



MIND TOOLS

Essential skills for an excellent career



Project Planning and Management Skills

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Mind Tools - Practical Thinking Skills for an Excellent Life

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Module 4

Project Planning Skills

- [Estimating time accurately](#)
- [Managing simple projects](#)
- Project planning and scheduling - [Gantt Charts](#)
- Planning for large or complex projects - [Critical Path Analysis & PERT](#)
- Effective planning for important projects - [The Planning Cycle](#)
- [Planning Large Projects and Programs](#)
- [Stakeholder Management](#)

4. Project Planning & Management Techniques

This module discusses some of the key skills that you will need to manage projects successfully. It starts by introducing important project planning techniques, and then goes on to show you how to manage the political side of major projects – managing this well is often fundamental to the project's success.

This section will discuss the following tools:

- Estimating time accurately
- Managing simple projects
- Project planning and scheduling - *Gantt Charts*
- Planning for large or complex projects - *Critical Path Analysis & PERT*
- Effective planning for important projects - *The Planning Cycle*
- Planning Large Projects and Programs
- Stakeholder Management

By the end of the module you should have a good grasp of some important project planning techniques. You will know how to plan projects so that they can be completed on time and on budget. When projects run into difficulties (which they very often do), you will be able to prioritize the jobs that must be completed so that you meet the most important deadlines. You will also be able to decide when and how to take remedial action to bring a project back on course.

By the end of this module, you will also know how to manage communication with key project stakeholders so that you can win their support and improve the project's chances of success.

These skills are perfectly sufficient for running many of the projects you will encounter.

As projects become larger, however, a pragmatic general management approach can often be overwhelmed by the sheer complexity of the projects being run. Larger projects benefit from formal, methodology-based project and program management. This is a specialist skill in its own right - appropriate pointers to this are given towards the end of this section.

Estimating Time Accurately (4.1)

How to use tool: Accurate time estimation is a skill essential to good project management. It is important to get time estimates right for two main reasons:

1. Time estimates drive the setting of deadlines for delivery of projects, and hence peoples' assessments of your reliability.
2. They determine the pricing of contracts and hence their profitability.

Usually, people vastly underestimate the amount of time needed to implement projects. This is true particularly when they are not familiar with the task to be carried out. They forget to take into account unexpected events or unscheduled high priority work. People also often simply fail to allow for the full complexity involved with a job.

This section discusses how to estimate time on small projects. There are two other techniques used to organize and structure medium and large sized projects: the drawing of Gantt charts (see [4.3](#)) and use of Critical Path Analysis (see [4.4](#)). Both of these techniques reduce large projects down into a set of small projects. This section also explains how to estimate time for each of these project stages.

Fully understanding the problem to solve

The first stage in estimating time accurately is to fully understand what you need to achieve. This involves reviewing the task in detail so that there are no unknowns. Inevitably it is the difficult, tricky problems that take the greatest amount of time to solve.

The best way to review the job is to list all tasks in full detail. A technique such as Drill-Down (see [2.2](#)) is useful for this. Module 2 of this e-book gives you a range of techniques for fully understanding the problem you need to solve.

Estimating time

You can only start to estimate time accurately when you have a detailed list of all the tasks that you must achieve. When you have this, you can make your best guess at how long each task will take to complete.

Ensure that within your estimate you also allow time for project management, detailed project planning, liaison with outside bodies, meetings, quality assurance and any supporting documentation necessary.

Also make sure that you have allowed time for:

- Other high urgency tasks to be carried out which will have priority over this one
- Accidents and emergencies
- Internal meetings
- Holidays and sickness in essential staff
- Contact with other customers, perhaps to arrange the next job
- Break-downs in equipment
- Missed deliveries by suppliers
- Interruptions
- Quality control rejections
- Etc.

These factors may double (or more than double) the length of time needed to complete a project.

If the accuracy of time estimates is critical, you may find it effective to develop a systematic approach to including these factors. If possible, base this on past experience.

Key points:

You can lose a great deal of credibility by underestimating the length of time needed to implement a project. If you underestimate time, not only do you miss deadlines, you also put other project workers under unnecessary stress. Projects will become seriously unprofitable, and other tasks cannot be started.

The first step towards making good time estimates is to fully understand the problem to be solved.

You can then prepare a detailed list of tasks that must be achieved. This list should include all the administrative tasks and meetings you need to carry out as well as the work itself.

Finally, allow time for all the expected and unexpected disruptions and delays to work that will inevitably happen.

Scheduling Simple Projects (4.2)

How to use tool: Simple projects involve only one or a few people over a short time. Typically, these projects will have few tasks dependent on other tasks, and will be relatively simple and easy to coordinate. Examples might be coordinating delivery of resources for a workshop session, implementing a small marketing plan, or delivering a simple software enhancement.

With simple projects, tools like Gantt Charts and Critical Path Diagrams may overcomplicate project scheduling and communication. Unless project team members are trained in their use, they can often 'blind people with science', leading to poor communication and muddled projects.

Appropriate Timetables and [Action Plans](#) are often sufficient to coordinate and implement simple projects. These should be explained and negotiated with project staff to improve the plans and get staff understanding, input and buy-in.

Key points: Simple projects are often best run using simple Timetables and Action Plans. These should be prepared and negotiated with project staff to improve plans and get buy-in.

During the project these will contain sufficient control points and deliveries to monitor project progress and take any appropriate remedial action.

Gantt Charts (4.3)

Function: **Project Planning and Scheduling**

How to use the tool: Gantt Charts are useful tools for analyzing and planning small or medium sized projects. They:

- Help you to plan out the tasks that need to be completed.
- Give you a basis for scheduling when these tasks will be carried out.
- Allow you to plan the allocation of resources needed to complete the project.
- Help you to work out the critical path for a project where you must complete it by a particular date.

When a project is under way, Gantt charts help you to monitor whether the project is on schedule. If it is not, it allows you to pinpoint the remedial action necessary to put it back on schedule.

