

Project Management Workbook

The Process

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project management

project management, tools, process, plans and project planning tips

Here are the rules of project management. Project management skills are essential for project managers, and any other managers who manage complex activities and tasks, because complex tasks are projects. Project management skills are essential for any complex task, where different outcomes are possible, requiring planning and assessing options, and organizing activities and resources to deliver a result. Projects come in all shapes and sizes, from the small and straight-forward to extremely large and highly complex. Project management can be concerned with anything: people, products, services, materials, production, IT and communications, plant and equipment, storage, distribution, logistics, buildings and premises, staffing and management, finance, administration, acquisition, divestment, purchasing, sales, selling, marketing, human resources, training, culture, customer service and relations, quality, health and safety, legal, technical and scientific, new product development, new business development; and in any combination.

Project management, for projects large or small, should follow this simple process:

project management process

1. **Agree precise specification for the project.**
2. **Plan the project - time, team, activities, resources, financials.**
3. **Communicate the project plan to your project team.**
4. **Agree and delegate project actions.**
5. **Manage, motivate, inform, encourage, enable the project team.**
6. **Check, measure, review project progress; adjust project plans, and inform the project team and others.**
7. **Complete project; review and report on project performance; give praise and thanks to the project team.**

1. Agree precise specification for the project

Often called the project 'terms of reference', the project specification should be an accurate description of what the project aims to achieve, and the criteria and flexibilities involved, its parameters, scope, range, outputs, sources, participants, budgets and timescales (beware - see note below about planning timescales).

Usually the project manager must consult with others and then agree the project specification with superiors, or with relevant authorities. The specification may involve several drafts before it is agreed. A project specification is essential in that it creates a measurable accountability for anyone wishing at any time to assess how the project is going, or its success on completion. Project terms of reference also provide an essential discipline and framework to keep the project on track, and concerned with the original agreed aims and parameters. A properly formulated and agreed project specification also protects the project manager from being held to account for issues that are outside the original scope of the project or beyond the project manager's control.

This is the stage to agree special conditions or exceptions with those in authority. Once you've published the terms of reference you have created a very firm set of expectations by which you will be judged. So if you have any concerns, or want to renegotiate, now's the time to do it.

The largest projects can require several weeks to produce and agree project terms of reference. Most normal business projects however require a few days thinking and consulting to produce a suitable project specification. Establishing and agreeing a project specification is an important process even if your task is simple one.

A template for a project specification:

1. Describe purpose, aims and deliverables.
2. State parameters (timescales, budgets, range, scope, territory, authority).
3. State people involved and the way the team will work (frequency of meetings, decision-making process).
4. Establish 'break-points' at which to review and check progress, and how progress and results will be measured.

2. Plan the project

Plan the various stages and activities of the project. A useful tip is to work backwards from the end aim, identifying all the things that need to be put in place and done, in reverse order. First, brainstorming (simply noting ideas and points at random), will help to gather most of the points and issues. For complex

projects, or when you lack experience of the issues, involve others in the brainstorming process. Thereafter it's a question of putting the issues in the right order, and establishing relationships and links between each issue. Complex projects will have a number of activities running in parallel. Some parts of the project will need other parts of the project to be completed before they can begin or progress. Some projects will require a feasibility stage before the completion of a detailed plan.

project timescales

Most projects come in late - that's just the way it is - so don't plan a timescale that is over-ambitious. Ideally plan for some slippage. If you have been given a fixed deadline, plan to meet it earlier, and work back from that earlier date. Build some slippage or leeway into each phase of the project. Err on the side of caution where you can. Otherwise you'll be making a rod for your own back.

the project team

Another important part of the planning stage is picking your team. Take great care, especially if you have team-members imposed on you by the project brief. Selecting and gaining commitment from the best team members - whether directly employed, freelance, contractors, suppliers, consultants or other partners - is crucial to the quality of the project, and the ease with which you are able to manage it. Generally try to establish your team as soon as possible. Identifying or appointing one or two people even during the terms of reference stage is possible sometimes. Appointing the team early maximises their ownership and buy-in to the project, and maximises what they can contribute. But be very wary of appointing people before you are sure how good they are, and not until they have committed themselves to the project upon terms that are clearly understood and acceptable. Don't imagine that teams need to be full of paid and official project team members. Some of the most valuable team members are informal advisors, mentors, helpers, who want nothing other than to be involved and a few words of thanks. Project management on a tight budget can be a lonely business - get some help from good people you can trust, whatever the budget.

To plan and manage large complex projects with various parallel and dependent activities you will need to put together a 'Critical Path Analysis' and a spreadsheet on MS Excel or equivalent. Critical Path Analysis will show you the order in which tasks must be performed, and the relative importance of tasks. Some tasks can appear small and insignificant when they might actually be hugely influential in enabling much bigger activities to proceed or give best

results. A Gantt chart is a useful way of showing blocks of activities over time and at a given cost and for managing the project and its costs along the way.

Various project management software is available, much of which is useful, but before trying it you should understand and concentrate on developing the pure project management skills, which are described in this process. The best software in the world will not help you if you can't do the key things.

the project 'critical path analysis'

'Critical Path Analysis' sounds very complicated, but it's a very logical and effective method for planning and managing complex projects. This is how to create a critical path analysis. As an example, the project is a simple one - making a fried breakfast.

First note down all the issues (resources and activities in a rough order):

Assemble crockery and utensils, assemble ingredients, prepare equipment, make toast, fry sausages and eggs, grill bacon and tomatoes, lay table, warm plates, serve.

Note that some of these activities must happen in parallel. That is to say, if you tried to make a fried breakfast by doing one task at a time, and one after the other, things would go wrong. Certain tasks must be started before others, and certain tasks must be completed in order for others to begin. The plates need to be warming while other activities are going on. The toast needs to be toasting while the sausages are frying, and at the same time the bacon and sausages are under the grill. The eggs need to be fried last. A critical path analysis is a diagrammatical representation of what needs done and when. Timescales and costs can be applied to each activity and resource. Here's the critical path analysis for making a fried breakfast:

This critical path analysis example below shows just a few activities over a few minutes. Normal business projects would see the analysis extending several times wider than this example, and the time line would be based on weeks or months. It is possible to use MS Excel or a similar spreadsheet to create a critical path analysis, which allows financial totals and time totals to be planned and tracked. Various specialised project management software enable the same thing. Beware however of spending weeks on the intricacies of computer modeling, when in the early stages especially, a carefully hand drawn diagram - which requires no computer training at all - can put 90% of the thinking and structure in place.

