## Chapter 1-1: Gathering Requirements

If you don't know where you're going, there is a good chance you won't get there

- paraphrase of Yogi Berra

Step one in planning any project is figuring out what it is you need to accomplish. That might sound obvious, but it is surprising how many projects get started without a clear goal. Most of those fail.

When someone starts a project, they have some goal in mind. That goal may be vague, but it is still there. As the quote at the top of this chapter hints, the first step towards success is understanding that goal. We do this by collecting a set of requirements. **Requirements** are anything that must be accomplished by the project.

There will also be **constraints** on the project, which are **time**, **cost and scope** (sometimes called quality). For the project to be successful, all of the requirements must be delivered without exceeding any of the constraints.

Constraints are covered in section 2 of this chapter, and dealing with cases where the requirements and constraints do not match is covered in section 3. For now, we will focus only on gathering requirements.

## Requirements

Requirements are everything that needs to be delivered as part of the project. Let's say we are planning a wedding. Some of the requirements might be:

- 1. The couple has to get legally married
- 2. The wedding must be outdoors in a flower covered gazebo
- 3. A priest must do the ceremony
- 4. It must provide 90-100 guests with seating, food and drinks
- 5. There must be 4 hours of entertainment, including dancing, for the guests after the ceremony

And so on...

As a project manager, your first goal is to gather as many requirements as you can for this project. I say 'as many as you can', because often all of the requirements aren't known at the beginning. It may require asking a lot of questions to get a full list of requirements.

We also ask questions so that we find out what **is not** a requirement. For example, wouldn't it be good to know that we don't need to provide any decorations for this wedding. Our goal is to have a clear picture of what we need to deliver, and what we don't need to deliver, so that our customer is happy, we don't waste time and effort on things we didn't need, and we can prevent the project from growing uncontrollably as we go along (a phenomenon known as 'scope creep').

## In Scope

Must be Outdoors

Must be under a flowered gazebo

Must include 100 guests

Must provide food and beverages

Must provide entertainment and dancing

Must make sure the right officiant is there

Out of Scope

Does not require an open bar Does not require a sit down meal Does not require decorations

One important thing to remember when gathering requirements - requirements aren't tasks, they are results. For instance, 'Have the wedding outdoors' is a requirement because it describes an outcome. There will be tasks associated with that – someone has to find a good spot, book it and pay for it. We stay focused on the outcome we want first, then break that

down into tasks later. If we get into tasks too quickly, it is easy to lose sight of the goals and we may miss things.

A requirement is an outcome. A task is something we do.

If the project sponsor (the person paying for the project) wants their goal accomplished a certain way, then the rules they lay down are constraints, not requirements. However, if your sponsor is giving you those sorts of constraints, they either haven't told you all of the goals, or they don't trust you. In either case, you need to ask why they want that particular constraint.

Gail has hired Joseph, a contractor, to build a workbench for her. Gail wans the workbench 4'x8' so it fits in her garage. She wants it to be made of wood, and stained dark brown. She also wants her son Jason to cut all of the pieces on his table saw.

The size, materials and color are all good requirements. But cutting the wood is a task, not a requirement, so why is Gail saying Jason must cut the wood? He may not be the best person to do it, and a table saw might not be the right tool. As a project manager, we have to ask Gail what her reason is. It is important to uncover these sorts of hidden requirement and constraints, so you can be sure you deliver what is actually needed. In this case, Gail was trying to reduce cost, but when she finds out that it won't, she decides to let Joseph do the cutting.

This is the end of the Sample. For the complete chapter, look for Practical Project Management to be published soon.