Planning and Managing Projects

(V3)

A Guide To Assist
In The Effective Planning
And Management Of Projects©

Rus Slater
www.coach-and-courses.com
Spring 2009

Welcome!

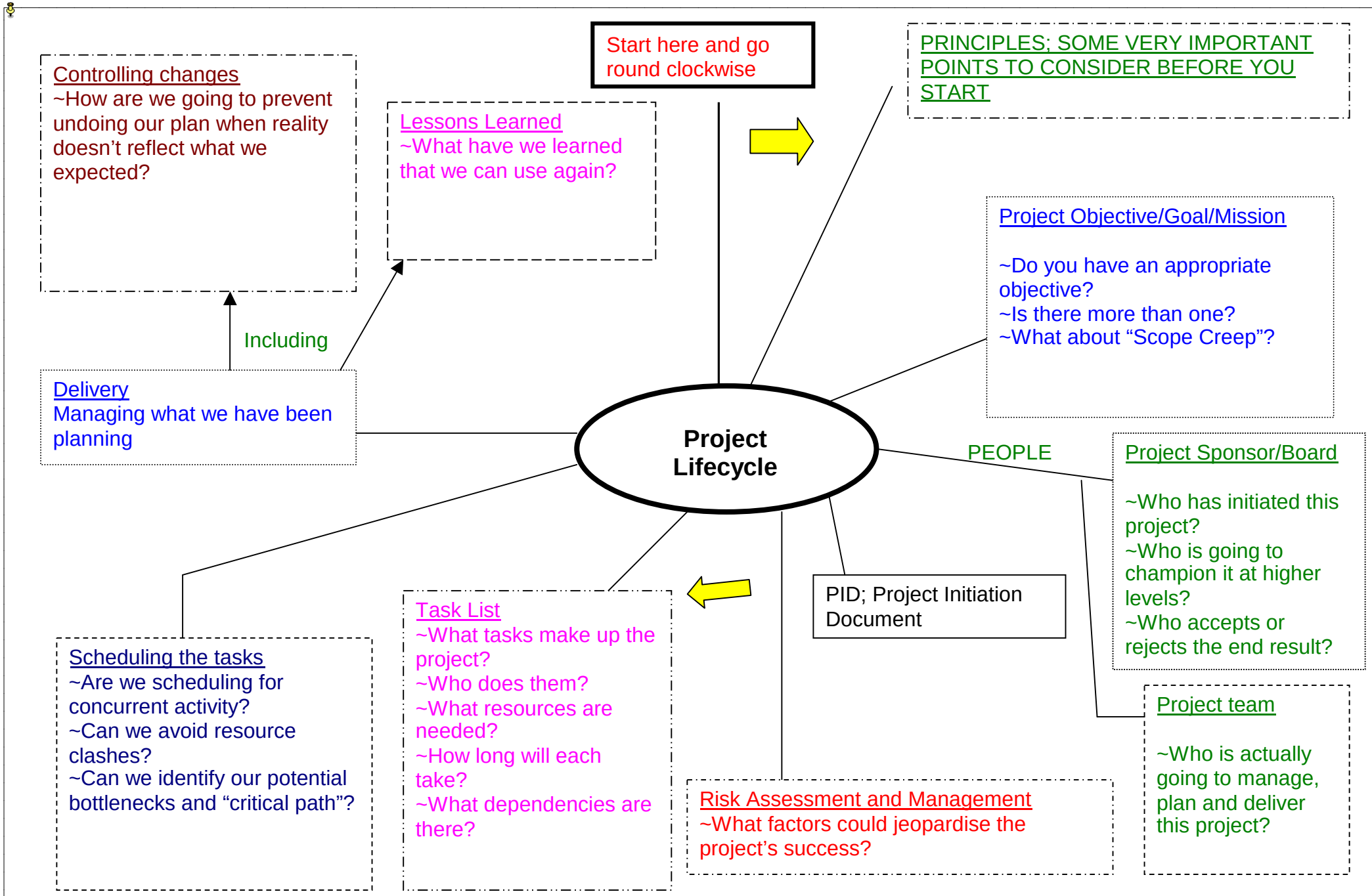
Welcome to this Guide for Planning and Managing Projects, this book is aimed at people who ***either***:

~Haven't managed projects (or been trained to manage projects) before and are about to take on that responsibility as their primary role,
~Aren't going to be full-time project managers but will have to manage projects from time to time
~Have been selected to manage a specific, one-off project and want to get it right first time.

