Project Management
Sample Templates and follow up information

1. **Business Case/Project Proposal**
2. **Project Management Plan**
3. **Planning and Scheduling - Critical Path, Gantt Charts**
4. **Delegating tasks - Responsibility matrix**
5. **Changes to a Project (and sample Change Control form)**
6. **Risk Management Process (and sample Risk Log)**
7. **Issue Management Process (and sample Issue Log)**
8. **A note on cost estimation**
9. **12 Factors for successful handover of a project**
10. **Glossary of Project Management Terms**

1. Business Case/Project Proposal

This is done at the start of the project to justify doing the work, to answer the question 'why do this project?' The project Sponsor will own and approve this. If you are contributing to this document, here are some suggested key headings (amount of detail depends on size/complexity of project)

- Outline description of the project (and how this links with the wider business objectives - ie the background and why the project needs to be done)
- What different options have been considered and which one recommended
- Business benefits expected of the project. These could include financial or employee benefits, improved efficiency, customer satisfaction etc.
- The key products/things to be delivered by the project (and how these will be measured)
- Risks to the project - things that might hamper or stop your project
- Outline of Scope, timescale and costs
- Organisational issues - who will do the work, who is the sponsor/owner
- Financial appraisal - investment required, payback, profit/savings projected

This should all be agreed/approved to move onto more detailed planning.

2. Project Management Plan

The Project Management Plan is the main document giving the detail of a project and it will be referred to throughout. Some organisations have a similar document named a Project Initiation Document. If you are preparing or contributing - here are areas that should be considered. Amount of detail will depend on the size of the project and on your organisation needs.

WHAT
Objectives
Definition

scope *(with work breakdown structures etc)*
Products and outcomes to be delivered *(with acceptance criteria)*
Project Success Criteria/Key Performance Indicators
Constraints and dependencies *(what are we constrained by? what's feeding in)*

WHY
Need, problem or opportunity
Business Case

WHEN
Lifecycle phases
Overall time plan
Key milestones - *may also link to £*

HOW
How are we going to measure ...
Quality Policy and Quality Plan
Risk Management Plan
H&S Policy, Plan
Governance *(link project with wider strategic or company aims)*
Procurement Plan (*following your company procedures)*
Comms Plan and reporting *(who, when how often, about what and what do you want people to do with the information)*
How project will be handed over and integrated into business as usual
Levels of monitoring and control
Budget
Cost Management

WHERE
Geographical Location

WHO
Project Roles and Responsibilities
Responsibility Matrix and Organisational Breakdown Structure
Stakeholder Lists

3. Planning and Scheduling - Critical Path

Where work is well defined, you can analyse by -

1. creating a logical model of how the work will be performed;
2. estimating how long each activity might take;
3. calculating timings for the activities when joined together;
4. presenting the results.