Gantt charts are excellent scheduling and planning tools to use up to a particular complexity of project. After this, they begin to become unwieldy. If you find that this is the case, use Critical Path Analysis (see [4.4](#)) in place of Gantt Charts.

Sequential and parallel activities:

An essential concept behind project planning (and Critical Path Analysis) is that some activities are dependent on other activities being completed first. For example, it is not a good idea to start building a bridge before you have designed it!

These dependent activities need to be completed in a sequence, with each stage being more-or-less completed before the next activity can begin. We can call dependent activities "sequential".

Other activities are not dependent on completion of any other tasks. These may be done at any time before or after a particular stage is reached. These are non-dependent or "parallel" tasks.

To draw up a Gantt chart, follow these steps:

1. List all activities in the plan

For each task, show the earliest start date, estimated length of time it will take (see [4.1](#)), and whether it is parallel or sequential. If tasks are sequential, show which stages they depend on.

You will end up with a task list like the one below. This example shows the task list for a custom-written computer project. We will use this same example for both this section and the section on Critical Path Analysis and PERT (see [4.4](#)). This will allow you to compare the results of the two approaches.

Figure 4.3.1. Gantt Chart Example: Planning a custom-written computer project

NB: The start week shows when resources become available. Whether a task is parallel or sequential depends largely on context.

List of all activities in plan:

1. High level analysis
Possible start week 1, 5 days, sequential
2. Selection of hardware platform
Possible start week 1, 1 day, sequential, dependent on (1)
3. Installation and commissioning of hardware
Possible start week 3, 2 weeks, parallel, dependent on (2), any time after
4. Detailed analysis of core modules
Possible start week 1, 2 weeks, sequential, dependent on (1)
5. Detailed analysis of supporting utilities
Possible start week 1, 2 weeks, sequential, dependent on (4)
6. Programming of core modules
Possible start week 4, 3 weeks, sequential, dependent on (4)
7. Programming of supporting modules
Possible start week 4, 3 weeks, sequential, dependent on (5)
8. Quality assurance of core modules
Possible start week 5, 1 week, sequential, dependent on (6)
9. Quality assurance of supporting modules
Possible start week 5, 1 week, sequential, dependent on (7)
10. Core module training
Possible start week 7, 1 day, parallel, dependent on (6), any time after
11. Development of accounting reporting
Possible start week 6, 1 week, parallel, dependent on (5), any time after
12. Development of management reporting
Possible start week 6, 1 week, parallel, dependent on (5), any time after
13. Development of management analysis
Possible start week 6, 2 weeks, dependent on (5), any time after
14. Detailed training
Possible start week 7, 1 week, sequential, dependent on (1-13)
15. Documentation
Possible start week 4, 2 weeks, parallel

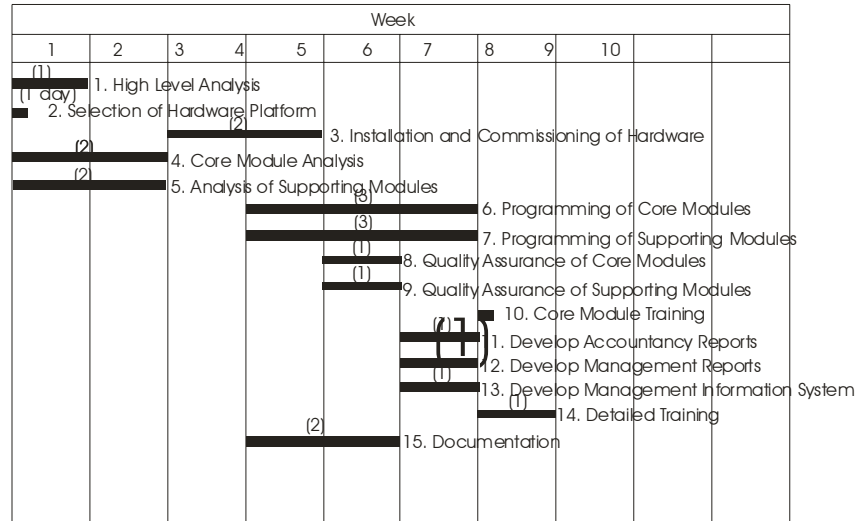
2. Head up graph paper with the days or weeks through to task completion**3. Plot the tasks onto the graph paper**

Next draw up a rough draft of the Gantt chart. Plot each task on the graph paper, showing it starting on the earliest possible date. Draw it as a bar, with the length of the bar being the length of the task. Above the task bars, mark the time taken to complete

them. Do not worry about task scheduling yet. All you are doing is setting up the first draft of the analysis.

This will produce an untidy diagram like the one below:

Figure 2: Draft Gantt Chart: Example Computer Project



4. Schedule Activities

Now take the draft Gantt chart, and use it to schedule actions. Schedule them in such a way that sequential actions are carried out in the required sequence. Ensure that dependent activities do not start until the activities they depend on have been completed.

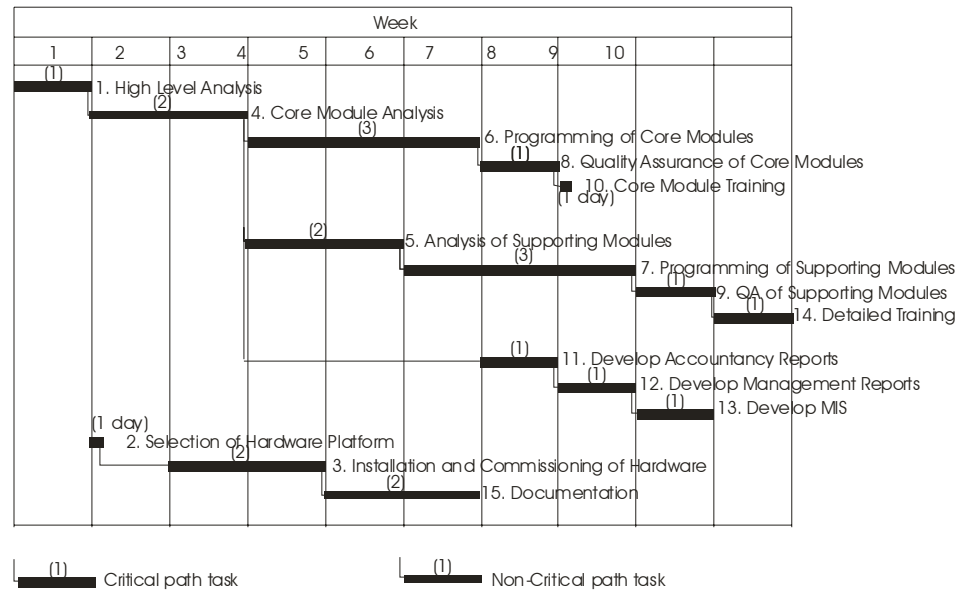
Where possible, schedule parallel tasks so that they do not interfere with sequential actions on the critical path. While scheduling, ensure that you make full use of the resources you have available. Also allow some slack time in the schedule for hold-ups, over-runs, quality rejections, failures in delivery, etc.