Our world has become more "target orientated" over the past twenty years and so more and more of our work is deemed to be a "project" with a specific end goal and time frame. Unfortunately "Project Management" as a generic subject has tended towards the monster projects that Governments and global corporations initiate, it has also tended towards the IT world where many of these projects exist. Consequently a lot of project management training, books and material is aimed at these multi million pound, several year projects and is too cumbersome for most of us. A prime example of this is the excellent PRINCE and PRINCE 2 project management method (PRojects IN a Controlled Environment); it is great if you are developing a Europe wide border control software system with integrated face recognition and real-time camera download, with a project budget of Euro 8.4 bn and a lifecycle of 6 years. For an office relocation, design makeover, bridge build or product launch it is a 500-kg demolition ball to crack a nut!

This programme aims to take the fundamentals from this type of comprehensive method and make it user friendly for more everyday use.

On the following page is a diagrammatic representation of the Project Lifecycle, it sets out in a form of logical order, the chapters of this book:


Start here and go round clockwise
PRINCIPLES; SOME VERY IMPORTANT POINTS TO CONSIDER BEFORE YOU START
Controlling changes
~How are we going to prevent undoing our plan when reality doesn't reflect what we expected?
Lessons Learned
~What have we learned that we can use again?
Project Objective/Goal/Mission
~Do you have an appropriate objective?
~Is there more than one?
~What about "Scope Creep"?
Including
Delivery
Managing what we have been planning
Project Lifecycle
PEOPLE
Project Sponsor/Board
~Who has initiated this project?
~Who is going to champion it at higher levels?
~Who accepts or rejects the end result?
PID; Project Initiation Document
Task List
~What tasks make up the project?
~Who does them?
~What resources are needed?
~How long will each take?
~What dependencies are there?
Scheduling the tasks
~Are we scheduling for concurrent activity?
~Can we avoid resource clashes?
~Can we identify our potential bottlenecks and "critical path"?
Risk Assessment and Management
~What factors could jeopardise the project's success?
Project team
~Who is actually going to manage, plan and deliver this project?

Principles; Some Very Important Points To Consider Before You Start

Though some of these points may seem, initially, to be "no-brainers", they are all issues that have caused projects to go disastrously awry.

1. **Is this actually a "project"?**
   A project is a temporary and one-time endeavour, undertaken to create a unique product, outcome or service, which brings about a contribution to a specified benefit. A project is unique; it is not a part of an ongoing business process, neither is it a repeated event in the business calendar. A project produces a result that is different from "business as usual". A project has a finishing date. If you are currently addressing an issue that doesn't fit this paragraph you don't have a "project"; by all means proceed, for the methodology here may help, but proceed aware that you *may* find some difficulties

2. **Is there a robust justification for this project, which is clearly articulated?**
   (This is often referred to as the Business Case) Any project MUST have a robust justification. Many projects are initiated on a whim or a fad by a senior member of the organisation, the danger, therefore, is that if the fashion changes or the "flavour-of-the-month" is superseded by a new fad, the project loses support. Similarly if the project has been initiated by someone who knows the real genuine justification, but hasn't ensured that everyone else understands it, then the project is reliant upon that person's continued support.
   In either of these cases should the person who initially started the impetus for the project leave, or move to another role, the project may well flounder.
   Any robust justification should include a cost/benefit analysis, bearing in mind that there may be costs and benefits that are not easy to quantify on a spreadsheet.
   The justification or business case may form the basis for several separate projects depending on its nature and size

3. **Where does this project start and stop?**
   This sounds ridiculous unless you consider some examples; if the project is to manage an office relocation for example, does the project start at dawn on the day of the move with the vans arriving, or does it start with the packing of the stuff to be moved? Does it include allocation of desk spaces in the new building during the planning stage, and does it stop when the boxes arrive at the new office or does it include the unpacking and filling of drawers and shelves.

Planning the Project

Project Objective/Goal/Mission

~Do you have an appropriate objective?
The project objective, goal or mission should not be confused with the justification; the justification may be "To save £X,000 per annum in rent, staffing cost and tax breaks by relocation to a Government Regeneration Area" whilst one project arising from this justification may have an objective; "To move the company's operation to 43 Winwood Street, Livercastle upon Exe, over the weekend of the 16/17th of January 200X, ensuring we are fully open for business at 0900 on the 18th of January"

The objective for a project should be SMART:
-**Specific**: so there is no "grey areas" regarding what the objective is. Are we trying to "Cross the River" or "Build a Bridge"?
-**Measurable**: so that we can assess the success of the project on completion. We will need to assess whether the project met its objective and, if it exceeded or missed it, by what amount. Measurability must also include the cost/benefit aspect; ie the budget for the project; there is usually little or no point in a project going overspent….
-**Achievable**: so that the project team do not believe they are charged with a "forlorn hope". The project team should have input to the plan in terms of its composition, duration and quality targets. All too often someone takes an informed guess at the duration and budget for the project and that gets set in stone, before the detailed plans are laid. Projects plans are then shoehorned to fit dates and budgets. Where the dates and budgets are *necessarily* set before the team lays the plan, then the *resources* must be calculated according to the fixed targets.
-**Relevant**; to the business case or justification; this is a good time to test the justification!
-**Timebound**: so we know exactly when to expect delivery of the project outcomes. (see "Achievable" above)

~Is there more than one?
A project may have more than one objective in extreme circumstances but it is likely that different objectives will call for different project teams. Consequently it is more credible that each objective will be handled by a different team, as a discrete project, all projects contributing to a "programme".