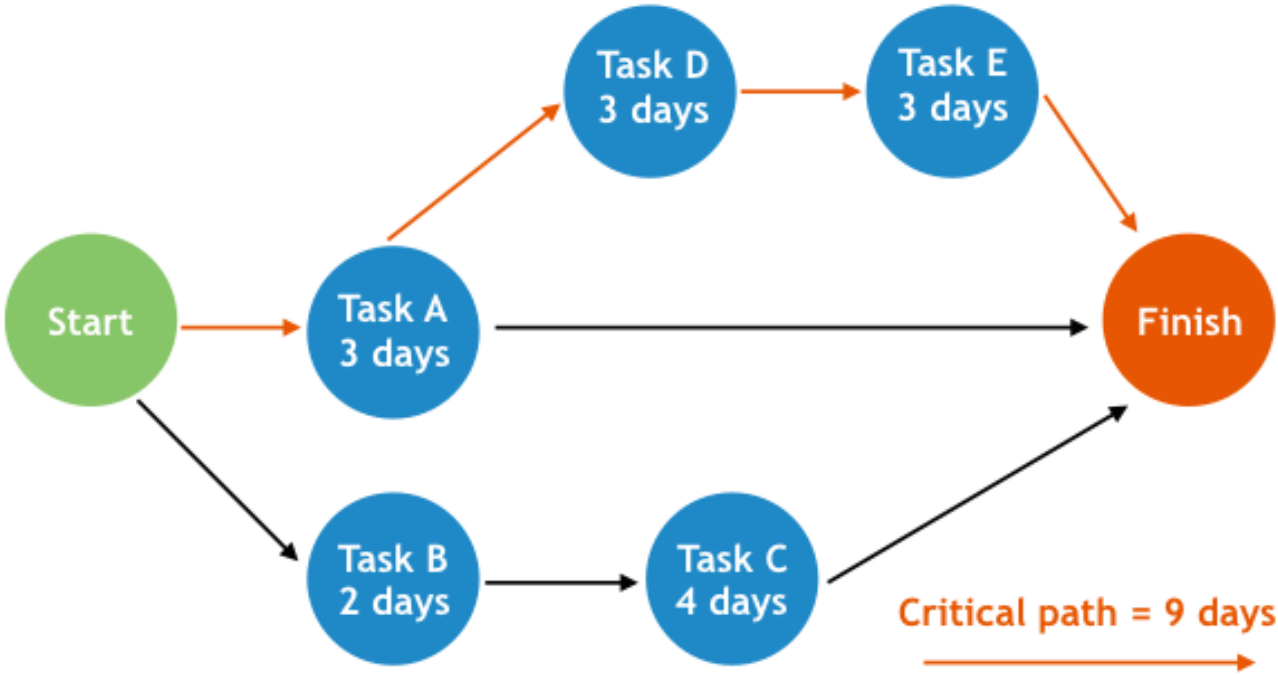
You will need to consider things such as the efficiency of resources, and physical constraints (eg restricted working if several tasks taking place in one area).

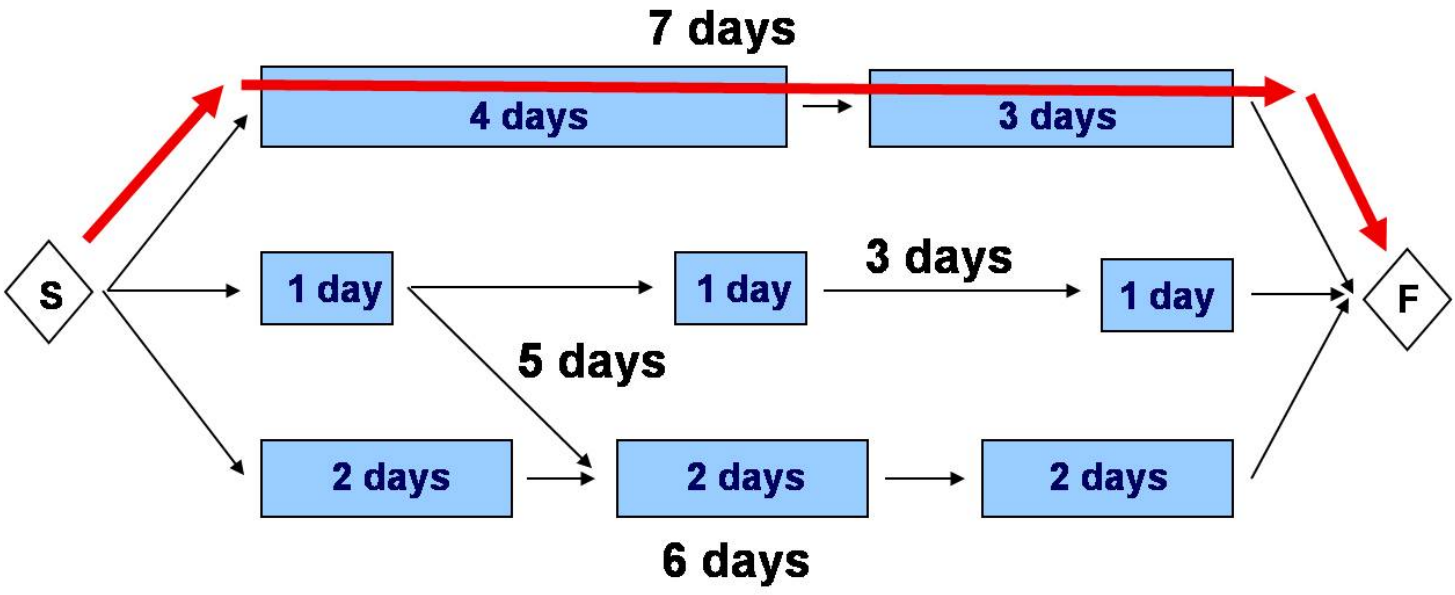
The simplest form of calculation is critical path analysis. This calculates earliest and latest dates for the performance of each activity and therefore the overall duration of the project. It then calculates the amount that individual activities can be delayed without

affecting the project finish. This is known as float time. The longest path (or paths) through the network is called the critical path and is made up of activities with the lowest total (or no) float time