5. Presenting the Analysis

The final stage in this process is to prepare a clean final version of the Gantt chart. This should combine the draft analysis (see above) with your scheduling and analysis of resources. This chart will show when you anticipate that jobs should start and finish.

A redrawn and scheduled version of the example project is shown below:

Critical Path Analysis: Activities Scheduled on a Gantt Chart



By drawing this example Gantt chart, you can see that:

- If all goes well, the project can be completed in 10 weeks
- If you want to complete the task as rapidly as possible, you need:
 - 1 analyst for the first 5 weeks
 - 1 programmer for 6 weeks starting week 4
 - 1 programmer for 3 weeks starting week 6
 - Quality assurance for weeks 7 and 9
 - Hardware to be installed by the end of week 7
- Analysis, and development and installation of supporting modules are essential activities that must be completed on time.
- Hardware installation is a low priority task as long as it is completed by the end of week 7

Key points:

Gantt charts are very useful tools for planning and scheduling small and medium sized projects. They allow you to assess how long a project should take, determine the resources needed, and lay out the order in which tasks need to be carried out.

When a project is under way, Gantt charts are useful for monitoring its progress. You can immediately see what should have been achieved at a point in time, and can therefore take remedial action to bring the project back on course. This can be essential for the successful and profitable implementation of the project.

Critical Path Analysis & PERT (4.4)

Function: **Planning for large or complex projects**

Why use the tool? Critical Path Analysis and PERT are powerful tools that help you to schedule and manage complex projects. They were developed in the 1950s to control large defense projects, and have been used routinely since then.

As with Gantt Charts, Critical Path Analysis (CPA) helps you to plan all tasks that must be completed as part of a project. They both act as a useful basis for the preparation of a schedule and for resource planning. During management of a project, they both allow you to monitor achievement of project goals and help you to see where remedial action needs to be taken to get a project back on course.

The benefit of using CPA over Gantt Charts is that Critical Path Analysis formally identifies the tasks that must be completed on time for the whole project to be delivered to schedule. It also identifies the tasks that can be delayed if resource is to be reallocated to catch up on missed tasks.

A further benefit of Critical Path Analysis is that it helps you to identify the minimum length of time needed to complete a project. Where you need to run an accelerated project, it helps you to identify which project steps you should accelerate to complete the project within the available time. This helps you to minimize cost while still achieving your objective.

The disadvantage of CPA is that the relation of tasks to time is not as immediately obvious as with Gantt Charts. This can make them more difficult to understand for someone who is not familiar with the technique.

How to use the tool: **Sequential and parallel activities:**

As with Gantt charts, the essential concept behind Critical Path Analysis is that you cannot start some activities until others are finished. These activities need to be completed in a sequence, with each stage being more-or-less completed before the next stage can begin. These are "sequential" activities.

Other activities are not dependent on completion of any other tasks. You can do these at any time before or after a particular stage is reached. These are non-dependent or "parallel" tasks.

1. List all activities in the plan

For each activity, show the earliest start date, estimated length of time it will take, and whether it is parallel or sequential. If tasks are sequential, show which stage they depend on.

You will end up with a task list like the one for Gantt charts shown in figure [4.3.1](#). We will use the same example as with Gantt charts to compare the two techniques.

2. Plot the activities as a circle and arrow diagram

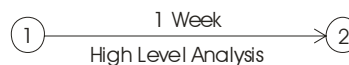
Critical Path Analyses are presented using circle and arrow diagrams.

In these, circles show events within the project, such as the start and finish of tasks. Circles are normally numbered to allow you to identify them.

An arrow running between two event circles shows the activity needed to complete that task. A description of the task is written underneath the arrow. The length of the task is shown above it. By convention, all arrows run left to right.

An example of a very simple diagram is shown below:

Figure 1: Simple Circle and Arrow Diagram



This shows the start event (circle 1), and the completion of the “High Level Analysis” task (circle 2). The arrow between them shows the activity of carrying out the High Level Analysis. This activity should take 1 week.

Where one activity cannot start until another has been completed, we start the arrow for the dependent activity at the completion event circle of the previous activity. An example of this is shown below:

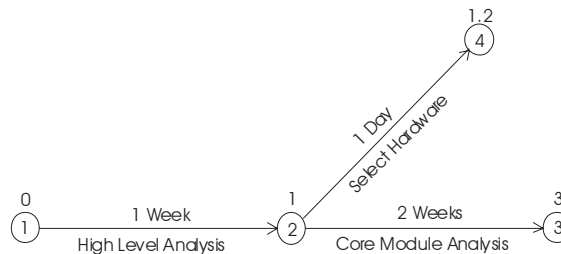


Figure 2: Circle and Arrow Diagram showing two activities that cannot be started until the first activity has been completed.