Gantt charts

Gantt Charts are extremely useful project management tools. You can construct a Gantt Chart using MSExcel or a similar spreadsheet. Every activity has a separate line. Create a time-line for the duration of the project (the breakfast example shows minutes, but normally you'd use weeks, or for very big long-term projects, months). You can colour code the time blocks to denote type of activity (e.g. intense, watching brief, directly managed, delegated and left to run, etc.) You can schedule review and break points. At the end of each line you can show as many cost columns for the activities as you need. The breakfast example shows just the capital cost of the consumable items and a revenue cost for labour and fuel. A Gantt chart like this can be used to keep track of progress for each activity and how the costs are running. You can move the time blocks around to report on actuals versus planned, and to re-schedule, and to create new plan updates. Costs columns can show plan and actuals and variances, and calculate whatever totals, averages, ratios, etc you need. Gantt Charts are the most flexible and useful of all project management tools, but remember they do not show the importance and inter-dependence of related parallel activities, and they won't show the necessity to complete one task before another can begin, as a critical path analysis will do, so you need both tools, especially at the planning stage.

project financial planning and reporting

For projects involving more than petty cash you'll need a spreadsheet to plan and report planned and actual expenditure. Use MSExcel or similar. If you don't know how to put together a basic financial plan, get some help from someone who does, and make sure you bring a good friendly, flexible financial person into your team - it's a key function of project management, and if you can't manage the financial processes your self you need to be able to rely completely on whoever does it for you. The spreadsheet must enable you to plan, administer and report the detailed finances of your project. Create a cost line for main expenditure activity, and break this down into individual elements. Create a system for allocating incoming invoices to the correct activities (your bought-ledger people won't know unless you tell them), and showing when the costs hit the project account. Establish clear payment terms with all suppliers and stick to

them. Projects develop problems when team members get dissatisfied; rest assured, non- or late-payment is a primary cause of dissatisfaction.

Remember to set some budget aside for 'contingencies' - you will need it.

project contingency planning

Planning for and anticipating the unforeseen, or the possibility that things may not go as expected, is called 'contingency planning'. Contingency planning is vital in any task when results and outcomes cannot be absolutely guaranteed. Often a contingency budget needs to be planned as there are usually costs associated. Contingency planning is about preparing fall-back actions, and making sure that leeway for time, activity and resource exists to rectify or replace first-choice plans. A simple contingency plan for the fried breakfast would be to plan for the possibility of breaking the yolk of an egg, in which case spare resource (eggs) should be budgeted for and available if needed. Another might be to prepare some hash-browns and mushrooms in the event that any of the diners are vegetarian. It may be difficult to anticipate precisely what contingency to plan for in complex long-term projects, in which case simply a contingency budget is provided, to be allocated later when and if required.

3. Communicate the project plan to your team

This serves two purposes: it informs people what's happening, and it obtains essential support, agreement and commitment. If your project is complex and involves a team, then you should involve the team in the planning process to maximise buy-in, ownership, and thereby accountability. Your project will also benefit from input and consultation from relevant people at an early stage.

4. Agree and delegate project actions

Your plan will have identified those responsible for each activity. Activities need to be very clearly described, including all relevant parameters, timescales, costs, and deliverables. Use the **SMART acronym** to check that you delegate tasks properly. Delegated tasks fail mostly because they have not been explained clearly, agreed with the other person, or supported and checked while in progress. Publish the full plan to all in the team, but don't issue all the tasks unless the recipients are capable of their own forward-planning. For long-term complex projects you will not know exactly what the future tasks will be. Don't delegate anything unless it passes the SMART test.

5. Manage, motivate, inform, encourage, enable the project team

Manage the team and activities by meeting, communicating, supporting, and helping with decisions (but not making them for people who can make them for themselves). 'Praise loudly; blame softly.' (Catherine the Great). One of the big challenges for a project manager is deciding how much freedom to give for each delegated activity. Tight parameters and lots of checking are necessary for inexperienced people who like clear instructions, but this approach is the kiss of death to experienced, entrepreneurial and creative people. They need a wider brief, more freedom, and less checking. Manage these people by the results they get - not how they get them. Look out for differences in personality and working styles in your team. They can get in the way of understanding and co-operation. Your role here is to enable and translate. Face to face meetings, when you can bring team members together, are generally the best way to avoid issues and relationships becoming personalised and emotional. Communicate progress and successes regularly to everyone. Give the people in your team the plaudits, particularly when someone high up expresses satisfaction - never, never accept plaudits yourself. Conversely - you must take the blame for anything that goes wrong - never dump on anyone in your team (as project manager any problem is always ultimately down to you anyway).

6. Check, measure, and review project performance; adjust project plans; inform project team and others

Check the progress of activities against the plan. Review performance regularly and at the stipulated review points, and confirm the validity and relevance of the remainder of the plan. Adjust the plan if necessary in light of performance, changing circumstances, and new information, but remain on track and within the original terms of reference. Be sure to use transparent, pre-agreed measurements when judging performance. (Which shows how essential it is to have these measures in place and clearly agreed before the task begins.) Identify, agree and delegate new actions as appropriate. Inform team members and those in authority about developments, clearly, concisely and in writing. Plan team review meetings. Stick to the monitoring systems you established. Probe the apparent situations to get at the real facts and figures. Analyse causes and learn from mistakes. Identify reliable advisors and experts in the team and use them. Keep talking to people, and make yourself available to all.

7. Complete project; review and report on project; give praise and thanks to the project team

At the end of your successful project hold a review with the team. Ensure you understand what happened and why. Reflect on any failures and mistakes positively, objectively, and without allocating personal blame. Reflect on successes gratefully and realistically. Write a review report, and make observations and recommendations about follow up issues and priorities - there will be plenty.

Someone said 'Don't you love it when a plan comes together?' It's true. As project manager, to be at the end of a project and to report that the project plan has been fully met, on time and on budget, is a significant achievement, whatever the project size and complexity. The mix of skills required are such that good project managers can manage anything.

amusing project management analogies:

To the optimist, the glass is half full. To the pessimist, the glass is half empty. To the project manager, the glass is twice as big as it needs to be.

A clergyman, a doctor and a project manager were playing golf together one day and were waiting for a particularly slow group ahead. The project manager exclaimed, "What's with these people? We've been waiting over half an hour! It's a complete disgrace." The doctor agreed, "They're hopeless, I've never seen such a rabble on a golf course." The clergyman spotted the approaching green keeper and asked him what was going on, "What's happening with that group ahead of us? They're surely too slow and useless to be playing, aren't they?" The green keeper replied, "Oh, yes, that's a group of blind fire-fighters. They lost their sight saving our clubhouse from a fire last year, so we always let them play for free anytime." The three golfers fell silent for a moment. The clergyman said, "Oh dear, that's so sad. I shall say some special prayers for them tonight." The doctor added, rather meekly, "That's a good thought. I'll get in touch with an ophthalmic surgeon friend of mine to see if there's anything that can be done for them." After pondering the situation for a few seconds, the project manager turned to the green keeper and asked, "Why can't they play at night?"