Below is a link to an online source that I think provides a useful outline of critical path and how it can help you schedule and plan effectively. *(the site asks if you want to sign up - you don't need to, the information is right there and is a good explanation of the process)*
https://www.smartsheet.com/critical-path-method

Sample Critical Path Diagrams



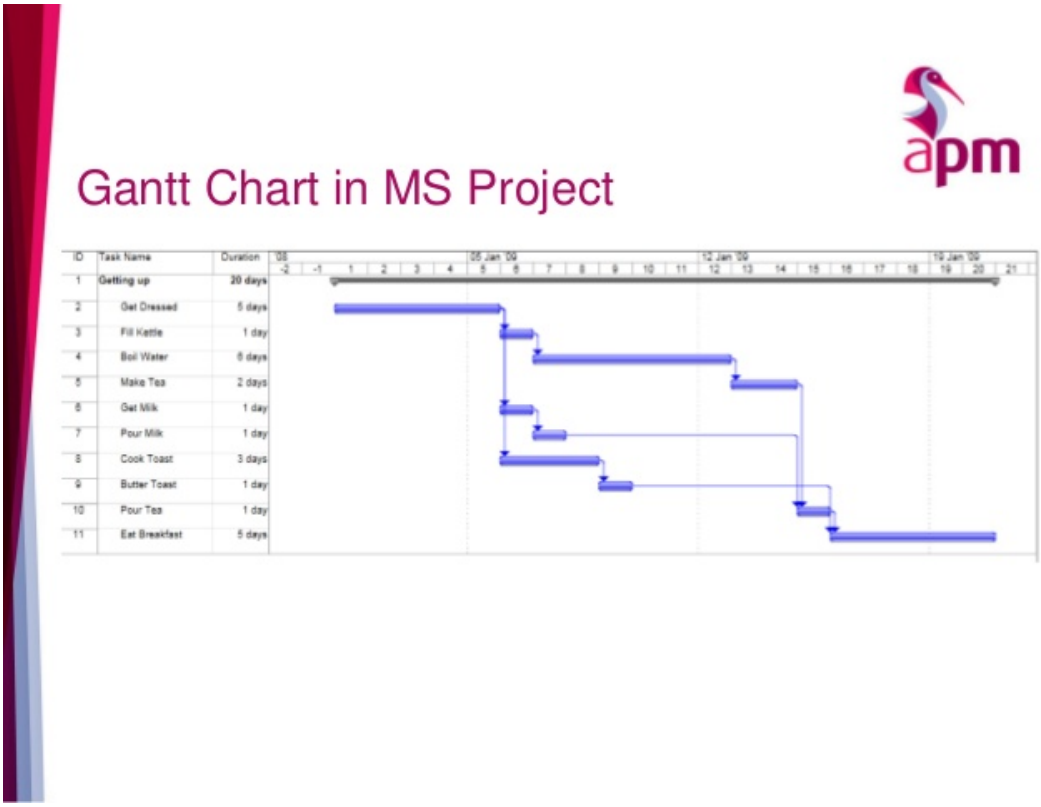


A schedule agreed by the team is more likely to succeed than one imposed from above. Make sure that the amount of time for each task is agreed and timings communicated to minimise disruption. Put these linked tasks with timings into your project planning document so that you can effectively monitor.

A note on using Gantt Charts to plan

- A Gantt Chart is a simple form of bar chart
- Bar length indicates duration
- Tasks are usually positioned at earliest dates showing any float at the end
- Shown with or without logic connections
- Can be rolled up into summary tasks and show milestones.
-

Below is given a simple example of a Gantt Chart from APM. If you search on their website there is more information on scheduling, including a presentation that explains how to schedule, and use of Gantt Charts.



