Software Project Management

Chapter 2. Software Project Planning

Understand the Project Needs

- When a stakeholder does not feel that his needs are being met, he usually puts pressure on the project manager to provide an early version of the software, so that he can personally verify that the team really understands why the software is being built.
- When the stakeholder asks for an early version or a prototype of the software, he is usually asking for evidence that his needs are understood and being addressed.

Drive the Scope of the Project

- Defining the scope is the most productive thing a project manager can do to get the project underway.
- It is usually counterproductive to do any other project activity before everybody agrees on the scope, because that activity could fall outside of the scope without anyone realizing it.

- By focusing on discussing the scope and writing a vision and scope document, the project manager can ensure that the team starts out moving in the right direction.
- When a project team is first gathered, there is almost always a sense of expectation and interest among the project team and the stakeholders.

Talk to the Main Stakeholder

- By giving exact specifications, the customer can get exactly what he wants.
- The project manager should try to form the same sort of relationship with each stakeholder.
- He can do this by working to understand exactly what it is that the stakeholder will need from the software, and then by helping the project team to deliver software that is tailored to those needs.

Write the Vision and Scope Document

- The *vision and scope* document is one of the most important tools that a project manager has; it is also one of the easiest to implement.
- Some of the most common (and expensive) problems that a project can experience are caused by miscommunication about the basic goals of the project and about the scope of the work to be done.

• When a project is initiated, the project manager should take the lead, talking to the stakeholders and creating a vision and scope document before the first line of code has been written.

TABLE 2-1. Vision and scope document outline

- 1. Problem Statement
 - a. Project background
 - b. Stakeholders
 - c. Users
 - d. Risks
 - e. Assumptions
- 2. Vision of the Solution
 - a. Vision statement
 - b. List of features
 - c. Scope of phased release (optional)
 - d. Features that will not be developed

Project background

- This section contains a summary of the problem that the project will solve.
- It should provide a brief history of the problem and an explanation of how the organization justified the decision to build software to address it.

Stakeholders

• This is a bulleted list of the stakeholders

Users

This is a bulleted list of the users

Risks

• This section lists any potential risks to the project. It should be generated by a project team's brainstorming session.

Assumptions

• If Wideband Delphi is not being used to generate the assumptions, the project manager should hold a brainstorming session with the team to come up with a list of assumptions instead.

Vision statement

• The goal of the vision statement is to describe what the project is expected to accomplish. It should explain what the purpose of the project is.

List of features

• This section contains a list of features. A *feature* is as a cohesive area of the software that fulfills a specific need by providing a set of services or capabilities.

Features that will not be developed

• Features are often left out of a project on purpose. When a feature is explicitly left out of the software, it should be added to this section to tell the reader that a decision was made to exclude it

Review the vision and scope document

• Once the vision and scope document has been written, it should be reviewed by every stakeholder, by the members of the project team, and, ideally, by at least a few people who will actually be using the software (if they are available).