the team, the environment, and the architecture. Time spent here sets up the team for early success.

After discussing each of these, the chapter concludes with a checklist for Iteration 0 activities.

Try This
These exercises are best done as a conversation with someone in your organization. After each exercise, ask each other if there are any actions either of you can take to improve your situation.

- Discuss a time when you did too much up-front preparation.
  - How could you have avoided the excess preparation?
  - What did this cost you besides your time?
- Discuss a time when you did not do enough up-front preparation.
  - Can you tell the difference between doing too much and not enough preparation?
  - What do you think is the minimal preparation required for virtually all projects?
NET OBJECTIVES
LEAN-AGILE APPROACH

INTEGRATED AND COHESIVE
All of our trainers, consultants, and coaches follow a consistent Lean-Agile approach to sustainable product development. By providing services at all of these levels, we provide you teams and management with a consistent message.

PROCESS EXECUTION
Net Objectives helps you initiate Agile adoption across teams and management with process training and follow-on coaching to accelerate and ease the transition to Lean-Agile practices.

SKILLS & COMPETENCIES
Both technical and process skills and competencies are essential for effective Agile software development. Net Objectives provides your teams with the knowledge and understanding required to build the right functionality in the right way to provide the greatest value and build a sustainable development environment.

ENTERPRISE STRATEGIES
Enterprise Agility requires a perspective of software development that embraces Lean principles as well as Agile methodologies. Our experienced consultants can help you develop a realistic strategy to leverage the benefits of Agile development within your organization.

SERVICES OVERVIEW

TRAINING FOR AGILE DEVELOPERS AND MANAGERS
Net Objectives provides essential Lean-Agile technical and process training to organizations, teams and individuals through in-house course delivery worldwide and public course offerings across the US.

CURRICULA — CUSTOM COURSES AND PROGRAMS
Our Lean-Agile Core Curriculum provides the foundation for Agile Teams to succeed.

Lean Software Development
- Implementing Scrum for Your Team
- Agile Enterprise Release Planning
- Sustainable Test-Driven Development
- Agile Estimation with User Stories
- Design Patterns

In addition, we offer the most comprehensive technical and process training for Agile professionals in the industry as well as our own Certifications for Scrum Master and Product Champion.

PROCESS AND TECHNICAL TEAM COACHING
Our coaches facilitate your teams with their experience and wisdom by providing guidance, direction and motivation to quickly put their newly acquired competencies to work. Coaching ensures immediate knowledge transfer while working on your problem domain.

LEAN-AGILE ASSESSMENTS
Understand what Agility means to your organization and how best to implement your initiative by utilizing our Assessment services that include value mapping, strategic planning and execution. Our consultants will define an actionable plan that best fits your needs.

LEAN-AGILE CONSULTING
Seasoned Lean-Agile consultants provide you with an outside view to see what structural and cultural changes need to be made in order to create an organization that fosters effective Agile development that best serves your business and deliver value to your customers.

FREE INFORMATION

CONTACT US FOR A FREE CONSULTATION
Receive a free no-obligation consultation to discuss your needs, requirements and objectives. Learn about our courses, curricula, coaching and consulting services. We will arrange a free consultation with instructors or consultants most qualified to answer all your questions.

Call toll free at 1-888-LEAN-244 (1-888-532-6244) or email sales@netobjectives.com

REGISTER PROFESSIONAL LEAN-AGILE RESOURCES
Visit our website and register for access to professional Lean-Agile resources for management and developers. Enjoy access to webinars, podcasts, blogs, whitepapers, articles and more to help you become more Agile. Register at http://www.netobjectives.com/user/register.