4. Delegating Tasks - Responsibility Matrix

The simplest way to allocate work packages and tasks is a RESPONSIBILITY MATRIX (sometimes called a RACI matrix) showing who is
R*esponsible - actually doing the task*
Ac*countable - for the task being done, eg Project Manager accountable to Steering Group*
C*onsulted - who needs to be asked, consulted, involved in discussion, who can give advice*
In*formed - who needs to know it has happened/been done.*

There should only be 1 person accountable and ideally one person responsible - not a team. If you have more than one person it may not get done. It is useful for a project manager when allocating work and you can also use to help plan any chunks of work. You can add other headings - eg Supporting (who is helping with the task) or Sign Off (to show whether needed or not).

Examples of how people have used:

- to show tasks in a process clearly and know who is responsible, who wants to be consulted, who needs to be informed. This might make you think of other people who are not present but need to be involved, it can also help newer/less experienced team members have an idea where to start with a task.
- to show overload/someone taking on too much
- to start a discussion if someone isn't engaged/doing fair share
- to clarify how many tasks are being done by certain dates, and if that is realistic - can either shift dates or shift responsibilities etc
- a team or individual can use to show all the responsibilities they have (maybe across different streams of work/projects) when arguing for resources or changes. eg an IT person may be asked to do work on 5 projects and also has BAU work to cover
- to clarify who is taking on responsibilities when someone is on sick/annual leave (eg a health and safety manager may need to know everything is covered and have that clear for all to see/sign off when done)

Steps to Plot a Responsibility Matrix

1. Identify all the tasks and activities you want to allocate.
2. List the tasks in the left hand column of your matrix. Focus on project tasks, milestones and key decisions.
3. List everyone participating in the project along the top of the matrix.
4. Agree with each participant their association (Responsible, Accountable, Consulted and Informed) to each task).

Example of a very simple responsibility matrix

RACI Chart

Activity	Project Sponsor	Project Manager	Project Team	Department Manager
Prepare Bill of Materials		A	R	C
Prepare Estimate	I	A	R	I
Authorize Expenditure	R	I	I	I
Send Procurement Documents		R	C	
Evaluate Bids	A	R	C	
Perform Inspections	I	A	R	

R = Responsible A = Accountable C = Consult I = Inform

5. Changes to a Project

The Project Management Plan provides baseline information on the project scope. Some change is often required as shortfalls are uncovered and project progresses. Uncontrolled change can impact on other areas (eg a change to timings may impact on quality) or threaten the success of a project, so needs careful consideration.

Whilst change can be proposed by any stakeholder, it is important to **keep a history of changes to the scope of a project** (so that people can see where the project has changed, if they are joining part way through, or for review of effectiveness). Any contractual changes need to receive very careful consideration to avoid legal problems.

Sample Change Request Form
PROJECT:
ITEM AFFECTED: Name Work Package Change Requested by
DESCRIPTION OF CHANGE
REASON FOR CHANGE
ITEMS/AREAS AFFECTED BY CHANGE
ESTIMATE OF COST/SAVINGS
ESTIMATED IMPACT ON SCHEDULE
REMARKS
CHANGE APPROVED/REJECTED Signed Date Signed Date

6. Risk Management Process

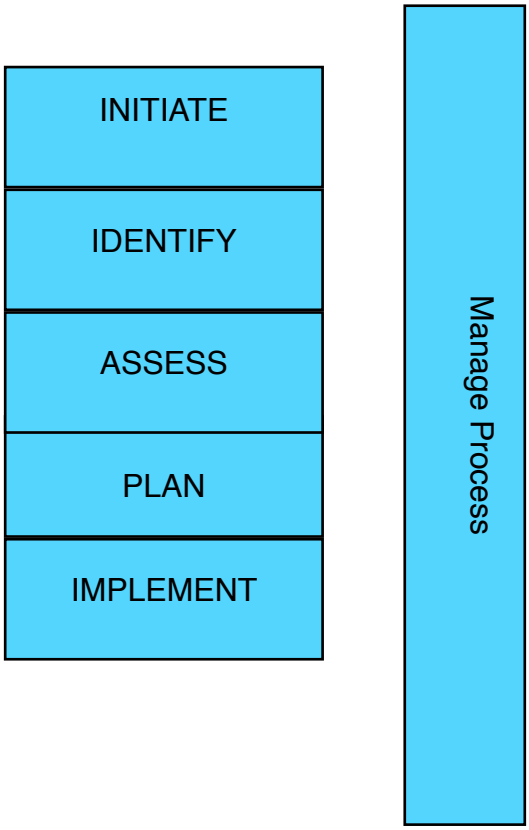
Get the right people involved

Actively look for risks

Assess their threat to the project

Plan whether to Defer, Avoid, Accept, Transfer, Reduce

Formally agree what to do and communicate this to others on the project



Sample risk log

ID	Risk	Originator	Date	Owner	Probability	Impact	Risk Score	Others?

