Nuts and Bolts of Project Management

Before getting to the nuts and bolts, we need to approach the project. Working on a project is exciting, and oftentimes people want to start rolling right away so they can accomplish the project goal—or they spend so much time planning, they don’t have enough time to implement—or they wait until the last minute to begin the project, and they rush haphazardly to complete it. They may race to the next project without evaluating the initial project—and perhaps make the same mistakes all over again.

There are many ways to approach doing a project. A good approach would be to **begin by defining the project** to ensure that everyone has the same definition—and understands it. This may delay the start of the project; however, in the long run it will save time, and more importantly, it will help people to accomplish the same goal.
Planning and Organizing

Planning

It is important to plan the project with the team so that their contributions and commitment are included and developed. The plan becomes the foundation for the phases that follow. Begin with a schematic plan—a rough outline. A rough outline will be easier to adjust than a fully developed plan. Get consensus among your project team members. Finally, develop the plan. A fully developed plan will evolve as the project progresses; however, its main intent and direction will generally proceed intact.

Organizing

Work undertaken by more than one person requires coordination. If many people are involved it requires organization and structure. This is especially true for projects because they often involve innovative forms of work and work patterns that differ from the norm. Normal patterns of communication may not be appropriate and the structure of the work may be unusual.
In the planning and organizing activities, you develop the project plan (an orderly sequence of activities that are assigned to resources based on their availability and abilities), and the manner in which it will be viewed (a report).

- Define project objective(s)

- Identify activities
  - Determine what types of reports are needed (Gantt charts, CPM/PERT)

- Establish precedence relationships—relationships between tasks whereby some tasks depend (sequentially) on other tasks (i.e., one task has to occur before another task can begin)
  - Identify the work breakdown structure (WBS) of all the tasks that need to occur in the project
  - Identify milestones—critical actions and dates

- Make time estimates for each task and the completion of the project

- Determine resource requirements to meet objectives—including such resources as funding, staffing, equipment, and materials. You may need to add/reallocate resources to meet your objectives.
  - Determine the best way to allocate resources
Implementing, Monitoring, and Controlling

Implementing

The project team must ensure that the team's output meets the performance requirements stated in the project definition and delivers the goals of the project. How the implementation is managed has a direct relationship to the quality, time scale, and cost of the project. Regular reviews of task outcomes and comparisons between the work completed with the project definition and plan are the important items to monitor.

Monitoring & Controlling

As the project work is completed and delivered by the project team the work needs guidance and control to ensure it stays on track. Swift and decisive action must be taken if the project does not stay on course or work to plan and budget.

In these activities, you carry out project activities and ensure they occur as intended (effectively and efficiently): as allocated, on time, on budget, in proper sequence, and at the desired quality level.

Establish protective measures

While you may not be able to control some activities and/or unanticipated events, you can practice measures to alert you when things go awry.
Determine what tools are needed and available. For example, is project management software available? Do the people working on the project know how to use it effectively and efficiently?

• Inspect the progress of the project on a regular basis.

• Communicate on a regular basis—exchange and share information among all parties: from the project manager to the team, from the team to the project manager, and from one team member to another.

• Identify potential risks. For example, if the project involves exchanging electronic files, make sure all parties have compatible software, that they use the same file formats, that they protect files by backing them up and using anti-virus software.

• Identify back-up measures and make sure they are available if needed. For example, if a project team is writing a report, make sure all members of the team use compatible software.

• Document activities—keep the project plan up-to-date.

  ➢ If changes occur, revise the plan.
  ➢ If something unusual or significant occurs that can impact the project, note it in the project file and review it with your team and/or client.

• Know your project milestones and check them regularly.
Evaluating

Evaluating the project involves assessing the completed project and determining what went right, what went wrong, what could have been done better, and what was learned. Evaluating may take time that could be spent on beginning the next project; but the lessons learned can help ensure the next project won’t repeat the same mistakes, or that it will incorporate features that contributed to the success of the project.