~What about "Scope Creep"?

"Scope creep" is the term for the slow, evolutionary expansion of the objective of a project during its lifecycle. For example, you start with a project to design a website for the company simply to provide market presence, than you are asked to add a shop, then a password protected supplier facility, then a staff information service, then a customer feedback section. At no time did the budget, team or timeframe change. Scope creep can be avoided by having a SMART objective up front, then each request can be assessed against whether it falls within the parameters of the project, if "No" it can only be added if there has been an adequate assessment of the impact of adding it part way through, and when appropriate changes have been made to the plan to accommodate that impact. This process is called "Change Control" and is considered later in this manual.

People

Project Sponsor/Board

Every project needs a “sponsor”
The sponsor is *normally* someone who is

a) Significantly higher in authority than the project manager or his/her team
b) The person who is going to measure, and probably take credit for, the outcomes, when the project achieves its objectives and the benefits identified in the justification/business case come rolling in
c) The initiator of the project, or the person who got it it’s blessing at the most senior level
d) Prepared to champion this project at senior levels when the project is challenged or jeopardised by other priorities or when the project runs into problems and extra resources are needed.
e) In some cases the sponsor will be the client.

The project manager will need to keep the sponsor regularly updated on progress and potential problems on the project so that the sponsor is fully able to handle any questions or challenges immediately

With smaller projects there is usually only a need for a sponsor but with larger projects, or projects that require cross-functional teams you may want a “project board”.

A Project Board may consist of senior representatives from the departments with most input/commitment to the project as well as the departments who stand to gain most.
For example, if a project aimed to organise the setting up of a sales subsidiary in a neighbouring country the Project Board might consist of the Finance, HR and Marketing Directors. If a project is to build an extension for on a home the project board might be the couple that own the house. You probably would actually refer to them as the “project board” though!

Project Manager

~Who is actually going to manage, plan and deliver this project?
Sometimes, with a very small project, this will be one person: managing, planning and delivering the whole thing alone, over a short period. In these cases the person will need all of the skills below. Generally, however, there will be a team with a Project Manager at its head.

The choice of Project Manager is quite crucial; the project manager needs to have particular skills:

Multi tasking-to handle the issues across the entire range of tasks/resources and people on any one day
Logical Thinking-to plan the progress of the project
Lateral Thinking-to see where activities can be managed concurrently
Commercial awareness-to oversee the whole project in a cost effective way
Numerical Acumen-to juggle the financial and resource aspects of the project (more on this later)
Communication Skills-to deal with the team, the stakeholders and the suppliers to the project efficiently
Leadership-to motivate a diverse, probably matrix team (often made up of members who "outrank" the project manager) to complete the project
Diplomacy-to handle the sponsor and the board, especially when the project hits problems and to deal with change requests
Imagination-to consider downstream impact when changes are needed.

Project Team

The rest of the team will need to have technical expertise as well as having the ability to:

Manage their own time and output effectively, especially where they are part-time project team members with departmental managers and responsibilities as well
Make judgement calls regarding the scheduling and progress of their parts of the plan
Work to fixed deadlines, to specified standards of quality, possibly without supervision or support
Understand the big picture of the adjacent parts of the project rather than just their own part.
Recognise the importance of their "followership" of a Project Manager who may well be junior to them and who may have little knowledge of their area of expertise
(Included in most project teams should be an "accounts officer"; more on that person later

The Tuckman model of team performance says that teams go through a series of stages:
Forming

Storming

Norming

Performing

Where:
~Forming is the stage where the people come together and are introduced

~Storming is the stage where the egos jockey for position and people suss out each other and their relative position in the pecking order

~Norming is the stage where we accept our relative positions in the pecking order and the acceptable behaviours are recognised

~Performing is the stage where we have got all the previous stuff out of the way and we can get on with the job in hand clearly knowing where we stand

Consequently it is strongly advised that any new project team should have a session to try to Form, Storm and Norm.

Get away from the workplace, meet the sponsor and project manager, understand the justification and the project objectives, discuss the plan, and generally get to know each other. Discuss team communication, especially where the team members all have day jobs and line managers elsewhere in the organisation. Agree a Team Charter of expectations relating to behaviours, rather than the actuality of the plan.