Can also use High/Medium/Low or Red/Amber/Green to rate.

Keep a list of all risks and revisit regularly to see if rating is changing and if different action is needed.

7. Issue Management Process

Anyone can identify an issue

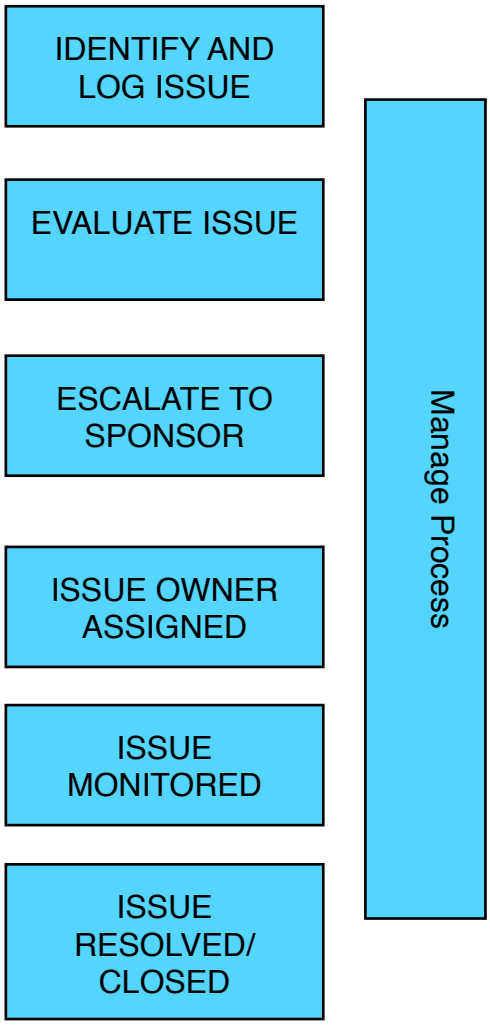
PM and team need to examine the impact and potential resolutions

Sponsor may make decision or may escalate to Steering Group

A person is given responsibility to work on the issue with a date to report back

PM makes sure this happens

When resolved, important to keep a record for review and lessons learned



Sample Issue Log

Issue No.	Description	Raised by	Date raised	Consequence or Impact	Possible resolution	Owner	Outcome	Date issue closed