A project manager was out walking in the countryside one day when a frog called out to him. He bent down, picked up the frog and put it in his pocket. The frog called out again, saying, "If you kiss me I shall turn me back into a beautiful

princess, and I'll stay with you for a week as your mistress." The project manager took the frog out of his pocket, smiled at it, and put it back into his pocket. The frog called out once more, "If you kiss me and turn me back into a princess, I'll stay with you for as long as you wish and do absolutely *anything* that you want. Again the Project manager took the frog out of his pocket, smiled at it and put it back. Finally, the frog demanded, "What's the matter? You can turn me back into a beautiful princess, and I'll stay with you for ever and do anything you want. Why won't you kiss me?" to which the project manager replied, "Understand, I'm a project manager. I simply don't have time for a girlfriend, but a talking frog that's cool."

(Ack. G Bee)

Network Analysis Introduction

The core technique available to Project Managers for planning and controlling their projects is Network Analysis. This short guide will provide a basic understanding of networking principles before applying them to the computer.

Network Analysis or Critical Path Analysis (CPA) or the American “Program, Evaluation and Review Technique” (PERT) is one of the classic methods of planning and controlling the progress of projects.

Tasks or Activities

Effective planning of projects requires careful thought and the application of logic. To illustrate this planning tool, let's consider the manufacture of a small item. Some typical processes might be:

cutting
finishing
assembling
purchasing
machining
testing
designing

All these processes are called '**ACTIVITIES**' or '**TASKS**'

Step 1:

List **WHAT** has to be done.

Hint: try thinking of verbs ending in “...*ing*”, like *machining* or *testing*.

Do not consider at this stage who is going to do what, concentrate on **WHAT**.

An activity or task is represented by a rectangle, thus



Step 2:

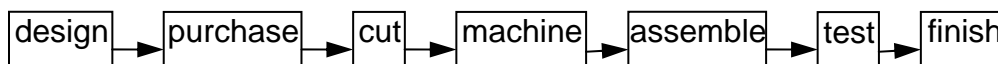
Decide the **ORDER** in which it is to be done.

Some steps are obvious: we, perhaps, cannot *test* until *assembly* has been completed, which cannot be done until the various parts have been made. So we have a logical relationship between the start of one task and the beginning of the next. We could order our list of tasks thus:

designing purchasing cutting machining assembling testing finishing

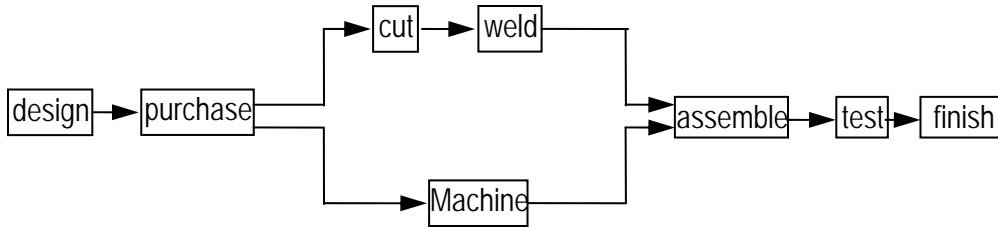
Logic Network or PERT Chart

Writing this out as a network:

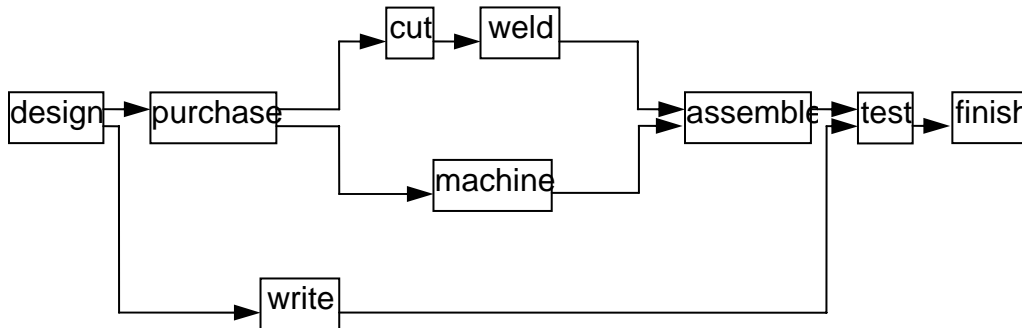


We put the tasks into rectangles and join them with arrows to show the sequence or precedence: the logical relationships between them.

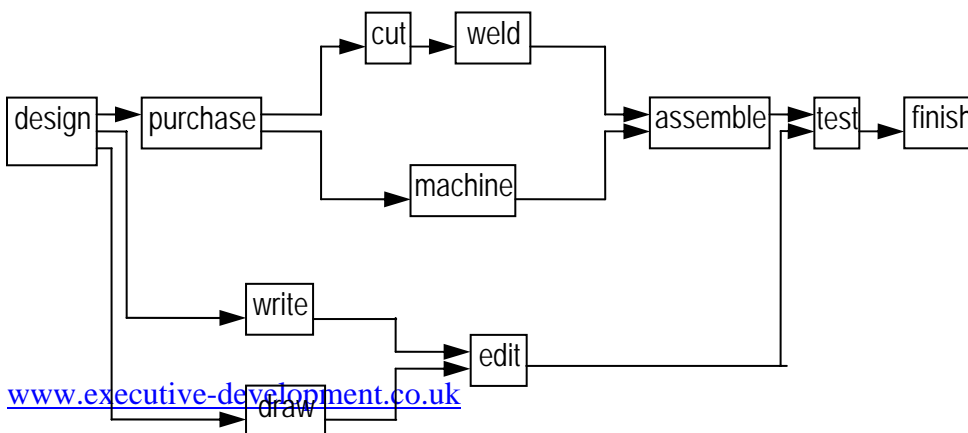
Suppose that once we have bought the materials, some need cutting to size and others need turning on a lathe. The tasks of *machining* and *cutting* could run in parallel rather than consecutively, assuming we have the appropriate resources. But let's add a bit more. Say the cut parts need to be *welded* together before assembling — like this:



Let's add another task: the **writing** of a set of test instructions. Where would **writing** fit in? Well, the **writing** cannot really start until the **design** is finished, though it could be carried out at the same time as the fabrication, but it must be ready before the **testing** can begin. Applying such logic to the relationships, we can add the task **writing** like this:



Now let's say we need to have our draughtsman produce some illustrations for our test instructions. When the **writing** and the **drawing** are finished, we will then need to **edit** the whole:



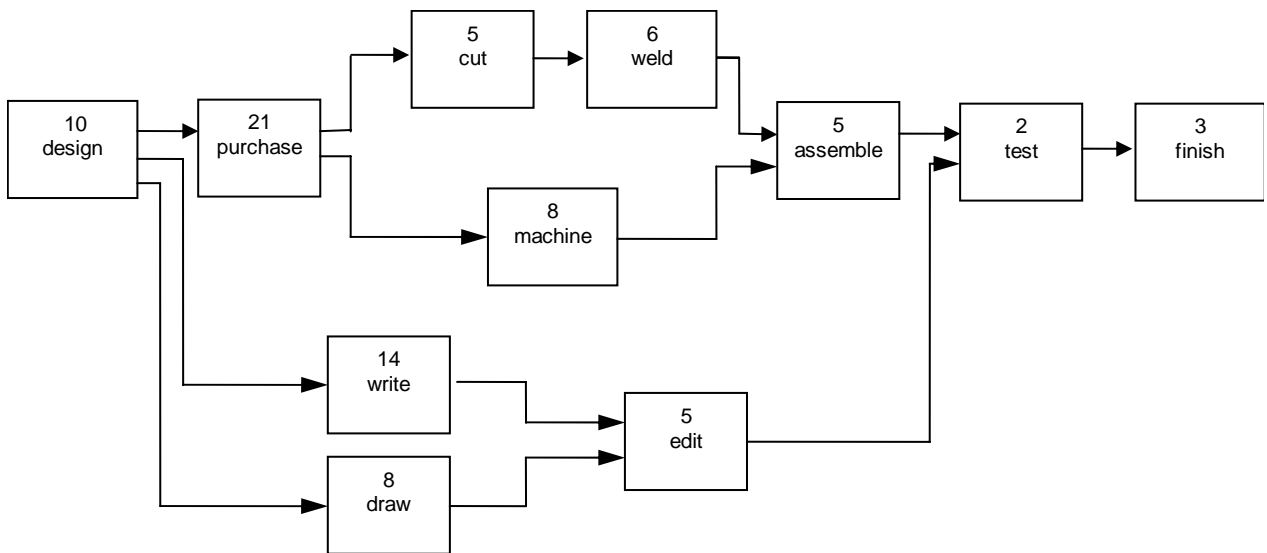
And so the network is built up, often cueing the mind to missing tasks.

In this step always assume you have infinite resources so that who does what does not cloud the issue – concentrate only on the **LOGIC**.

Time Analysis

Duration

Having completed the network, we can begin the analysis. Firstly, we need to know the duration of each task and write it into the network. For convenience, we will write the durations in days, thus:

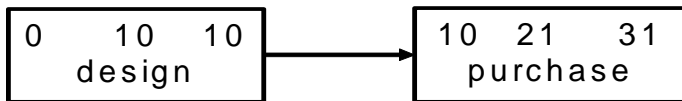


In this step, always reduce the resource requirement to the duration of **ONE** person to give maximum flexibility for you to add further resources later when the project begins to run late. [However, there are rare cases when tasks cannot physically be performed by one resource, in which case consider the time taken for both of them working together. For example, carrying a very long plank that requires a person at each end, adding more resources will not

necessarily reduce the duration and might even slow it down if they get in the way of each other, but you must have two. Checking the brake lights on a car is another example.]

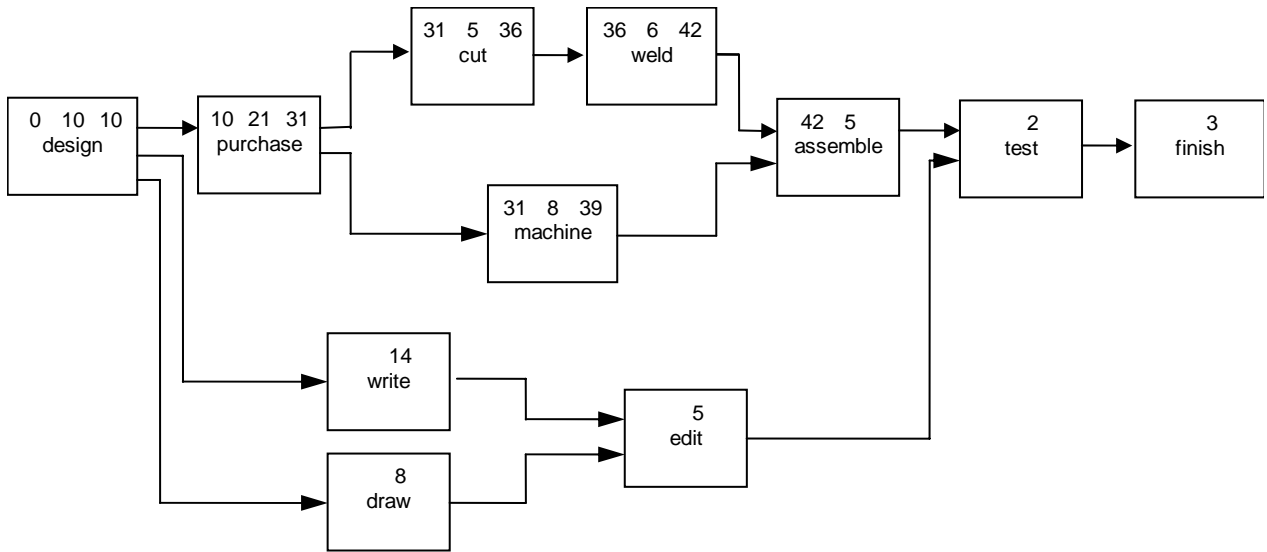
The Forward Pass

Now we can calculate how long the project will take. We start by calculating the shortest time or '**earliest finish**'. So if we start at time '**0**' the earliest day that *design* can be finished is day **10**. *Purchasing* therefore cannot start until day **10**: i.e. the earliest we can start *purchasing* is day **10**, and thus the earliest finish for *purchasing* is **10 + 21 = day 31**. We write the earliest start time in the top left-hand corner of the task box, and the earliest finish time over the right-hand corner of the task box.

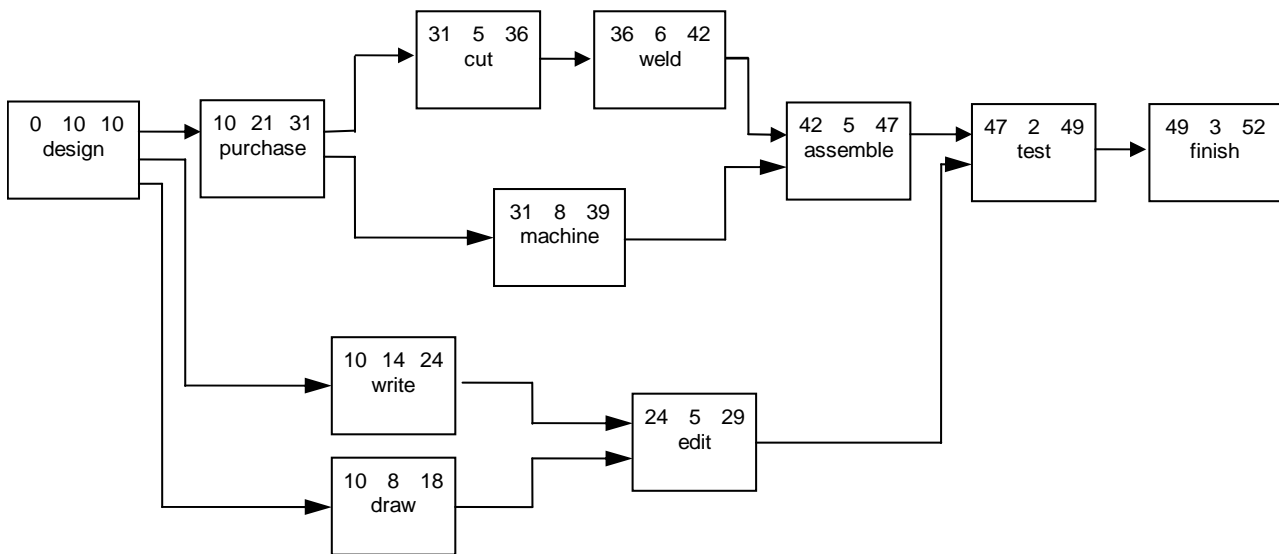


For the *purchasing* task, we thus say the **Earliest Start Time (EST)** is **10** and the **Earliest Finish Time (EFT)** is **31**