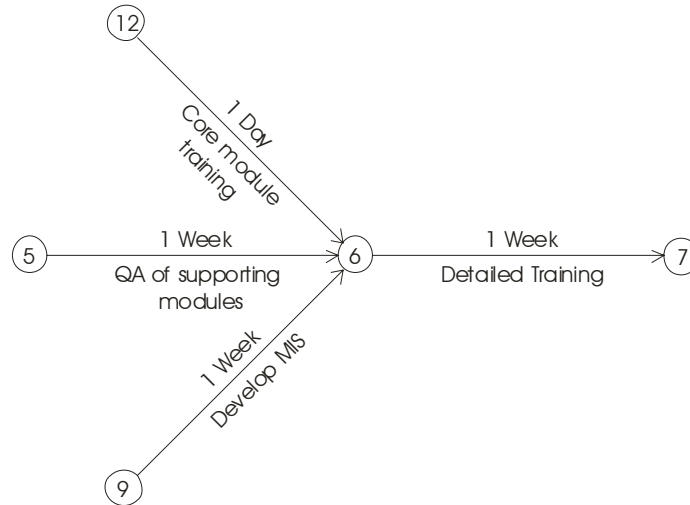
Here, the activities of “Selecting Hardware” and “Core Module Analysis” cannot be started until “High Level Analysis” has been completed. This diagram also brings out a number of other important points:

- Within Critical Path Analysis, we refer to activities by the numbers in the circles at each end. For example, the task “Core Module Analysis” would be called “activity 2 to 3”. ‘Select Hardware’ would be “activity 2 to 4”.
- Activities are not drawn to scale. In the diagram above, activities are 1 week long, 2 weeks long, and 1 day long. Arrows in this case are all the same length.

- In the example above, you can see numbers above the circles. These show the earliest possible time that this stage in the project will be reached. Here, units are whole weeks.

A different case is shown below:

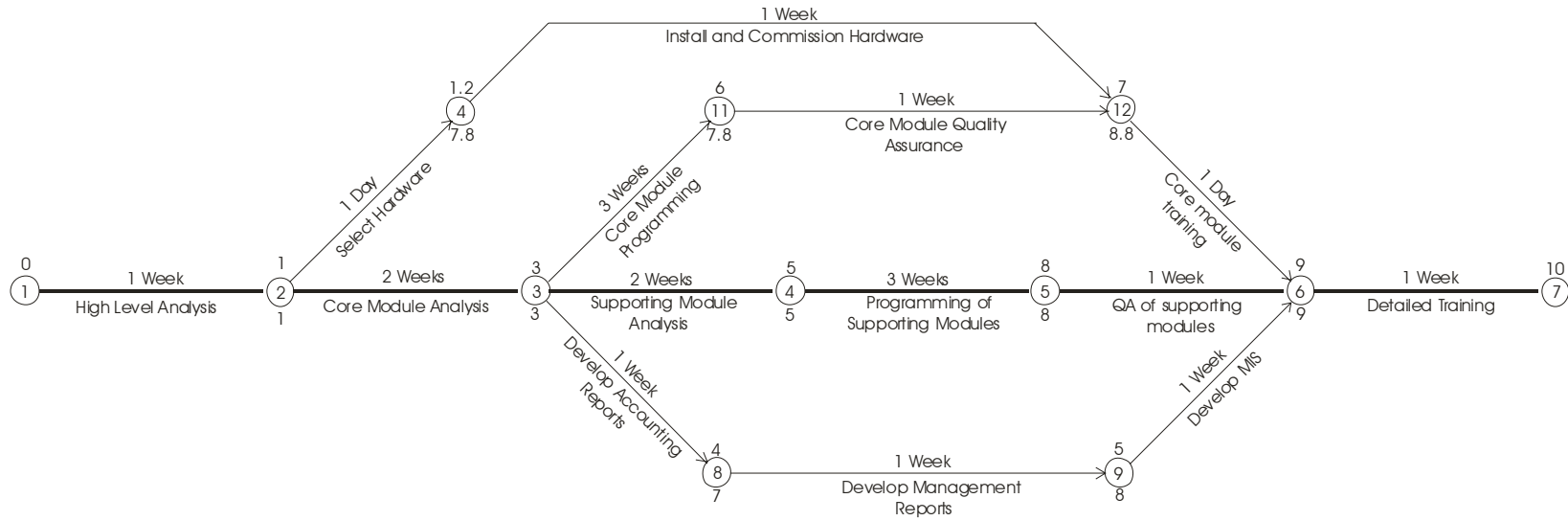
Figure 3: Circle and Arrow Diagram showing an activity (6 to 7) that cannot start until other activities (12 to 6, 5 to 6, and 9 to 6) have been completed.



Here, activity 6 to 7 cannot start until the other three activities (12 to 6, 5 to 6 and 9 to 6) have been completed.

See figure 4.4.4 for the full circle and arrow diagram for the computer project used as an example.

Figure 4; Critical Path Analysis for Example Computer Project



This shows all the activities that will take place as part of the project. Notice that each event circle has a figure below it as well as a figure above. This shows the latest time that it can be reached with the project still being completed in the minimum time possible. You can calculate this by starting at the last event (in this case number 7), and working backwards.

You can see that event 4 can be completed any time between 1.2¹ weeks in and 7.8 weeks in. The timing of this event is not critical. Events 1 to 2, 2 to 3, 3 to 4, 4 to 5, 5 to 6 and 6 to 7 must be started and completed on time if the project is to be completed in 10 weeks. This is the “critical path” as these activities must be very closely managed to ensure that activities are completed on time. If jobs on the critical path slip, immediate action should be taken to get the project back on schedule. Otherwise, completion of the whole project will slip.

“Crash Action”

You may find that you need to complete a project earlier than your Critical Path Analysis says is possible. In this case you need to take action to reduce the length of time spent on project stages.

You could pile resources into every project activity to bring down time spent on each. This would probably consume huge additional resources.

A more efficient way of doing this would be to look only at activities on the critical path. As an example, it may be necessary to complete the computer project in figure 4.3.4 in 8 weeks rather than 10 weeks. In this case you could look at using two analysts in steps “2 to 3” and “3 to 4”, and two programmers instead of one in step “4 to 5”. This would shorten the project by two weeks, but would raise the project costs, and doubling resources at any stage usually only improves productivity by 50%. This occurs as time spent on coordinating the project consumes time gained by increasing resource.