8. A note on cost estimation

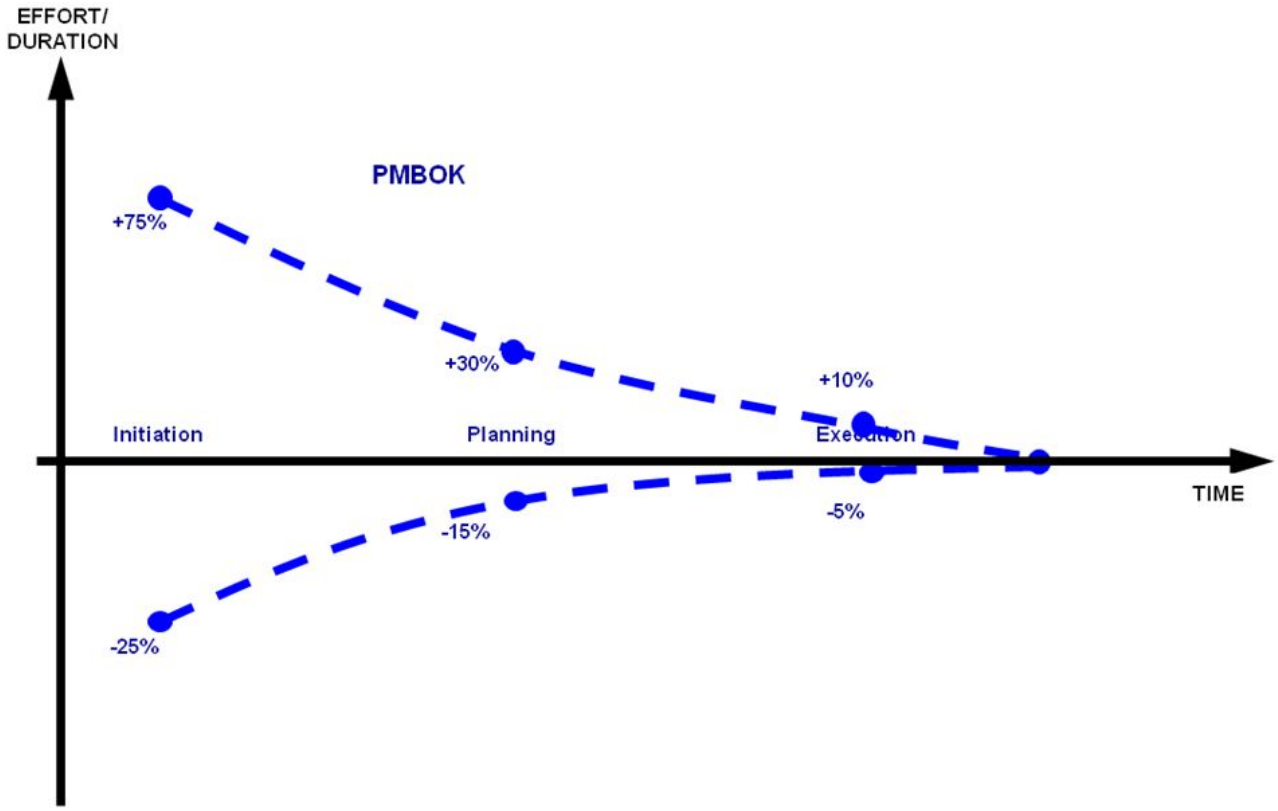
There is always a degree of uncertainty in estimation and you will be asked questions you that can't be answered at the very beginning of a project. It is sometimes impossible at an early stage to give detailed and clear costings on how everything will be designed and built - as you first need to get clarity on scope (will the customer want feature a? or feature b? or both?) and work out pricing for staff resources and materials.

Since all of these inquiries cannot be clarified at the very beginning of the project, they add a considerable “white noise” factor to all of the estimates. Even though things are uncertain people want definitive answers on budget. Cone estimating can give some assurance with some flexibility.

Guide to the Project Management Body of Knowledge (PMBOK) guidelines for estimation states that recommended estimate ranges are:

- +75/-25% for the Initiation stage
- +30/-15% for the Planning stage and
- +10/-5% for the Execution and Control stages

In other words if the actual cost of the project turns out to be $100,000, it is absolutely acceptable for the project manager to provide the customer with an initial estimate ranging from $75,000 to $175,000 BUT plans need to show how and when that will get narrowed to more definitive costings. If there is no flexibility in budget, use MOSCOW prioritising to help give some flexibility around what you are promising.



9. 12 factors for the successful handover of projects

A recent study from the Association for Project Management Research Fund identified factors that have been in place on multiple projects that handed over successfully to business-as usual. If you have these things in place you are more likely to have a project that can be useful for your organisation.

Commercial/Contractual

1. Requirements should be written into tender documentation/contracts in as much detail and as specifically as possible including engagement requirements, data environment and any standardisation of equipment or product that the client requires.

2. Whole life cost must be considered if at all possible. Does spending more now have an impact on the overall operating cost of the project throughout its life.

3. Incentivise success. If a scheme is well delivered, this should reward all parties.

Process

4. Handover is a process not just a date. Planning for it should be from the start of the project and it should be viewed as an incremental transfer of knowledge and operation from project team to business-as-usual.

5. The benefits and deliverables must be measurable and communicable from the start. Ask why are we doing this project and how will we know when it is done?

6. Involve end users from the outset. Through stakeholder analysis, understand who will benefit from the project, who will be required to facilitate the delivery of the benefits and how the project outputs will impact their role.

Data and knowledge transfer

7. Documentation must be written for the end users. It may require different sets of documentation for different users but for documentation to support knowledge transfer it needs to be meaningful, applicable and relevant to the end users.