PID; Project Initiation Document

A PID is a very simple document but a very valuable one:

It consists of:
The names of the Sponsor or Board
The name of the Project Manager
The names of the project team
Contact information for all the above

The justification or business case

The project's objective, goal or mission in full

It is valuable because:
It tells anyone joining the team or looking at the project who is who, and who does what

It clearly spells out the reason for doing the project; the justification/business case, to anyone challenging the project

IT FOCUSSES THE MIND ON THE OBJECTIVE
(and, by putting the justification and the objective on the same page it should make clear the link between the getting of one being reliant on the completing of the other)

NB
In the case of a Project Manager working directly for the client the PID may actually be the contract for service so it may well include a lot of other relevant commercial information as well.

Risk Assessment and Management

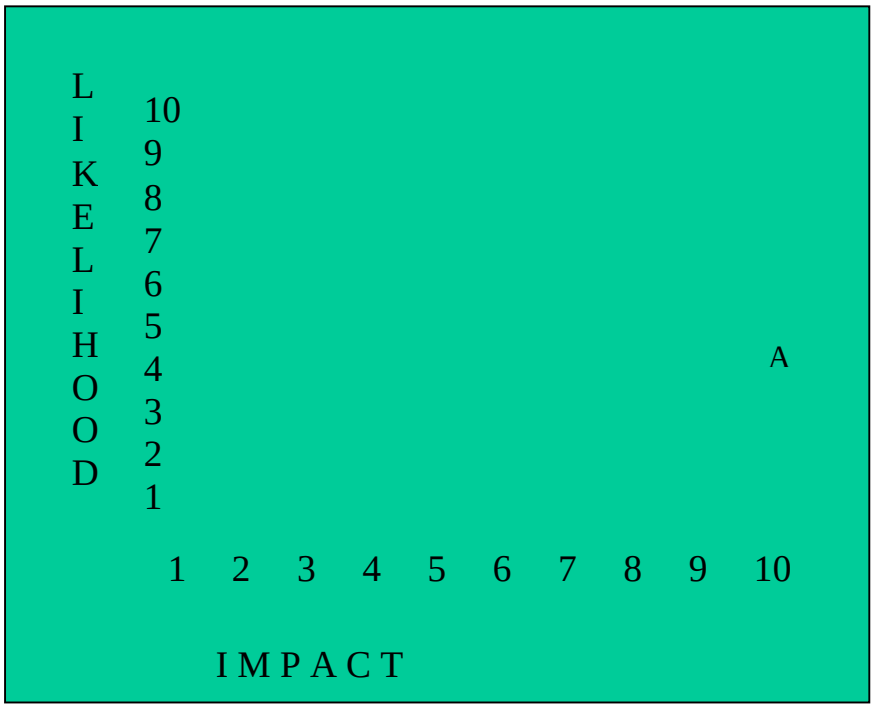
~What factors could jeopardise the project's success?

Firstly we need to brainstorm all the possible risks to the successful outcome of the project

Then we need to assess the risks individually

We need to assess "Likelihood" and "Impact" and rate each on a scale…. 1 = VERY LOW TO 10 = VERY HIGH

"Likelihood"
We can judge the chances of something going wrong. The more likely it is to go wrong, the more we will need to have a contingency plan in place, but we need to couple this with the assessment of the impact



"Impact"
The Impact can range from "frankly, we'd barely notice it" (1) to "it would completely destroy the chance of success" (10).

Now that we have identified the risk, and allotted likelihood and an impact, we can assess whether to "manage" this risk or simply be aware of it

If it is low likelihood AND low impact we may choose to ignore it.

If the likelihood OR the impact is high we should plan to "manage" it in some way.

In order to manage risk we need to:-
•*Judge* what overall response to take
•*Allocate* a specific person to watch out for the risk throughout the entire planning and delivery
•Have a *plan* to minimise the chance of the risk damaging the event by either preventing the risk or minimising its' impact

For example;
When risk assessing for a fundraising event…

•Risk A: "Failing to sell more than 155 tickets";
"Likelihood" is 5 (based on previous experienced difficulty in selling tickets at this price for this type of event)
" Impact" is 10 (on the grounds that 155 tickets is the figure at which we actually break into "profit" for this event)…..
Risk Management
Overall response
1. As we cannot insure against poor ticket sales we must start marketing tickets as far in advance of the event date as is possible, we must review ticket sales and we must target our audience.
Allocated person
2. Chris X will take responsibility for managing this risk.
3.We will review ticket sales initially on the on the XXth of YYY, and finally on the AAth of BBB of at which date we can decide whether to cancel the event with no charges.
4. In the event that we haven't reached target by the initial review date we will offer a bulk discount for entire tables of 15 tickets at ZZ%.
5. We will approach the Chelsea and Richmond Friends Groups who have contacts at this sort of level
5. Nicky Y will seek commercial sponsorship to underwrite the event to at least 50% of cost.