Note in this example, that shortening the project by two weeks bring activities ‘3 to 11’, ‘11 to 12’ and ‘12 to 6’ onto the critical path as well.

PERT

PERT (Program Evaluation and Review Technique)

PERT is a variation on Critical Path Analysis that takes a slightly more skeptical view of time estimates made for each project stage. To use it, estimate the shortest possible time each activity will take, the most likely length of time, and the longest time that might be taken if the activity takes longer than expected.

Use the formula below to calculate the time to use for each project stage:

$$\frac{\text{Shortest time} + 4 \times \text{likely time} + \text{longest time}}{6}$$

¹ Using decimals here helps to keep the diagram uncluttered. 1.2 weeks = 1 week and 1 working day.

This helps to bias time estimates away from the unrealistically short time-scales normally assumed.

Key points: Critical Path Analysis is an effective and powerful method of assessing:

- What tasks must be carried out
- Where parallel activity can be performed
- The shortest time in which you can complete a project
- Resources needed to execute a project
- The sequence of activities, scheduling and timings involved
- Task priorities
- The most efficient way of shortening time on urgent projects.

An effective Critical Path Analysis can make the difference between success and failure on complex projects. It can be very useful for assessing the importance of problems faced during the implementation of the plan.

PERT is a variant of Critical Path Analysis that takes a more skeptical view of the time needed to complete each project stage.

The Planning Cycle (4.5)

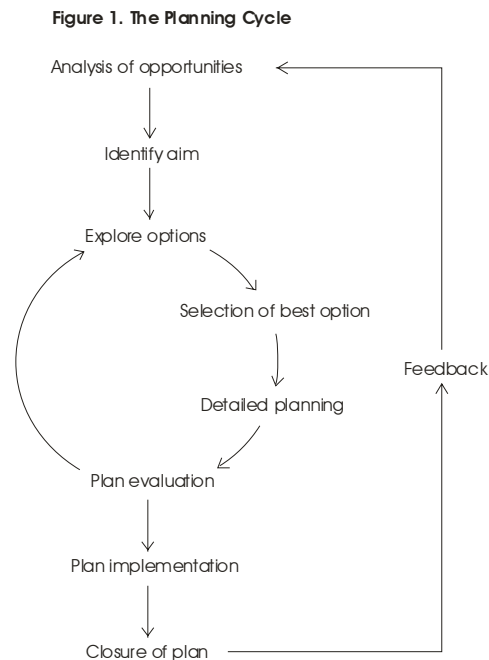
Function: **Effective Planning for Important Projects**

How to use tool: The Planning Cycle brings together all aspects of planning into a coherent, unified process. By planning within this structure, you will help to ensure that your plans are fully considered, well focused, resilient, practical and cost-effective. You will also ensure that you learn from any mistakes you make, and feed this back into future decision-making.

By planning within this structure, you will help to ensure that your plans are fully considered, well focused, resilient, practical and cost-effective. You will also ensure that you learn from any mistakes you make, and feed this back into future planning and decision-making.

Planning using this cycle will help you to plan and manage ongoing projects up to a certain level of complexity - this will depend on the circumstance. For projects involving many people over a long period of time, more formal methodologies and approaches are necessary (see [4.6](#)).

The Planning Cycle is shown in figure 4.5.1:



The stages in this planning process are explained below:

1. Analysis of Opportunities:

The first thing to do is to spot what needs to be done. You will crystallize this into a formal aim at the next stage in the process.

One approach to this is to examine your current position, and decide how you can improve it. There are a number of techniques that will help you to do this:

- **SWOT Analysis:** is a formal analysis of your strengths and weaknesses, and of the opportunities and threats that you face. See section [2.5](#) for more information on this.
- **Risk Analysis:** helps you to spot dangerous weaknesses in your organization or within your operation. See [2.7](#).
- **Understanding pressures for change:** other people may be pressing you to change the way you do things. Alternatively, your environment may be changing, and you may need to anticipate or respond to this. These may arise from changes in the economy, new legislation, competition, changes in people's attitudes, new technologies, or changes in government. In cases where change is forced on you, ensure that you react to the cause of the pressure, not to the symptoms of it.

A different approach is to use any of a whole range of powerful creativity tools (see section 1) to work out where you can make improvements. These creativity tools culminate in the powerful Simplex process described in 1.10.

2. Identifying the Aim of Your Plan

Once you have completed a realistic analysis of the opportunities for change, the next step is to decide precisely what the aim of your plan is. Deciding and defining an aim sharpens the focus of your plan, and helps you to avoid wasting effort on irrelevant side issues.

The aim is best expressed in a simple single sentence. This ensures that it is clear and sharp in your mind.

If you are having difficulty in deciding the aim of your plan, ask yourself:

- What do I want the future to be?
- What benefit do I want to give to my customers?
- What returns do I seek?
- What standards am I aiming at?
- What values do I and my organization believe in?

For large plans, you can present this aim as a "Vision Statement" or "Mission Statement". Vision Statements express the benefit that an organization will provide to its customers. For example, the vision statement for Mind Tools is: "To enrich the quality of our customers lives by giving them the tools to help them to think in the most productive and effective way possible". While this is wordy, it explains exactly what this e-book aims to do.

Mission statements give concrete expression to the Vision Statement, explaining how it is to be achieved. The mission statement for this e-book is: "To provide a well structured, accessible, concise survey of the best mind tools available".

3. Exploring Options

By this stage, you should know where you are and what you want to do. The next thing to do is to work out how to do it. The Creativity Tools module (section 1) of this e-book explains a wide range of powerful creativity tools that will help you to generate options.

At this stage, it is best to spend a little time generating as many options as possible, even though it is tempting just to grasp the first idea that comes to mind. By taking a little time to generate as many ideas as possible, you may come up with less obvious but better solutions. Just as likely, you may improve your best ideas with parts of other ideas.