The earliest time both *cutting* and *machining* can start is day **31**. So the earliest finish for cutting will be day **36** and for machining day **39**. However, *assembly* cannot start at day **39** because the *welding* has not yet been done. The earliest *welding* can start is after the *cutting* is finished, i.e. day **36**. So the earliest time *assembly* can start must be day **42**.



Note that the task *machine* has some **float** or **slack**: i.e. it cannot start before day **31** and must finish before day **42**, but as it only takes **8** days, there is a slack of $42 - 31 - 8 = 3$ days. When calculating the earliest times, you must consider all the paths or arrows coming into the task box, and select the **largest** or longest time. Now if we complete the timings, or "**Forward Pass**" as it is called, the picture will look like this:



So, the calculations show that the whole project will take **52** days or the '**earliest finish time**' is **52** days.

Slack

You will remember that when we considered the task ***machine*** we found that it had some **slack** available. You will have noted that the tasks along the paths ***draw, write*** and ***edit*** also had some slack. The other tasks (i.e. those with no slack) are **critical** in that any delay in their completion will cause the whole project to be late. It is thus very important to discover the **critical tasks** and thus identify the **critical path** through the network.

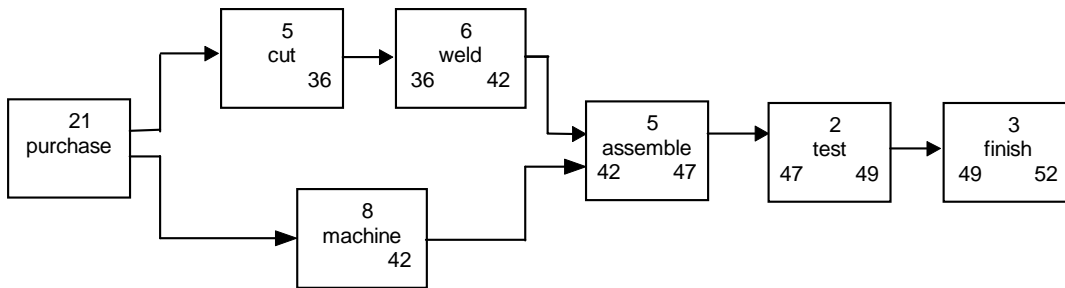
Critical Path

The next part of the analysis of the network is to find the **CRITICAL PATH**. By definition the **Critical Path** is the shortest time path through the network. In such a simple network, it is easy to calculate the amount of slack available for each task, but in a complicated network, it is not easy to 'see' which tasks have slack and which have none.

The Backward Pass

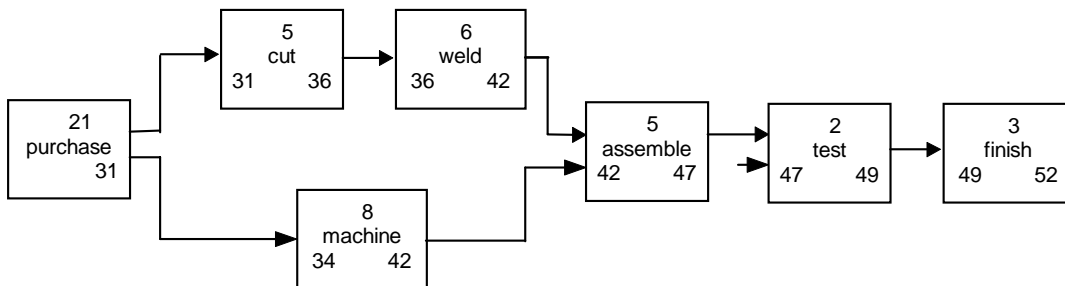
So far we have calculated the **Earliest Start Time (EST)** and the **Earliest Finish Time (EFT)** for each task. The next step in calculating the critical path is to re-time the network starting at the end and calculate the **Latest Start Time (LST)** and **Latest Finish Time (LFT)** for each task.

So, beginning with the earliest finish time for the whole project, i.e. **52** days, we subtract the time of the last task giving **49** days as the latest time the ***finishing*** task can begin without affecting the outcome.



The latest time we can start *testing* is $49 - 2 = 47$ days, and *assembly* is 42 days. Continuing backwards, against the arrows (doing what is called the "backward pass") the latest time *welding* can start is $42 - 6 = 36$ days.

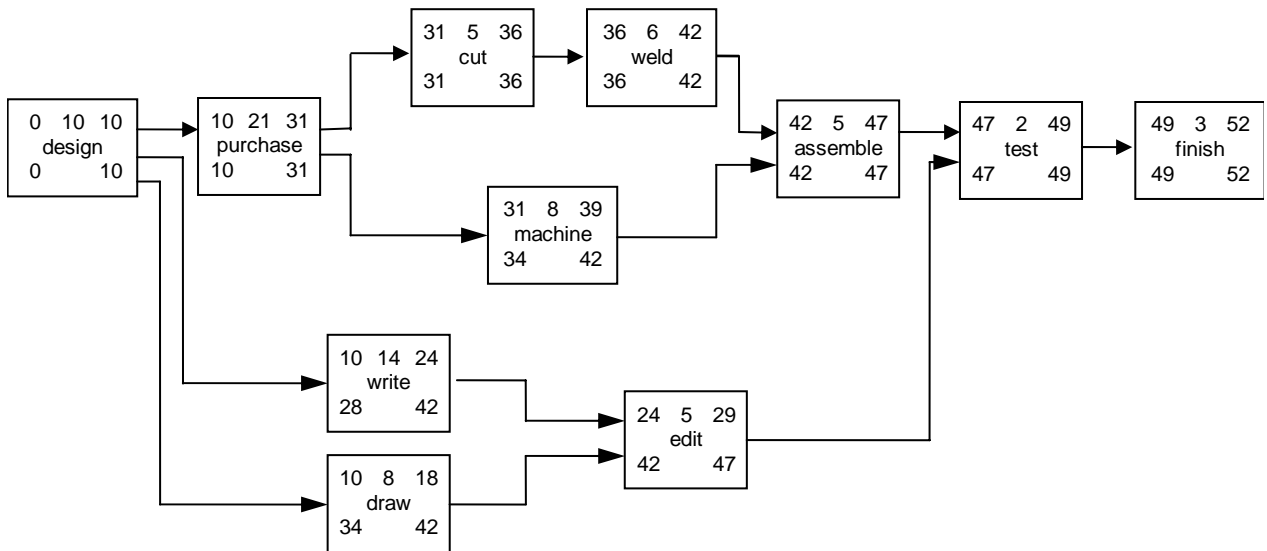
But what about *cutting* and *machining*? What is the latest time *purchasing* can finish? Well, the latest time *machining* could start is $42 - 8 =$ day **34**, and the latest time *cutting* could start is $36 - 5 =$ day **31**. Hence, the latest time *purchasing* can finish is day **31**



So, when making the backward pass to calculate the latest times, you have to consider all the arrows coming out of a task box and select the lowest or shortest time to that task.

