

What is a Project?

A project is a temporary effort to create a unique product or service. Projects usually include constraints and risks regarding cost, schedule or performance outcome.

What is Project Management?

Project management is a set of principles, practices, and techniques applied to lead project teams and control project schedule, cost, and performance risks to result in delighted customers.

DEFINITION- Project management is a methodical approach to planning and guiding project processes from start to finish. According to the Project Management Institute, the processes are guided through five stages: initiation, planning, executing, controlling, and closing. Project management can be applied to almost any type of project and is widely used to control the complex processes of software development projects.

Core Concept: Project-Based Learning

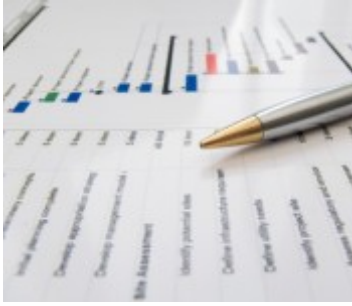
Why Teach with Project-Based Learning?

Project-based learning is a dynamic approach to teaching in which students explore real-world problems and challenges. With this type of active and engaged learning, students are inspired to obtain a deeper knowledge of the subjects they're studying.

Project Planning a Step by Step Guide

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The key to a successful project is in the planning. Creating a project plan is the first thing you should do when undertaking any kind of project.

Often project planning is ignored in favour of getting on with the work. However, many people fail to realise the value of a project plan in saving time, money and many problems.

This article looks at a simple, practical approach to project planning. On completion of this guide, you should have a sound project planning approach that you can use for future projects.

Step 1: Project Goals

A project is successful when the needs of the stakeholders have been met. A stakeholder is anybody directly, or indirectly impacted by the project.

As a first step, it is important to identify the stakeholders in your project. It is not always easy to identify the stakeholders of a project, particularly those impacted indirectly. Examples of stakeholders are:

- The project sponsor.
- The customer who receives the deliverables.
- The users of the project outputs.
- The project manager and project team.

Once you understand who the stakeholders are, the next step is to find out their needs. The best way to do this is by conducting stakeholder interviews. Take time during the interviews to draw out the true needs that create real benefits. Often stakeholders will talk about needs that aren't relevant and don't deliver benefits. These can be recorded and set as a low priority.

The next step, once you have conducted all the interviews, and have a comprehensive list of needs is to prioritise them. From the prioritised list, create a set of goals that can be easily measured. A technique for doing this is to review them against the [SMART](#) principle. This way it will be easy to know when a goal has been achieved.

Once you have established a clear set of goals, they should be recorded in the project plan. It can be useful to also include the needs and expectations of your stakeholders.

This is the most difficult part of the planning process completed. It's time to move on and look at the project deliverables.

Step 2: Project Deliverables

Using the goals you have defined in step 1, create a list of things the project needs to deliver in order to meet those goals. Specify when and how each item must be delivered.

Add the deliverables to the project plan with an estimated delivery date. More accurate delivery dates will be established during the scheduling phase, which is next.

Step 3: Project Schedule

Create a list of tasks that need to be carried out for each deliverable identified in step 2. For each task identify the following:

- The amount of effort (hours or days) required to complete the task.
- The resource who will carryout the task.

Once you have established the amount of effort for each task, you can workout the effort required for each deliverable, and an accurate delivery date. Update your deliverables section with the more accurate delivery dates.

At this point in the planning, you could choose to use a software package such as [Microsoft Project](#) to create your project schedule. Alternatively, use one of the many free templates available. Input all of the deliverables, tasks, durations and the resources who will complete each task.

A common problem discovered at this point, is when a project has an imposed delivery deadline from the sponsor that is not realistic based on your estimates. If you discover that this is the case, you must contact the sponsor immediately. The options you have in this situation are:

- Renegotiate the deadline (project delay).
- Employ additional resources (increased cost).
- Reduce the scope of the project (less delivered).

Use the project schedule to justify pursuing one of these options.

Step 4: Supporting Plans

This section deals with plans you should create as part of the planning process. These can be included directly in the plan.

Human Resource Plan

Identify by name, the individuals and organisations with a leading role in the project. For each, describe their roles and responsibilities on the project.

Next, describe the number and type of people needed to carryout the project. For each resource detail start dates, estimated duration and the method you will use for obtaining them.

Create a single sheet containing this information.

Communications Plan

Create a document showing who needs to be kept informed about the project and how they will receive the information. The most common mechanism is a weekly or monthly [progress report](#), describing how the project is performing, milestones achieved and work planned for the next period.

Risk Management Plan

[Risk management](#) is an important part of project management. Although often overlooked, it is important to identify as many risks to your project as possible, and be prepared if something bad happens.

Here are some examples of common project risks:

- Time and cost estimates too optimistic.
- Customer review and feedback cycle too slow.
- Unexpected budget cuts.
- Unclear roles and responsibilities.
- Stakeholder input is not sought, or their needs are not properly understood.
- Stakeholders changing requirements after the project has started.
- Stakeholders adding new requirements after the project has started.
- Poor communication resulting in misunderstandings, quality problems and rework.
- Lack of resource commitment.

Risks can be tracked using a simple risk log. Add each risk you have identified to your risk log; write down what you will do in the event it occurs, and what you will do to prevent it from occurring. Review your risk log on a regular basis, adding new risks as they occur during the life of the project. Remember, when risks are ignored they don't go away.

Congratulations. Having followed all the steps above, you should have a good project plan. Remember to update your plan as the project progresses, and measure progress against the plan.