4. Selecting the Best Option

Once you have explored the options available to you, it is time to decide which one to use. If you have the time and resources available, then you might decide to evaluate all options, carrying out detailed planning, costing, risk assessment, etc. for each. Normally, you will not have this luxury.

Two very useful tools for selecting the best option are Grid Analysis (see [3.3](#)) and Decision Trees (see [3.4](#)). Grid Analysis helps you to decide between different options where you need to consider a number of different factors. Decision Trees help you to think through the likely outcomes of following different courses of action.

5. Detailed Planning

By the time you start detailed planning, you should have a good picture of where you are, what you want to achieve, and the range of options available to you. You may well have selected one of the options as the most likely to yield the best results.

Detailed planning is the process of working out the most efficient and effective way of achieving the aim that you have defined. It is the process of determining who will do what, when, where, how and why, and at what cost.

When drawing up the plan, techniques such as use of Gantt charts (see [4.3](#)) and Critical Path Analysis (see [4.4](#)) can be immensely helpful in working out priorities, deadlines and the allocation of resources.

While you are concentrating on the actions that need to be performed, ensure that you also think about the control mechanisms that you will need to monitor performance. These will include activities such as reporting, quality assurance, cost control, etc. that are needed to spot and correct any deviations from the plan.

A good plan will:

- State the current situation.
- Have a clear aim.
- Use the resources available.
- Detail the tasks to be carried out, whose responsibility they are, and their priorities and deadlines.
- Detail control mechanisms that will alert you to difficulties in achieving the plan.

- Identify risks, and plan for contingencies. This allows you to make a rapid and effective response to crises, perhaps at a time when you are at low ebb, or are confused following a setback. Risk Analysis is explained in [2.7](#).
- Consider transitional arrangements, considering how will you keep things going while you implement the plan?

6. Evaluation of the Plan and Its Impact

Once you have worked out the details of your plan, the next stage is to review it to decide whether it is worth implementing. Here you must be objective; however much work you have carried out to reach this stage, the plan may still not be worth implementing.

This is frustrating after the hard work of detailed planning. It is, however, much better to find this out now than when you have invested time, resources and personal standing in the success of the plan. Evaluating the plan now gives you the opportunity to either investigate other options that might be more successful, or to accept that no plan is needed or should be carried out.

Depending on the circumstances, the following techniques can be helpful in evaluating a plan:

- **PMI:**
This is a good, simple technique for “weighing the pros and cons” of a decision. It involves listing the plus points in the plan in one column, the minus points in a second column, and the implications of the plan in a third column. Each point can be allocated a positive or negative score. PMI is explained in section [3.5](#).
- **Cost/Benefit Analysis:**
This is useful for confirming that the plan makes financial sense. This involves adding up all the costs involved with the plan, and comparing them with the expected benefits. This is explained in more detail in section [3.8](#).
- **Force Field Analysis:**
Similar to PMI, Force Field Analysis helps you to get a good overall view of all the forces for and against your plan. This allows you to see where you can make adjustments that will make the plan more likely to succeed. See [3.6](#) for more information.
- **Cash Flow Forecasts:**
Where a decision is has mainly financial implications, such as in business and marketing planning, preparation of a Cash Flow Forecast can be extremely useful. It allows you to assess the effect of time on costs and revenue. It also helps in assessing the size of the greatest negative and positive cash flows associated with a plan. When it is set up on a spreadsheet package, a good Cash Flow Forecast also functions as an extremely effective model of the plan. It gives you an easy basis for investigating the effect of varying your assumptions. Cash Flow Forecasting is explained in section [2.6](#).
- **6 Thinking Hats:**
6 Thinking Hats is a very good technique to use to get a rounded view of your plan and its implications. It provides a context within which you can examine a plan rationally, emotionally, optimistically, pessimistically and creatively. By using this tool you will improve your plan and make it more robust. 6 Thinking Hats is explained in detail in section [3.7](#).

Any analysis of your plan must be tempered by common sense. If your analysis shows that the plan either will not give sufficient benefit, then either return to an earlier stage in the planning cycle or abandon the process altogether.

7. Implementing Change

Once you have completed your plan and decided that it will work satisfactorily, it is time to implement it. Your plan will explain how! It should also detail the controls that you will use to monitor the execution of the plan.

8. Closing the Plan

Once you have achieved a plan, you can close the project. At this point is often worth carrying out an evaluation of the project to see whether there are any lessons that you can learn. This should include an evaluation of your project planning to see if this could be improved.

If you are going to be carrying out many similar projects, it may be worth developing and improving an Aide Memoire (see [6.1.9](#)). This is a list of headings and points to consider during planning. Using it helps you to ensure that you do not forget lessons learned in the past.

Key points: The Planning Cycle is a process that helps you to make good, well-considered, robust plans.

The first step, the analysis of opportunities, helps you to base the plan firmly in reality. The second, definition of the aim, gives your plan focus.

The third stage is to generate as many different ways for achieving this aim as possible. By spending time looking for these you may find a better solution than the obvious one, or may be able to improve the obvious solution with parts of other ones.

Next, select the best approach, and make a detailed plan showing how to implement it. Evaluate this plan to make sure that it will be worth implementing. If it is not, return to an earlier stage and either improve the plan or make a different one. If no plan looks like producing enough benefit to justify the cost, make no changes at all.

Once you have selected a course of action, and have proved that it is viable, carry it out. Once it is finished, examine it and draw whatever lessons you can from it. Feed this back into future planning.

Planning Large Projects and Programs (4.6)

How to use tool: The techniques explained so far in this section on Mind Tools support a pragmatic, commonsense approach to planning and managing small and medium-sized projects.

A warning: this approach will only scale up to a certain extent - larger projects will reach a complexity where pragmatic management generates a level of inefficiency and waste which can start to threaten the project.