8. Collate lessons learned as the project progresses. It provides more meaningful data for future projects, it can be tied to stage gateways or key deliverables.

9. Agree the information requirements at the outset. This ensures all parties have a clear deliverable, know what is expected of them and work towards achieving the goal from the start of project.

People

10. Often overlooked but put simply get good people on your project and keep them for as long as you are able.

11. Definition of stakeholders should be carried out throughout and in detail. Who will be impacted by the project and who is needed to make it a success?

12 The client role is pivotal including client engagement.

10. Glossary of some commonly used Terms and Acronyms

TERM	DESCRIPTION
Baseline	The reference levels against which a project is monitored and controlled
Benefits Management	The identification, definition, planning, tracking and realisation of business benefits.
Benefits Realisation	ensuring the outcome of a project produces the projected benefits
Breakdown Structures PBS WBS CBS OBS	Hierarchical structures by which project elements are broken down and shown. eg *Product Breakdown Structure* - focuses on the products/things to be delivered *Work Breakdown Structure* - focuses on the work/activities needed to ensure products are delivered *Cost Breakdown Structure* - focuses on all the project costs throughout the lifecycle *Organisational Breakdown Structure* - assigning resources to work packages to show who is involved
Business Case	Provides justification for undertaking a project. Evaluates benefit, cost and risk of alternative options and provides a rationale for preferred solution
Change Control	Process for requests to change the scope of a project are captured and evaluated, then approved, rejected or deferred
Change Register	A record of all proposed changes with information on decisions and actions
Comparative Estimating	Estimating technique based on the comparison with, and factoring from, the cost of similar previous work
Configuration Management	Activities concerned with creation, maintenance, controlled change and quality control of the scope of work

TERM	DESCRIPTION
Critical Path	A sequence of activities through a network diagram from start to finish, the sum or durations determines overall duration. (there may be more than one such path)
Critical Path analysis	Procedure for calculating critical path and floats (extra time available) in network diagram
Deliverable	Products or packages of work to be delivered to and formally accepted by stakeholder
Dependency	Relationship between activities in a project
Gateways	The point between the different phases of a project where you can review, learn lessons and decide whether to move on to the next phase
Governance	The set of policies, functions, processes and responsibilities that define the establishment, management and control of projects
Issue	Formal issue when a problem occurs which will cause disruption or possible failure of the project. This triggers escalation to next level of management.
Lessons Learned	Documented experiences that can improve future projects - it is good practice to note these throughout the project, rather than just at the end
MOSCOW	Must, Should, Could, Won't haves - useful for prioritising and negotiation
Network Diagram	Diagram or model of activities, showing links/dependencies
Objectives	Predetermined results. Outputs, outcomes or benefits. Must be measurable.
Output	Products delivered by a project to achieve desired project outcome
Outcome	Desired end result/s of the project
PESTLE	Political, Economic, Social, Technological, Legal, Environmental - these are the areas which need to be considered when drawing up a Business Case and when looking at risks/ opportunities to the project. Some people use STEEPLE which has Ethical added in to the above list.
PMP	Project Management Plan - pulls together all the plans for the project

TERM	DESCRIPTION
Project Lifecycle	the inter-related phases of a project which provide a structure for governing the progression of work. The four main phases of a linear lifecycle are Concept, Definition, Deployment, and Transition An Extended Project Lifecycle would also contain the Business Benefits phase.
Project Sponsor	The project is undertaken for the sponsor, is accountable for ensuring the work is governed effectively and is the primary risk taker. The sponsor needs to ensure that the project remains viable and that benefits are realised.
RAG rating system	The RAG system is a popular project management method of rating for issues or status reports, based on Red, Amber and Green colours used in a traffic light rating system.
Risk	A set of circumstances that (should it occur) will have an affect on achieving one or more project objectives
RAID log Risk Log Issues Log	Log containing information on Risks, Assumptions, Issues, Dependencies of the Project. Logs can be done simply for Risks or Issues
Responsiblity Assignment Matrix (RACI)	Chart showing assigned responsibilities for elements of work (result of work breakdown structure - tasks to be done - with organisational breakdown structure - people to be involved)
Stakeholders	Any person or organisation with an interest or role in the project, or who is impacted by it

And finally.... no matter what level of planning you undertake, make sure you agree tasks with people - and ensure enough information and resource to undertake the task

