Project Planning in a Nutshell

~ By Thomas Pyzdek

Improvement happens one project at a time. But often projects fail because they are poorly planned, or even completely unplanned. This article provides an overview of why it is important to prepare a project plan. It also shows what elements a good project plan will include.

Why Create a Project Plan?

There are several reasons why one should plan carefully before starting a project:

1. The plan is a simulation of prospective project work, which allows flaws to be identified in time to be corrected
2. The plan is a vehicle for discussing each person's role and responsibilities, thereby helping direct and control the work of the project
3. The plan shows how the parts fit together, which is essential for co-ordinating related activities
4. The plan is a point of reference for any changes of scope, thereby helping project managers deal with their customers
5. The plan helps everyone know when the objectives have been reached and therefore when to stop

Elements of a Good Project Plan

The project plan shows the "why" and the "how" of a project. A good project plan will include the following elements:

- Statement of the goal
- Cost/benefit analysis
- Feasibility analysis
- Listing of the major steps to be taken
- Timetable for completion
- Description of the resources required (including human resources) to carry out the project

The plan will also identify objective measures of success that will be used to evaluate the effectiveness of the proposed changes; these are sometimes called the "deliverables" of the project.
Project Decomposition

Most projects important enough to have a significant impact on quality are too large to tackle all at once. Instead, large projects must be broken down into smaller projects and, in turn, into specific work elements and tasks. The process of going from project objectives to tasks is called decomposition. Project decomposition begins with the preparation of a preliminary plan. A preliminary project plan will identify, in broad, high-level terms, the objectives of the project and constraints in terms of time and resources. The work to be performed should be described, and precedence relationships should be sketched out. Preliminary budgets and schedules will be developed. Finally, sub-plans will be developed for each subproject for the following:

- Control plans
- Quality control plans
- Cost control plans
- Schedule control plans
- Staffing plans
- Material plans
- Reporting plans
- Other plans as deemed necessary

These sub-plans are developed in parallel for the various sub-projects.

Improvement happens one project at a time, but without proper planning, these projects may well fail to deliver their objectives.

*Thomas Pyzdek wrote the Six Sigma Handbook, The Quality Engineering Handbook and The Handbook of Quality Management. His works are used by thousands of universities and organisations around the world to teach Quality, Lean, and Six Sigma. Get more Six Sigma Training information*