For larger projects, Project Management becomes a technical discipline in its own right. To run projects as efficiently as possible, Project Managers need to be trained in methodologies such as PRINCE 2 (an increasingly widespread UK government standard) or an equivalent, and need to apply an appropriate subset of these methodologies. PRINCE is powerful in that it completely clarifies people's roles in projects, ensures that lines of communication are clear, makes sure that project risk is actively managed, sets up appropriate controls, etc. In this, it embodies and codifies much of project management best practice.

Stakeholder Management (4.7)

Function: **Winning Support for Your Projects**

by Rachel Manktelow, who has fifteen years experience of helping organizations and business leaders to manage change and work more effectively.

"Stakeholder management is critical to the success of every project in every organization I have ever worked with. By engaging the right people in the right way in your project, you can make a big difference to its success... and to your career."

Introduction: As you become more successful in your career, the actions you take and the projects you run will affect more and more people. The more people you affect, the more likely it is that your actions will impact people who have power and influence over your projects. These people could be strong supporters of your work - or they could block it.

Stakeholder Management is an important discipline that successful people use to win support from others. It helps them ensure that their projects succeed where others fail.

The Stakeholder Management Tool comes in two parts: Firstly we look at "Stakeholder Analysis", the technique we use to identify the key people who must be won over. We then look at "Stakeholder Planning". This helps us build the support that helps you succeed.

The benefits of using a stakeholder-based approach are that:

- You can use the opinions of the most powerful stakeholders to shape your projects at an early stage. Not only does this make it more likely that they will support you, their input can also improve the quality of your project
- Gaining support from powerful stakeholders can help you to win more resources - this makes it more likely that your projects will be successful
- By communicating with stakeholders early and frequently, you can ensure that they fully understand what you are doing and understand the benefits of your project - this means they can support you actively when necessary
- You can anticipate what people's reaction to your project may be, and build into your plan the actions that will win people's support.

How to use the tool: **Stakeholder Analysis**

The first step in Stakeholder Analysis is to identify who your stakeholders are. The next step is to work out their power, influence and interest, so you know who you should focus on. The final step is to develop a good understanding of the most important stakeholders so that you know how they are likely to respond, and so that you can work out how to win their support - you can record this analysis on a stakeholder map.

After you have used this tool and created a stakeholder map, you can use the stakeholder planning tool to plan how you will communicate with each stakeholder.

The steps of Stakeholder Analysis are explained below:

1. Identifying Your Stakeholders:

The first step in your stakeholder analysis is to brainstorm who your stakeholders are. As part of this, think of all the people who are affected by your work, who have influence or power over it, or have an interest in its successful or unsuccessful conclusion.

The table below shows some of the people who might be stakeholders in your job or in your projects:

Possible Project Stakeholders:

Your boss	Shareholders	Government
Senior executives	Alliance partners	Trades associations
Your coworkers	Suppliers	The press
Your team	Lenders	Interest groups
Customers	Analysts	The public
Prospective customers	Future recruits	The community
Your family		

Remember that although stakeholders may be both organizations and people, ultimately you must communicate with people. Make sure that you identify the correct individual stakeholders within a stakeholder organization.

2. Prioritize Your Stakeholders:

You may now have a long list of people and organizations that are affected by your work. Some of these may have the power either to block or advance. Some may be interested in what you are doing, others may not care.

Map out your stakeholders using the Power/Interest Grid shown in figure 1, and classify them by their power over your work and by their interest in your work.

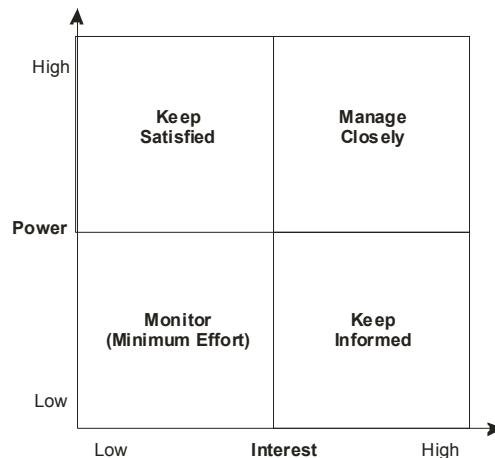


Figure 1: Basic Power/Interest Grid

For example, your boss is likely to have high power and influence over your projects and high interest. Your family may have high interest, but are unlikely to have power over it.

Someone's position on the grid shows you the actions you have to take with them:

- High power, interested people: these are the people you must fully engage and make the greatest efforts to satisfy.
- High power, less interested people: put enough work in with these people to keep them satisfied, but not so much that they become bored with your message.
- Low power, interested people: keep these people adequately informed, and talk to them to ensure that no major issues are arising. These people can often be very helpful with the detail of your project.
- Low power, less interested people: again, monitor these people, but do not bore them with excessive communication.

3. Understanding your key stakeholders:

You now need to know more about your key stakeholders. You need to know how they are likely to feel about and react to your project. You also need to know how best to engage them in your project and how best to communicate with them.

Key questions that can help you understand your stakeholders are:

- What financial or emotional interest do they have in the outcome of your work? Is it positive or negative?
- What motivates them most of all?
- What information do they want from you?
- How do they want to receive information from you? What is the best way of communicating your message to them?
- What is their current opinion of your work? Is it based on good information?
- Who influences their opinions generally, and who influences their opinion of you? Do some of these influencers therefore become important stakeholders in their own right?
- If they are not likely to be positive, what will win them around to support your project?
- If you don't think you will be able to win them around, how will you manage their opposition?
- Who else might be influenced by their opinions? Do these influencers then become stakeholders in their own right?

A very good way of answering these questions is to talk to your stakeholders directly. People are often quite open about their views, and asking people's opinions is often the first step in building a successful relationship with them.

You can summarize the understanding you have gained on the stakeholder map, so that you can easily see which stakeholders are expected to be blockers or critics, and which stakeholders are likely to be advocates and supporters of your project. A good way of doing this is by color coding: showing advocates and supporters in green, blockers and critics in red, and others who are neutral in orange.