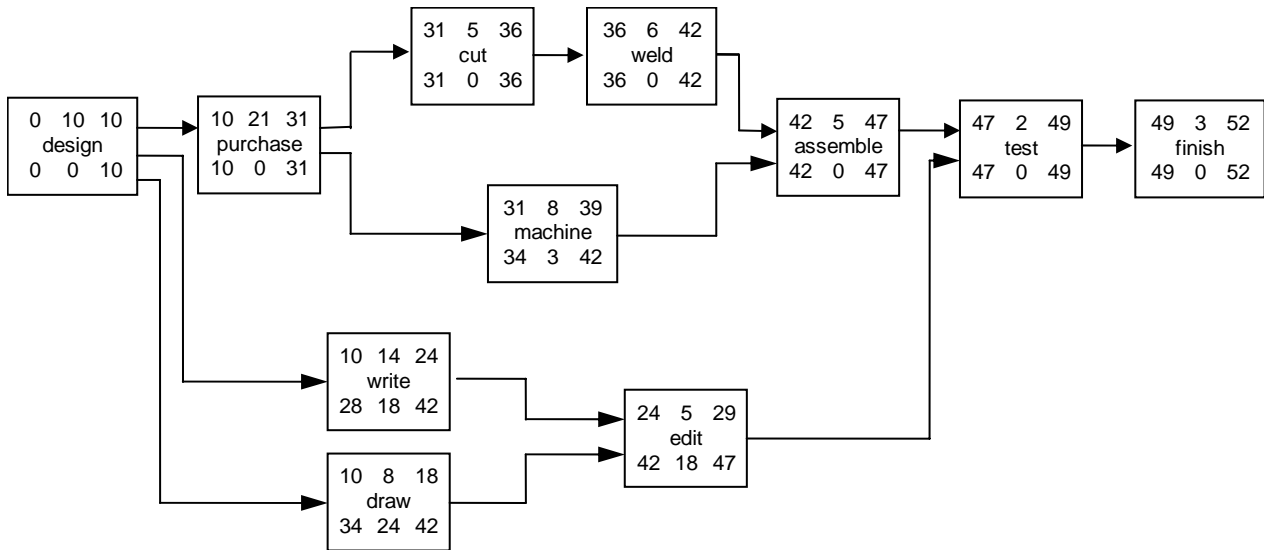
Now to finish the backward pass we calculate the latest times for *design* to finish and start. The latest time *writing* could start is $42 - 14 =$ day **28**, the latest time

drawing can start is $42 - 8 = 34$ and the latest time **purchasing** can start is $31 - 21 =$ day **10**. Therefore, the latest time **design** can finish without affecting the project finish time is day **10**. Subtracting the time of the **design** task leaves us at day **0**, which is back to our starting point!



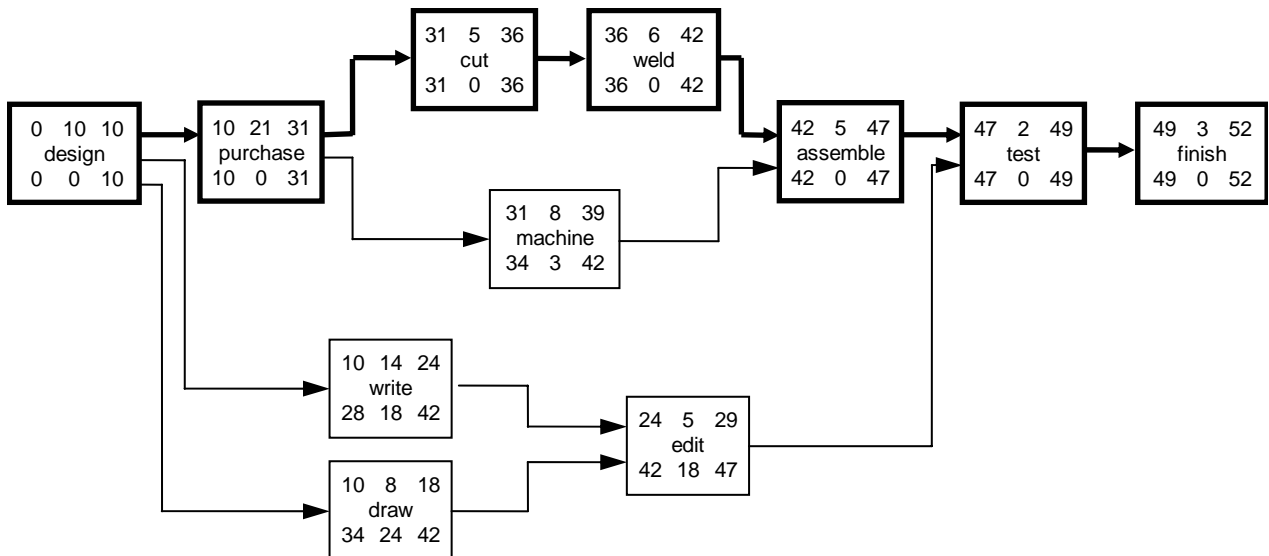
Slack

Now we have completed the timings by a forward and backward pass, we can look for slack. In this simple network, it is easy to see that the tasks **machine**, **draw** and **write** have slack. As we have already discovered, **machining** can start at day **31** but must finish by day **42**. As it takes only **8** days to complete, the slack is **3** days. We will write the slack in the empty slot in the bottom centre of the box. With **writing**, the task must finish by day **42** but it can start at day **10**. As it takes **14** days to complete, **writing** has a slack of $24 - 42 = 18$ days. Similarly, **drawing** has a slack of **24** days and **editing** **18** days. The remaining tasks have no slack at all.



The Critical Path

So, to find the critical path, we look first at the tasks whose earliest and latest start times are identical. Then we engage brain to determine which path between such tasks has no slack. That path is then, by definition, the **critical path**. On the diagram below, the critical path is indicated by **bold** lines.