NB You can usually identify many risks BEFORE you produce the task lists and the schedule, it is worth identifying these now as they may affect the entire viability of the project. Some risks may arise **from** the task list and the schedule. For example if there is one specific task, completion of which is absolutely critical to the continuation of the schedule, then any risk related to this is unlikely to be visible before the task schedule is written.

Task List

Any project can be broken down into a list of tasks. A task is a discrete piece of work that results in an output. A task could be a decision or an actual activity (for example, in our Risk Assessment we planned a review, this would be a decision, whereas "selling tickets" would be an activity). All the tasks will have to be completed in order to fulfil the project objective.

Some of these tasks may stand-alone and have no relationship to any of the other tasks. Some will have "dependencies".
A dependency exists when a task cannot be fulfilled unless, or until, another task has been completed.
~This could be due to the linear nature of progress (for example, when building a house, you cannot start the task of building the walls until the foundation is completed).
~Or it may be due to the availability of resources (for example, when mailshotting, you can't print the brochures at the same time as you are printing the marketing letters if you only have one printer)

LIST all the tasks first, if you start getting bogged down in the minutiae of the task at this stage you will miss other tasks altogether. THEN consider each task;
~The next page has a sample proforma that, when completed, should have all the information you will need for the purposes of project planning. The proforma produces a SMART objective for the task; critical to the motivation of the responsible person. If you use a project management software package you will probably find that it offers you the option to insert all this information into it, this proforma is included predominantly for the benefit of those who won't have a software package
~The following page has a copy of this proforma with some explanatory notes added. Even if you are going to have a software package, these notes are valuable!

Sometimes this proforma will be a sledgehammer to crack a nut and you will not need to go through the whole process of completing it. BEWARE THE TEMPTATION TO SKIMP ON THE DETAIL; IF YOU DO THERE IS A GREATER CHANCE THAT YOU WILL FORGET A RESOURCE REQUIREMENT UNTIL IT IS TOO LATE. For example; if the task is "Pack contents of desks into boxes. You may remember the boxes but have you also got the labels and a pen?
The important bit is <u>not</u> that you actually have an answer in every section of the form, what is important is that <u>if</u> there isn't an answer in the box there is a gap because you *considered* it and *decided* that it wasn't needed.
The alternative is that you don't have an answer in the box because it didn't occur to anyone to consider that aspect, then when something goes wrong you have what is known as an OSINTOT (Oh, Sugar, I Never Thought Of That!)…The whole point of Project

Management is to avoid OSINTOTs

Sample Checklist For Task Consideration

Task Title		Task number
Description	Fulfilled by	Estimated duration Days Hours
Date to be completed by		
Quality standard Signed off by		
Dependant upon Task no(s)		Precedes Task no(s)
Resources required Resource		Unit
Funds required		
Notes/Comments		

Sample Checklist For Task Consideration with some explanatory notes

Task Title (Give each task a simple, self-explanatory name)		Task number (Numbering tasks makes reference easier later)
Description (Make this comprehensive and as idiot-proof as you can)	Fulfilled by (Name the person *responsible* for the task as well as those who will actually do it)	Estimated duration (Get as realistic an estimate as possible from the people who actually understand the task) Days Hours
Date to be completed by (and time if appropriate)		
Quality standard ("Date to be completed by" above links to this standard, if the acceptance of this is up to someone else then list that as a separate task and as a decision rather than an activity) Signed off by (the responsible person listed above)		
Dependant upon Task no(s)		Precedes Task no(s)
(Remember the linear or the resource dependencies)		(Remember the linear or the resource dependencies)
Resources required (within this section you need to estimate the needs of the task and to be aware of any "tolerances" you are making; eg if you think it will take Chris 6 days to do this task are you allocating 6 days or 6.5 to give you a tolerance. It is not uncommon in many areas to give a tolerance of 10% to allow for wastage/losses/inaccurate estimates/problems etc)		
Resource		Unit
(People, materials, equipment, facilities, rooms)		(How much of the resource and when, the task may not require all the resources at once, nor for its full duration)
Funds required (Not only the absolute of how many £££s but in what form and when; cash, cheque, in advance, on account, in 30 days). You will need to add all the entries in these boxes to calculate your budget. You will want to copy them across into a spreadsheet and monitor spends as the project progresses.		
Notes/Comments (any other points that could be pertinent to this tasks successful completion)		

Scheduling the tasks

Once we have listed and considered all our individual tasks we can schedule them into an overall plan. For a small, simple project we may just use a list of things-to-do and tick them off as we do them, meeting regularly and frequently to assess the four Ps; "Progress and Problems, Past and Presumed"

For any project that requires more than one person, lasts for more than a week or has a business critical justification, something a little more sophisticated is required.