Figure 2 shows an example of this - in this example, you can see that a lot of effort needs to be put into persuading Piers and Michael of the benefits of the project - Janet and Amanda also need to be managed well as powerful supporters.

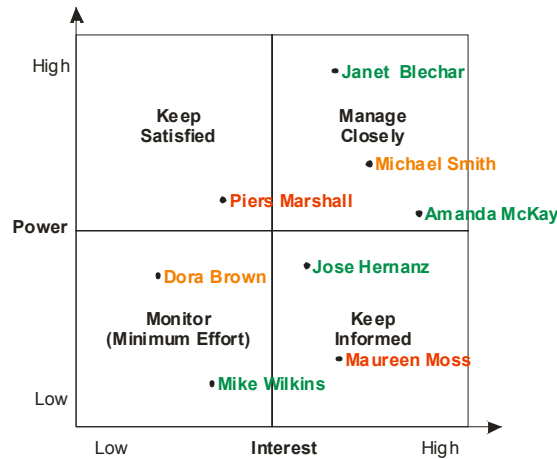


Figure 2: Example Power/Interest Grid With Stakeholders Marked

The next article in this series will explain Stakeholder Planning - this will show you how to plan to win your stakeholders around.

How to use the tool: [Stakeholder Planning](#)

Having conducted a Stakeholder Analysis exercise, you will have most of the information you need to plan how to manage communication with your stakeholders. You will have identified the stakeholders in your job and in your projects, and will have marked out their positions on a stakeholder map.

The next stage is to plan your communication so that you can win them around to support your projects. Stakeholder Planning is the process by which you do this.

To carry out a Stakeholder Planning exercise, start with a Stakeholder Planning Sheet. This is a table with the following column headings:

- Power
- Interest
- Stakeholder Name
- Key Interests and Issues
- Current Status - Advocate, supporter, neutral, critic, blocker
- Desired Support - High, medium or low
- Desired Project Role (if any)
- Actions Desired (if any)
- Messages Needed
- Actions and Communications

Using this table, work through the planning exercise using the steps below:

1. Update the Planning Sheet With Power/Interest Grid Information:

Based on the Power/Interest Grid you created in your stakeholder analysis, enter the stakeholders' names, their influence and interest in your job or project, and your current assessment of where they stand with respect to it.

2. Plan Your Approach to Stakeholder Management:

The amount of time you should allocate to Stakeholder Management depends on the size and difficulty of your projects and goals, the time you have available for communication, and the amount of help you need to achieve the results you want.

Think through the help you need, the amount of time that will be taken to manage this and the time you will need for communication. Help with the project could include sponsorship of the project, advice and expert input, reviews of material to increase quality, etc.

3. Think Through What You Want From Each Stakeholder:

Next, work through your list of stakeholders thinking through the levels of support you want from them and the roles you would like them to play (if any). Think through the actions you would like them to perform. Write this information down in the 'Desired Support', 'Desired Project Role' and 'Actions Desired' columns.

4. Identify the Messages You need to Convey:

Next, identify the messages that you need to convey to your stakeholders to persuade them to support you and engage with your projects or goals. Typical messages will show the benefits to the person or organization of what you are doing, and will focus on key performance drivers like increasing profitability or delivering real improvements.

5. Identify Actions and Communications:

Finally, work out what you need to do to win and manage the support of these stakeholders. With the time and resource you have available, identify how you will manage the communication to and the input from your stakeholders.

Focusing on the high-power/high-interest stakeholders first and the low-interest/low-power stakeholders last, devise a practical plan that communicates with people as effectively as possible and that communicates the right amount of information in a way that neither under nor over-communicates.

Think through what you need to do to keep your best supporters engaged and on-board. Work out how to win over or neutralize the opposition of skeptics. Where you need the active support of people who are not currently interested in what you are doing, think about how you can engage them and raise their level of interest.

Also, consider how what you are doing will affect your stakeholders. Where appropriate, let people know as early as possible of any difficult issues that may arise, and discuss with them how you can minimize or manage any impact.

Tip:

It is usually a good idea to manage people's expectations about likely problems as early as possible. This gives them time to think through how to manage issues, and preserves your reputation for reliability.

Once you have prepared your Stakeholder Plan, all you need to do is to implement it. As with all plans, it will be easier to implement if you break it down into a series of small, achievable steps and action these one-by-one.

Example: You can create your own example of stakeholder analysis at work - whether for your current role, a job you want to do or a new project.

Conduct a full stakeholder analysis. Ask yourself whether you are communicating as effectively as you should be with your stakeholders. What actions can you take to get more from your supporters or win over your critics?

Key Points: As the work you do and the projects you run become more important, you will affect more and more people. Some of these people have the power to undermine your projects and your position. Others may be strong supporters of your work.

Stakeholder Management is the process by which you identify your key stakeholders and win their support. Stakeholder Analysis is the first stage of this, where you identify and start to understand your most important stakeholders.

The first stage of this is brainstorm who your stakeholders are. The next step is to prioritize them by power and interest, and to plot this on a Power/Interest grid. The final stage is to get an understanding of what motivates your stakeholders and how you need to win them around.

Once you have completed your Stakeholder Analysis, the next stage is Stakeholder Planning. This is the process you use to plan how to manage your stakeholders and gain their support for your projects.

Stakeholder Planning can usefully be conducted using a planning sheet like the one described. To prepare your plan, go through the following steps:

1. Update the planning sheet with information from the power/interest grid
2. Think through your approach to stakeholder management
3. Work out what you want from each stakeholder
4. Identify the messages you need to convey
5. Identify actions and communications

Good Stakeholder Management helps you to manage the politics that can often come with major projects. It helps you win support for your projects and eliminates a major source of project and work stress.

Moving On...

We have put a great deal of effort into developing and testing this e-book to make it as useful as possible. If you have any suggestions on how we can improve it for the future, then please let us know at editorial@mindtools.com or through the Mind Tools web site at www.mindtools.com. Alternatively, if you have enjoyed this e-book and found it useful, please [let us know!](#)

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Best wishes, and enjoy using Mind Tools!



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