NETWORK ANALYSIS EXERCISE

- a) Producing a Play b) A Basic Example

EXERCISE 1

Draw a Network for the following:-

1 - 2	Write Play	56 days
2 - 3	Advertising Period	28 days
2 - 4	Audition for Parts	5 days
4 - 5	First Rehearsals	10 days
2 - 6	Scenery Made	56 days
5 - 6	Cast Changes	3 days
6 - 7	Final Dress Rehearsal	3 days
3 - 7	Ticket Selling Period	28 days
7 - 8	Play Runs	12 days

- a) What is the critical path?
- b) By how long can the ticket selling period be extended without altering the starting day of the play?

EXERCISE 2

Draw a Network for the following:-

<u>ACTIVITY</u>	<u>DURATION</u>
1 - 2	16
1 - 3	20
1 - 11	30
2 - 8	15
3 - 7	15
3 - 8	10
7 - 8	3
7 - 11	16
8 - 11	12

- a) What is the critical path?
- b) Tabulate - earliest and latest start and finish times and float.

NETWORK ANALYSIS EXERCISE: MACHINE ASSEMBLY AND INSTALLATION

A piece of equipment is made from two parts: A and B, which are assembled together. Each part requires a special machine to be installed (machine A, machine B) and the assembly requires the installation of another machine (machine K). The completed equipment must be tested before dispatch on a specially made piece of test gear. Assume all materials are to hand.

ACTIVITIES TO BE CONSIDERED TIME REQUIRED FOR PERFORMANCE

1) Obtain and install machine A	4 weeks
2) Obtain and install machine B	9 weeks
3) Obtain and install machine K	15 weeks
4) Make part A	5 weeks
5) Make part B	7 weeks
6) Assemble complete equipment	10 weeks
7) Make test gear	20 weeks
8) Test complete equipment	10 weeks
9) Dispatch	1 week

If the whole process of making the equipment starts now, and “time now” is taken to be week 0, suggest what is the latest time by which the manufacture of part A can start if the whole process is to be done as quickly as possible?

Project Management Case Study – Background

You have just been informed of your appointment to lead a new project approved by the Projects Steering Group. Your director has been appointed by the project sponsor and you are told that you must be prepared to give 50 per cent of your time to the project and assign some of your current responsibilities to other members of your departmental team. The initial proposal document you are given was prepared by someone else some three months earlier and this divided the project into some discrete parts:

- Data gathering
- Development
- Prototype testing
- Final testing
- Implementation and training
- Support and maintenance services

The budget approved for the project is based on a core team of six people with additional team support as required during the project life. However, your sponsor informs you that even though this is regarded by the organisation as an important high profile project, only five people can be spared at the current time due to workload. All the core team member allocations have been agreed with their line managers.

The project is important and the deliverables listed in the original proposal are regarded as still valid and essential to the organization.

The “business critical date” for the project has been fixed by its interface with another project currently active at another location. This date effectively gives you 58 calendar weeks from now to complete the project. It has been made very clear that the directors regard this project as having a “MUST NOT FAIL” label and that no slippages will be tolerated.

Only one of the team members is known to you, having worked with you before in the same team on a previous project. One member of the team has been assigned at your request. As you have little information on the other team members you call the Personnel Manager and ask for a brief note of their backgrounds with particular reference to project work. The response you receive gives you only some basic information.

Your Team

Graham

A very experienced person with over 15 years with the organisation. He worked with you previously on the DAMOS project and you value his knowledge and project skills. You feel fortunate to have him assigned full time on the project although you know he is regarded as being difficult sometimes. He has a reputation for being dogmatic and scornful of others' ability in comparison to his long experience. This makes him a little cynical about some modern technology and ideas that he has not generated. Apparently, for the next four weeks he has a little "tidying-up" to do on the last project.

Alison

An experienced person with some specific skills needed on this project. Her release for this project is full time but apparently this has been imposed on her line manager who is not happy about the situation. You expect this to lead to some conflict problems about work prioritization as her line manager continues to try to assign her work. She has been with the organisation since leaving university and although she has worked in various departments during the past ten years, there has been no significant increase in her responsibilities. She is a popular person and very participative in the social activities in the organisation.

Ian

You asked for Ian, knowing that he has a detailed knowledge and interest in the project. He is a quiet, academic type with an analytical approach which you feel will be valuable to the work ahead. Like many academic types he often gives the appearance of being quite disorganised. Ian will give 60 per cent of his time to the project and, having two people reporting to him, can easily pull in additional resource support.

Dave

He is a young business graduate almost at the end of his first year with the organisation. His manager requested his assignment to the project as an opportunity to experience project work under your guidance. What he lacks in experience is made up for by his enthusiasm and keenness to learn. He will be full time on the project.

Janet

Janet is a very competent analyst who joined the organisation from a competitor two years ago, bringing with her a good knowledge of the market place. Her marketing experience has quickly gained her a reputation in the organisation and her opinions are highly regarded by the directors. She has a strong commitment to her work and is intolerant of poor quality work and incompetence. She will be assigned 70% of her time to the project, but must give time to her work associated with another project launching a new product.

After some discussions with your project sponsor you accept who is to join the project team and you review the information you gather about each. You then decide the first step is to get the team together, so you prepare a short memo asking them to attend an initial kick-off meeting five days from now. Having issued the memo you organize a meeting room and start thinking about the problems you may face and how you will conduct this meeting.

Case Study – Scenario 1

1. Identify the issues that you think you will have to address from the knowledge that you have at the moment about the project and the people involved.
2. The day of your first team meeting has arrived and is due to start in half an hour. Everyone has confirmed their attendance. They have no details of the project except that they have been told that the project assignment will be for 12 months. Your sponsor has also confirmed he will be present. A good strategy for this kick-off meeting is:
 - a. Explain the project overall objectives and ask them for their ideas and suggestions to identify how to approach the project.
 - b. Ask the sponsor to introduce the project and emphasise the project context and importance to the organisation. Then introduce your thoughts on the processes to follow for the project.
 - c. Explain the technical details of the project and what is expected by the organisation. Focus the team to discuss how these can be achieved.

Case Study – Scenario 2

At your project kick-off meetings your project sponsor has described the organisation's expectations of the work that you and the team must carry out. In the discussion that follows the team identify that the deliverables of the project for the named customer will be very similar to those required by another internal customer. Although the project has been initiated by one customer you should:

- a. Decide to ignore this information as it is only based on rumour and is not a formal request for a project. Focus the team on the known customer.

- b. Assign tasks to the team to determine unofficially if a competitive project is about to start.

- c. Tell the team you will send a memo to all divisional managers informing them about this project and ask them directly about their possible future interest.

OR

Is there another option you would take?

Case Study – Scenario 3

You have called the team together for a brainstorming session to assess the risks. As the meeting progresses, Janet seems to become increasingly negative about the project, saying that the risks are now so great that the project should be aborted now. This is having a negative effect on the rest of the team. You should:

- a. Ignore the negative opinions and encourage the team to continue. Have a word with Janet after the meeting.