When we start to schedule tasks we need to keep several principles in mind:

1. Schedule for concurrent activity- try to have as much being done at the same time as is possible, in order to speed progress
2. Schedule accounting for dependencies, be they linear, or resource related.
3. Look for bottlenecks; where multiple tasks are dependent upon one task, that one task becomes critical
4. Schedule to allow for slippage; if it can go wrong it will; it is easier to allow a slippage if it has no downstream impact
5. Juggle the *scheduling* to achieve the end date, not the individual task time estimates (ie work smarter, not harder)
6. Look out for the decision tasks that require input from people outside the project team (many a project has gone awry because the MD/client has the right to approve the work-to-date before the team can carry on. The MD/client may delay his/her/their decision making without realising that that delay has a critical effect on the next phase of the project)

There are various methods of scheduling but we will look at the use of a Gantt Chart as it is a tried, tested and easily used tool, included in most Project Management software packages.

Gantt charts show a timeline along the horizontal axis and the task list on the vertical axis. Each activity is shown as a block from the left (start date) to the right (end date). Decision tasks are normally shown as diamonds on the date required. Often these decisions are allotted the title of "milestones" in that they are the "proofs" of the progress of the project. Dependencies are often shown by an arrow linking the end of one task to the beginning of the other. For example…

Sample Gantt Chart for organising a fund raising ball (grossly simplified!)

Week end→ Task↓	No	1/1	7/1	14/1	21/1	28/1	4/2	11/2	18/2	25/2
Discuss themes	1									
Agree theme	2									
Shortlist venues	3									
Book venue	4									
Discuss menus	5									
Agree menu	6									
Find auction items	7									
Id auctioneer	8									
Sell tickets	9									
Set up insurance	10									
Review viability	10a									
Get raffle prizes	11									
Find band	12									
Get raffle tickets	13									
Get publicity on TV	14									
Get publicity in press	15									
Decorate room	16									
Run ball	17									
Count money!	18									

Tasks are shown here as simple bars, you can colour code the bars to represent different team members or subgroups, and the decisions can similarly be colour coded to show the person/group responsible

Data Display
One of the great advantages of Gantt charts is their visual impact. You can stick a long roll of brown paper at eye level on the wall of the office, write on the task list and dates in marker pen and use string to show the progress/plan (this allows for changes without having to rub things out or start afresh**.** This way the progress/plan is immediately visible all the time, clearly reminding us where we are today, what should be happening tomorrow and telling everyone else what we are doing to earn our daily bread!

There are also lots of software products, such as MS Project, some shareware/freeware, that produce Gantt charts. The example above was produced in Word but they can be produced in Excel as well. Whilst the software versions are easy to produce and change they have the disadvantage of scale and printability if you want to display them as suggested above

Financial Control of Projects

Most projects have at least an element of "achievement to budget" in their overall objective. Some projects may have a financial income target as well; consequently one of the biggest challenges facing many new project managers is getting to grips with the "accounting". In this instance "accounting" may extend beyond simple financial book-keeping as a project manager may be having to budget cash, resources and man-hours sometimes a project manager will have free rein to buy goods and services at his or her own discretion, other times he or she may be constrained by organisational policy on such issues as Preferred Supplier Lists, internal cross charging, procurement departments and so forth. Sadly the accounting aspects often come a bit late in the project lifecycle!

Effective financial control systems and processes, understood and adhered by all members of the project team, are better than trusting to luck or any amount of 'crisis management'. They will also release management effort to other areas of the project, increase the likelihood of success and prevent OSINTOTs

Project managers need to pay close and constant attention to their project accounts, they need to get together with their accounts departments and ensure that they understand the sources and mechanisms of their project's funding (and if appropriate the destination and invoicing processes of any income. It is also a good idea to ensure that your accounts department understand how the money is to be spent and who has what authority. Cost management is usually basic arithmetic, but you have to be careful not to delegate all project financial decisions to accountants who may not be familiar with project rationale or business case, objectives,

scope and activities. There needs to be a clear and sensible approach to financial management in order to keep accounts in the black. Once a project manager becomes familiar with the periodic financial reports, then resource allocation decisions will be much easier to reduce costs and maximize the likelihood of project success. Jack Welch, former CEO at GM and executive consultant, notes that cash flow “doesn’t lie,” and “it tells the true condition of the business. It gives a sense of manoeuvrability and helps you understand and control your destiny.”

You must understand your project financials if you are to succeed. Behind every entry on your financial statements or cost accounting reports is a financial transaction that should have come as a result of a sound project decision. Thinking in commercial business terms for some project managers requires a monumental shift in mindset from technical professional to owner of P&L responsibility. Project delays should not simply be met with more spending and additional resources to beef up project teams. This might make things worse, as you may be digging a deeper hole and making a bad problem worse. Emphasis should shift to intelligent funding and sourcing/resourcing.

Project Sponsors’ responsibility

To exercise financial/cost control, and to protect/support the project in the event of unforeseen difficulties, project sponsors need to review and act on the best and most appropriate cost information.

