

This article is a work of fiction. Similarities to persons living or dead are coincidental.

LEAN PROJECT PLANNING

Building Useful Project Plans

"I tried that logic tree approach with this project," stated Sally, our client's project manager. "I had a hell of a time trying to convert it to a project plan," she informs me. "I just couldn't make it work."

I am stunned by this. We spent an entire day teaching Sally and her colleagues how to build logic trees. I was certain that it would be a snap for them to reformat the information into a useful project plan. Fortunately Sally changes the subject quickly, leaving me to solve this mystery.

Later, rather than try to put a Band-Aid on a process that appears less than satisfactory, I decide to start from scratch. I need to identify a process that provides all the necessary information, automatically excludes unnecessary activities, and is easy to learn and use. More importantly, it must be a true process. That is, the quality of its output must be largely independent of its users. Different people using the same process and the same inputs should arrive at largely the same project plan.

It's easy to see why unnecessary activities end up in the project plans. People, engineers, software developers, researchers, nearly all individuals who regularly contribute to project plans do so by providing a forward-going workflow description. "I do this; I do that; and I do the other thing." It is this forward-going workflow description that brings wasteful, historical activities into the plan. In contrast, my process must yield a lean plan, devoid of unnecessary activities. It must also yield a complete plan, which prevents re-work and unnecessary delays.

But, if a planning process that is truly lean is to be used successfully, then the deliverables of the project must be defined BEFORE the planning begins. And there's the proverbial rub. Many project managers are required to plan projects well before the projects' deliverables are defined. Others, like Sally, complain regularly that the deliverables of their projects are redefined frequently. It's clear that management and even customers must be involved before the project planning starts. If planning is to become a process, then, like every other process, the requisite inputs must be available. Without the requisite inputs, the proverb of garbage in - garbage out applies.

Interestingly, our implementation method is improved. By giving thought to a planning process I discover yet another step for management to take during an implementation.

OK! It's time to work on the planning process. Let's say that management has done its job, and now the project manager and the project team have the complete list of project deliverables. What next? Or, more to the point, what first, or is it what last? I'm confusing myself.

"Hello?" Hilbert Scott responds to my speed-dialed telephone call.

Hilbert and I met during college. Now he works as the enterprise analyst for Multico, a supplier of network hardware. His enterprise analyst position is a significant change from technical role that he had earlier in his career. Hilbert now maintains a predictive model of Multico's entire multi-project system.

It's always good to put two brains to work, when one brain begins to struggle. Hilbert is always willing to help out, by letting me talk through problems. I'm sure that he can help again.

"Hey, it's me!" I say, certain that he'll recognize my voice. "I need your brain," I tell him. "Got a minute?"

"Sure!" Hilbert provides his usual response. "What do you want to talk about?" He asks.

"I'm trying to figure out a project planning process," I tell him. "It has to be a reverse-planning process. But it also has to be easy to use. Interested?" I ask.

"I sure am," answers Hilbert. "We need a good planning process for our own projects," he observes. "It's tough to maintain our multi-project model, without good plans. But our people don't always succeed at putting good project plans together," he volunteers.

"OK. Here's where I am now. We have a project manager and a project team in a conference room. They have the list of deliverables for which they are planning the project," I tell him. "What's the first thing that the project manager needs to do?" I ask.

"That's easy," says Hilbert. "The project manager has to make sure that everybody's understanding of the deliverables is the same," Hilbert states.

Hilbert is right. The first step is clarity. Everybody must have the same understanding with respect to the objectives of the project. Otherwise, they all pull in different directions. But I'm struggling with what I would call an entry point. This isn't helping to see an effective process yet.

"I agree," I tell Hilbert. "But let's assume that we're in the middle of the planning process," I tell him. "I want to describe a generic set of steps, a process, which can be used to build every piece of a project plan. Then we can worry about how to start and finish the process," I explain.

"OK. Let's say that we're two developers. I'm supposed to work on a predecessor activity. And you're supposed to work the successor activity to mine," Hilbert says as he

paints a slightly different but more useful picture. "I don't know what my task is yet, right?"

He continues before I can respond.

"What's the first question on my mind?" Hilbert puzzles.

"What is this!" I respond. "The first thing that you need to know is what I'm expecting from you," I say confidently. "Otherwise you don't have a chance in hell of doing the right task and giving me what I need for my piece of the project," I conclude.

"OK. So the project manager needs to make sure that I have the answer to the question, 'what is this?' That makes sense," Hilbert observes. "The 'this' describes my deliverable to you, sort of a kanban." he notes.

"Then the project manager needs to know what you plan to do, to create my deliverable, no?" I ask in a leading manner.

"Yup!" quips Hilbert.

"So the next question is, 'What's your task,' which becomes the task description for the project management software," I add.

"I think we missed something," Hilbert says.

"What's that?"

"After the 'what is this' question, the project manager needs to know who provides it," he observes correctly.

"You're right!" I agree. "The project manager needs to know which resource gets the kanban and creates the deliverable."

Already I'm finding Hilbert's clear thinking invaluable.

"Do you mean that people should actually exchange kanban cards with each other?" I ask.

"Well, no, not really!" responds Hilbert. "The equivalent of the kanban exchange could happen as a conversation in the planning room at the time that the project is planned," he responds. "The important thing is the communication between resources," he observes. "But if developers were required to provide, say, Post-It® notes with the descriptions of their required significant inputs, well, that wouldn't be a bad thing either," states Hilbert.

