

Jeff Oltmann on Mastering Projects

Agile vs. Traditional: an Unnecessary War

There's a War On

There's a war raging. On one side are ardent agilists, who advocate managing projects using methods such as Scrum and XP. On the other side are traditionalists, who prefer waterfall methods. Just look at the venom in these excerpts from recent articles on project management and product development.

Dueling Titles

“The Agile Method and Other Fairy Tales” competes with “Rigid vs. Agile”

Stinging Quotes

“Waterfall methods are notorious for leading one to believe projects are on schedule when, in fact, they are not.”

“Agile proponents are the leaders of a dysfunctional industry.”

What are these opposing approaches to managing projects? It's a bit hard to pin down – and that's part of the confusion – but here's a broad distinction. Traditional methods are planning-driven. They place a high value on early and thorough planning before executing the plan. Agile methods emphasize flexibility and incrementalism over detailed planning. Agile projects string together a series of very short (typically 2 – 4 week) plan-do iterations rather than engaging in lot of advance planning.

Vacation in the Islands

An example may help. Let's say that you expect to take a month-long vacation in Hawaii. If you use a traditional

planning-driven approach, months before the trip you'll study guidebooks, research event listings, plan your daily itinerary, and procure advance tickets to key activities. When you arrive in Hawaii at the start of your vacation, everything is all laid out, including a pair of hard-to-get tickets to the Jimmy Buffet reunion concert that sold out months in advance.

Alternatively, you could manage this trip as an agile project using one week iterations. Before leaving for the islands, you'll make a high-level wish list of activities that sound interesting, but you won't spend much time on detailed pre-planning. At the beginning of every week on Hawaii you'll figure out what activities you will do that week based on your wish list, the weather forecast, and the people and places you discovered last week. This sounds pretty good – it allows you to be flexible and explore your emerging interests, such as accepting a spontaneous invitation to attend an authentic family luau with a local resident that you met the first week.

Who's Right?

Although this is an exaggerated example, it illustrates some of the pros and cons of each approach. The traditional approach, with its emphasis on advance planning, is efficient when you have relatively clear knowledge about the future course the project is likely to take, the risk or cost of having to redo things is low, or advance preparation confers important benefits such as managing long lead time orders. You plan once and then do (perhaps with minor modifications). This allows you take advantage of opportunities like attending that once

in a lifetime Jimmy Buffet concert under the palm trees.

In contrast, the agile approach is most powerful when you can't clearly see the future of key elements of the project. Frequent short iterations of planning and then doing add flexibility and reduce risk. This flexibility means that you'd have a great time going to the local luau during your vacation, an event you never could have pre-planned because the opportunity didn't come up until you met a local during the trip. Unfortunately you'd miss seeing the Jimmy Buffett concert because it was sold out months before you started any of your weekly iterations.

Which approach is best? It depends on the type of project you're doing – the length of its planning horizon, the cost of rework, the value of flexibility for the project, and perhaps even the personality of the organization performing the project.

However, we don't have to pick sides, either agile or traditional. Sometimes the most powerful solution is to com-

bine elements from both approaches, choosing detailed planning for stable parts of the project and shallow, iterative planning for other parts that are likely to change. (This is currently called a hybrid approach, but the idea goes back at least 30 years to project management author F.L. Harrison, who called it "Rolling Wave Planning.")

A Plea for Peace

It's clear that both agile and traditional approaches have valuable elements. Either can also be abused, causing a project to fail rather than helping it succeed.

Allow me get on my soapbox for a moment. Stop the caricatures and call a truce to this unnecessary war. Draw the best from both perspectives. As I recently told PM Network magazine, the bottom line is that "techniques from both approaches should be part of your practitioner's toolkit, and you must develop the judgment and skill to be able to apply the best technique to a particular project situation."

About the Author

Jeff Oltmann is principal consultant at Synergy Professional Services, LLC in Portland, Oregon (www.spspro.com). He is also on the graduate faculty of the Division of Management at Oregon Health and Science University. Jeff welcomes your questions and ideas. You can contact him at jeff@spspro.com or read previous articles at www.spspro.com/resources.htm.