- b. Focus the team on the challenge ahead, reminding them that all projects have risks and it is everyone's responsibility to identify the risks and focus on avoiding them as much as possible.

- c. Close the meeting and continue the risk assessment without team involvement, making a decision to reconsider whether the negative team member should remain in the team.

Case Study – Scenario 4

You have brought the team together for the first planning session having told them last week of the meeting date, asking each to think about the project and the work that they feel may be required. As you open the meeting, Graham tables a draft plan with all the key stages of the project derived and durations added to give the desired completion date. You are surprised but must now decide to:

- a. Thank Graham for his efforts and ask the rest of the team to review the draft plan to seek a consensus view of its accuracy. Make a note to talk to Graham later about teamwork.

- b. Thank Graham but diplomatically set his plan to one side and ask each team member to develop their own plans for their part of the work for discussion at another meeting of the team tomorrow.

- c. Accept the plan and ask each team member to use it to develop their detailed parts of the plan within the fixed timescales of the draft plan.

Case Study – Scenario 5

Your team is having some difficulty laying out realistic schedules to meet the customer's expectations. You are being asked many questions and they seem to be approaching the scheduling in the right way but are having trouble coming to consensus decisions. The detailed planning is taking much longer than you expected, so you should now:

- a. Leave the team to carry on with their work and eventually come to a conclusion as they will learn from the experience.

- b. Give the team your ideas on how to resolve their problems and hope that this will encourage their own creativity and lead to effective schedules.

- c. Participate in the work yourself and facilitate the planning until an acceptable schedule is derived.

Case Study – Scenario 6

The second phase of the project is a significant proportion of the work involving several people in a particular department. They have all been closely involved in planning this phase. The manager has sent you a memo asking for your performance evaluation of all his staff assigned to do project work. Your team have been working closely with these people, so you should:

- a. Respond promptly and point out that performance issues are part of his or her job, not yours.

- b. During your one-to-ones with team members, make this an additional responsibility for them and seek their evaluations for your report.

- c. Call the team together and tell them of the request. Then work together to evaluate each individual assigned and agree what to report.

Case Study – Scenario 7

The customer unofficially informs you that he has a problem and this could result in some changes to the requirements. This could spell disaster for your project. The customer has asked for a meeting within the next week at your office to discuss the details. To prepare for this formal meeting you should:

- a. Call an immediate meeting of the team and ask them to prepare an agenda for the meeting, identifying the issues to discuss.

- b. Ask the team to improve productivity before the meeting as this would impress the customer and show that you are doing a good job.

- c. Ask all of the team to ensure that all their reports and project records are accurate and updated and prepare status reports for all key stages of the project.

OR

Is there another action you would consider?

Case Study – Scenario 8

You have completed the first phase of the project and the results and outputs were not quite what you expected. This affects the estimates for the next phase and highlights that your original estimate were too optimistic. You are now facing a probable slippage of two weeks to the project completion date. Your customer is not going to be happy about this, so you must:

- a. Ask the team to meet and seek some way of improving their productivity for the next phase, hoping they will come up with a solution.

- b. Ignore the slippage at this stage. These problems occur in projects and eventually sort themselves out. You feel that you can still motivate the team to meet the completion date.

- c. Call a team meeting and emphasize that this is a crisis for the project. Work with the team to review the estimates and the project logic to find a way to restore the scheduled completion date.

Case Study – Scenario 9

You are now three-quarters of the way through the project. You have accepted some earlier customer changes and rescheduled the project to everyone's satisfaction. You now receive a call from the customer asking for an immediate assessment of the consequences of canceling the project immediately. It is stated that another project is planned and you may be given the job. You should:

- a. Decide not to involve the team at this stage as the work is progressing very well. You have had these scare messages before and nothing has resulted. Review the consequences yourself.

- b. Call the team together, expose the request and assess the risks and possible consequences, stressing that work must not be suspended as these things often happen.

OR

Is there some other action you can take?

Case Study – Scenario 10

Your team has taken a very optimistic approach to the project schedule. Some line managers have refused to support these schedules. Your team expected to be involved in discussions to optimize the schedules and reach mutual agreement. You feel you might need to get involved and should:

- a. Ask the team to meet and discuss ways to resolve the conflict and derive possible solutions. Stress you are available for advice if necessary.

- b. Meet with the line managers to understand why they have rejected the schedules then call a special team meeting and resolve the conflict by changing the schedules.

OR

Is there another option?

Case Study – Scenario 11

You are becoming increasingly concerned about Ian's performance, which seems to be deteriorating. He is a very quiet, almost introverted type and you are unsure whether he has a personal problem or is finding the work pressure too high. You should:

- a. Call a team meeting and open a discussion about how performance and productivity is not as good as at the outset. Ask the team to derive some ideas for action to improve things.

- b. Do nothing for now. It may be a personal problem which will work itself out and performance will be restored to recover any lost time.

- c. Have a one-to-one discussion with Ian and try to get him to see his own performance issue. Try to help him to understand the real cause and how to derive a solution.

Case Study – Scenario 12

At a regular progress team meeting it becomes apparent that one particular department is having difficulty meeting deadlines. Data and reports eventually get issued but usually late and this is frustrating the team. It appears that all documentation is being channeled via the manager's desk, leading to hold-ups. This manager has a reputation for such behaviour, insisting she sees everything leaving her department. She has apparently caused this problem on other projects over the past three years and insists on running her department this way. You should:

- a. Set up another team meeting later the same day to find ways of obtaining the project data and reports without interfering with the departmental policies.
- b. Ignore the issue and treat it as a common and normal difficulty of project work. The data and reports do get through eventually.
- c. As the project manager, make a note to seek a one-to-one discussion with the manager right away to resolve the issue and ensure that your team get the reports on time.

Case Study – Scenario 13

You are entering the final phase of the project with six weeks to the completion day. Alison informs you that her manager has offered her an opportunity to be the project manager of a new project set to kick off in two weeks. She is excited about her first real increase in responsibility in her ten years with the company. Alison has come to see you and has asked to be released from your project. Should you:

- a. Call a team meeting immediately, tell them the situation and lead a discussion into how this will impact on the project and what solutions they can derive to take on Alison's workload.

- b. Have a one-to-one discussion with Alison and stress how important it is for her to stay with your project through to completion. Explain how you think her departure could threaten the project.

OR

Do you have another option?

Case Study – Scenario 14

So your project has finally reached hand over point. The team feel justifiably pleased with the results and the customer seems to be happy. You know that there is one final thing to do: evaluate the work done and produce a final report. This could lead to more projects for you and the team, so you:

- a. Tell the team they have done a great job and there is now one task remaining, Ask them to meet and evaluate the project and then agree the outline, structure and contents of the final report.

- b. Call a team meeting and conduct a structured evaluation, then explain the structure of the report and assign tasks for individual sections to the team members. The final report should reflect on your leadership ability and everyone's performance.

OR

Do you have another option?