This means that they must receive regular, consistent and accurate cost reports that are appropriate in the level of detail and presented in a manner that permits easy understanding of both project status and future forecasts. Reports need to be tailored to suit the individual needs of each project and should always be presented to give a comparison of the actual present position with the project plan.
Reports to project sponsors normally give only the status of the project overall.

Project Manager’s responsibilities

The Project Manager holds all responsibility for the successful completion of the project objective; this will undoubtedly include delivery to cost. It is therefore the PM’s responsibility to ensure appropriate financial control of all aspects of the project and to ensure that costs are authorised, monitored and reported appropriately.
Tables of figures are essential, but for rapid understanding and analysis of trends some graphs are usually helpful.

The following aspects should be addressed in a financial report (rather than repeating detailed information available in earlier reports, later reports can summarise the key points and cross refer to the relevant earlier reports):

- Current actual spend of budget
- Original authorised budget (giving explanations for variance)
- New budget authorisations (giving justification for changes)
- Current authorised budget
- (Each section on budgets and expenditure should address the original base estimates and risk allowances for each element; this allows us to learn as projects are completed and improve the accuracy of our original estimates)
- Commitments/forecasts of next reporting period spend
- Potential/expected claims or disputes awaiting resolution (if the project is going well, this area should be small)
- Orders yet to be placed
- Future changes anticipated.

Each of the following cost elements should be covered:

- in-house costs and expenses (including all central support services, administration, overheads etc, these may be budgeted financially or in absolute terms such as man-hours)
- External consultancy fees and expenses
- Materials costs
- Operating costs
- All other costs relating to the project not listed above.
- All prices need to be shown in a common currency where possible.

The Project Manager is also responsible for ensuring that all members of the project team:

- Have a clear view of their task objective and task budget,
- Have well defined responsibilities for making the best use of resources including a critical scrutiny of output and value for money; and
- Have the information, skill, motivation and access to the expert advice that they need, in order to exercise their responsibilities effectively.

<u>Project Team Members responsibility</u>

It is the responsibility of each member of the project team to

- Ensure that they stick within the budgeted cost for each task

- Do not deliberately or inadvertently give suppliers (even internal suppliers such as support functions) authorisation for spends beyond budget
- Maintain appropriate cost reports (even if these are no more than invoices or receipts) for each task, and submit these in a timely way (many a project has appeared to be completed on budget only for costs to come to light after completion)
- Conform to the principle of "Bad News Early" and alert the Project Manager as soon as there is any likelihood of a cost overrun.

Accounting Officers[1] responsibility

It is the accounting officer's responsibility to ensure that the resources available within their department are organised to deliver support to the project team in the most efficient and effective way, with full regard to timing, accuracy and issue of payments and maintenance of management information. (One aspect that is important here is transparency of recording/reporting time and date; do you record money as "spent";

1. when it is committed, (ie when the order for parts is placed)
2. when it is used, (when the parts arrive with the project team)
3. when it is invoiced (the date the supplier invoice arrives)
4. when it is dispatched (the date a cheque is sent to the supplier)
5. when it is cashed (the date that the cheque clears out of your account)

bearing in mind that there could easily be a 60 or 70 day gap between 1 and 5!

Particular care should be taken on the timing of payments to suppliers; departments should not try to circumvent spending limits by delaying payments or making them before they are due. This may require considerable liaison between the project team and the accounting staff to ensure that the project is not delayed due to current or historical late payment.
The Accounting Officer should ensure that effective management systems appropriate for the achievement of the ***organisation's*** objectives, including financial monitoring and control systems, have been put in place.

[1] For the purposes of this document this title means the person in the accounts department who is going to take responsibility for all matters relating to this project; it is strongly advised that a single point of responsibility (rather than a single point of contact) exists to ensure accountability.

Maintaining financial records

Given the wide range of differing projects that Project Managers are responsible for there is no single common usable format for project accounting, therefore no specific recommendations are made here. Suffice it to say that if you have project management software or if your organisation is already strongly project oriented then you probably already have an in-house method, if not you will need to develop something for the project you have in hand. A spreadsheet programme is often adequate with the tasks listed on the left forming the rows and the resource types across the top forming the columns. If you annotate each row with a “Budget” and a “Spend” column this allows you to see any variance quickly.

Managing the Project

Once we have done all the *planning* we need to start *managing* the project; the timeline starts running and we make this plan work.

There are some principles that will work on virtually every project:
The team has to be *motivated* to complete the tasks they are responsible for to the standards that are laid down

Progress against plan must be *evaluated* regularly

Changes to the plan must be *regulated*, and, after changes have been agreed, the plan has to be *re-calibrated* to incorporate those changes fully

Communications must be actively managed to between project manager and team on the one hand and the appropriate stakeholders on the other, the timing of communication will probably not be the same for different groups.