"I like that," I comment. "That would go a long way toward improving communication between developers, which is where most projects get in trouble," I offer. With the Post-

® Post-It is a register trademark of the 3M Corporation.

It® notes acting as kanban cards, the project manager can document each developer's needs at the time that the plan is created."

"So we have three questions: What is this? Who makes it happen? And what is his/her process?" summarizes Hilbert. "By the way, the provider of an input and that provider's process description should go on a separate Post-It® note," he states. "These are pieces of process information, not input information," he observes.

"Should we use different colors?" I ask. "How about if we use white Post-It® notes for the inputs/outputs and yellow Post-It® notes for the process information?" I offer.

"It sounds good," Hilbert agrees.

"I think that I can figure out the next question," I state. "What significant inputs do you need from anybody else on the project?" I say with confidence.

"That makes sense," agrees Hilbert. "If a resource needs inputs from others, then it's up to that resource to specify those inputs. In other words, he's responsible for specifying his own kanban cards," concludes Hilbert.

"On a white Post-It® note," I add.

"And the next question should provide a test for sufficiency," offers Hilbert.

Hilbert is on target. All too often he and I see project plans that miss weeks or even months of activities for a number of people. The corresponding projects are always late, because necessary inputs that are needed later in the project are not identified until they are needed by somebody. At that point it's way too late. A simple test for sufficiency during the planning process is likely to surface early those inputs that are less than obvious.

I like the five-question approach. But I'm not sure that we have all the right questions yet.

"I'm uncomfortable with the third question," I say. "If we ask a developer for his/her process description, we're going to get a highly detailed process description. The project plan is going to be far too detailed to be useful," I observe

"I think you're right," agree Hilbert. "And for that matter, the task description that we get out of this question is actually irrelevant. It's only a label that's needed by the project management software. It could be anything," he notes. "All we really need is a simple task description, not a highly detailed list," he continues. "I think I have it. Let's ask for the last significant thing that the developer does to create the deliverable. This way we focus the developer's thinking on the end of his/her process, and we avoid the extreme detail," he suggests.

"I like that," I say.

"So we have five questions," Hilbert observes. "And the planning process consists of asking and answering the five questions," he continues.

- 1) What is this deliverable? (White Post-It® note)
- 2) Who makes this deliverable happen? (Yellow Post-It® note)
- 3) What is the last significant thing that he/she does? (Same yellow Post-It® note)
- 4) What tangible inputs does he/she need from anybody? (Each on a new white Post-It® note)
- 5) Are these tangible inputs sufficient? (To uncover missing inputs)

"But when do we stop asking the five questions?" he asks with a question of his own. "How do we know when we're done?"

I think quietly for a moment, and then the answer hits me.

"That's easy," I tell Hilbert. "When we reach a developer who can create the very first input with no additional inputs from anybody else, then we're at the end of a path," I say.

Hilbert corrects me immediately. "No. We're at the beginning of a path," he says.

"That's right," I agree. "We're at an entry point to the plan. We're at a point that links the present to the future," I shout with excitement. "That's what a project plan does, isn't it?" I continue before Hilbert can respond. "A project plan is the set of logistical steps that links the present to a desired future. We follow it, and we create something that doesn't exist in the present but will exist when the plan is executed," I conclude with satisfaction.

"Wow!" Hilbert exclaims. "I like this. I've got a planning session coming up. I'll let you know how it goes," he promises. "But what should I call it?" he asks.

"It eliminates wasteful, unnecessary tasks," I offer. "And it creates complete project plans that avoid the expensive delays caused by unidentified inputs," I add. "This is Lean Project Planning," I state adamantly.

"Lean Project Planning," repeats Hilbert. "This name might stick. I'll let you know how it's received," he offers.

© Copyright, Spherical Angle, Inc. 2003.

® Post-It is a registered trademark of the 3M Corporation.

Dear Reader:

Lean Project Planning is the first step toward the timely completion of any project. The Lean Project Planning process traces the flow of information about customer needs, in reverse through a product development organization. In doing so, the process achieves a number of very desirable effects, while eliminating several sources of wasted effort, time, and money.

The Lean Project Planning process begins by creating vital communication among all the stakeholders of a project. Second, the process identifies the project team and the team members' tasks. Third, the process forces equally vital communication to take place among all the project's team members, by causing team members to clearly identify their required, tangible inputs. Finally, the Lean Project Planning process introduces a test for sufficiency that often reveals unidentified inputs, the absence of which would not be discovered until late in the actual project. Thus, the Lean Project Planning process avoids wasted effort, by ensuring that only required work is included in a project plan. The process also avoids unnecessary delays, by identifying more completely the tangible inputs required for each task of a project.

The Lean Project Planning process is summarized by these five questions:

- 1) What is this deliverable?
- 2) Who makes this deliverable happen?
- 3) What's the last significant thing that he/she does?
- 4) What tangible inputs does he/she need from anybody?
- 5) Are these tangible inputs sufficient?

Everyone who has ever learned and used the Lean Project Planning process has been more than satisfied with its effectiveness. The quality of their project plans has been superior, and their plans have been devoid of unpleasant surprises. The performance of their project teams, clearly, has benefited from the better plans.

Cordially,

Tony Rizzo