At the completion of milestones it is appropriate to show that we *appreciate* the appropriate people.

When the project reaches its end it is necessary *validate* the end product to ensure that it fulfils the criteria laid down in the initial objective.

Finally we will want to *celebrate* our success

After the project is over we want to *educate* ourselves, and others to ensure that we don't let people re-invent the wheel

We could call these the "ate" functions of the Project Manager since they are:
(You can start this list with Formulate, as the Project Manager took responsibility for formulating the plan)
Motivate, Evaluate, Regulate and Re-calibrate, Communicate, Appreciate, Validate, Celebrate, Educate

Following is a very brief section on each of these functions; it is brief since it aims only to deal with those elements that relate to project management rather than management in general

Motivate

The team has to be *motivated* to complete the tasks they are responsible for to the standards that are laid down

Critical to the motivation of people in projects is their clear understanding of the objective for their particular task *and* the part it plays in the overall project. Hence is it vital to ensure that the people who will fulfil the task are involved as much as possible in the development of the task objectives.
As a project manager you MUST be aware of, and considerate of, the other responsibilities your team members have, which may deflect them from the completion of the project tasks you set them. If your team are unpaid volunteers you need to be wary of overstretching your goodwill. If your team members have "day jobs" elsewhere in the organisation you need to be wary of the demands of the project in relation to the departmental management.
You have to ensure that your team members have the appropriate resources to do the jobs you ask of them; being expected to do something with nothing is generally a pretty de-motivating scenario.
You will need to ensure adequate but not excessive communication between you and the team members to keep people up to date, to keep them in touch with each other and to keep yourself informed. This is a fine balancing act.

Evaluate

Progress against plan must be *evaluated* regularly

Elsewhere we have looked at Data Display, and mentioned how valuable it is in keeping the plan to mind. As the Project Manager you need to be constantly evaluating progress against plan. How regularly you actually do this will depend on the stage of the plan you are at, how long the plan is in total and what other jobs you have on at the time. Suffice it to say that you probably ought to be properly evaluating progress at least weekly.

Regulate and Re-calibrate

Changes to the plan must be *regulated*, and, after changes have been agreed, the plan has to be *re-calibrated* to incorporate those changes fully

Controlling changes

It seems excessive to be talking about documenting and analysing the simplest of requests or reschedules but the fact remains that "Change control" is absolutely critical to any project of more than a week or twos duration.

With a request for a change…
For example; you have studied your objective, brought the team together, planned the entire project and are confident that you can successfully bring the project in on time, budget and quality.
Then someone asks if you can add a bit to something. Overall it seems to be a tiny request in the scheme of things; a half day job adding to a 15 week plan, a few hundred pounds added to a £14,000 budget. Easy!
But is it really?
Will that little addition cause something further down the line to fail or go wrong, or take longer.

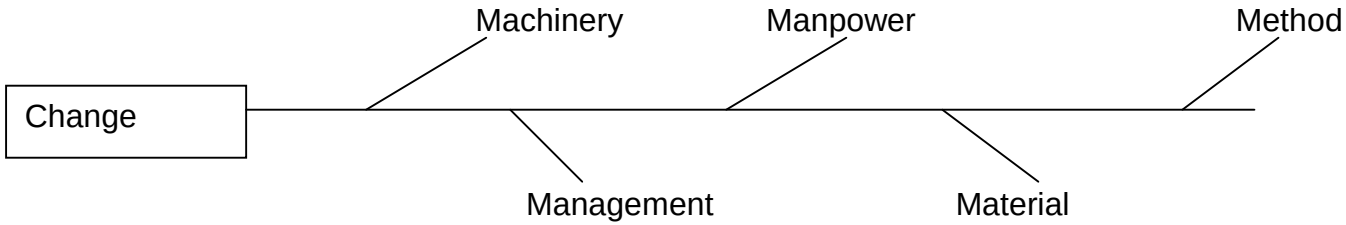
Case History
"The project was to provide a training programme to the IT function of the client, as part of the project each trainee was to be given a "Certificate". Part way through the planning but before delivery started, someone at the client asked if the client logo could be put on the certificate. It was instantly agreed, as we would be printing the certificates on demand anyway so it was a no-cost addition. Except----the logo was in colour and the Certificates were being printed on a Black & White printer-Problem 1; so we bought a new printer at our expense, unbudgeted in the project plan, to keep the client happy
Except----the marketing department of the client did not like their logo appearing on documents produced by someone else, as there may be colour corruption and copyright infringement. The legal department got involved. Client Counsel issued an edict that their logo could not be reproduced on the Certificates -Problem 2; we now had a printer we didn't want and a client who wasn't happy (albeit with their own colleagues) we had all spent a lot of time and effort trying to resolve this, delaying issuing the certificates on early courses which meant we now had a backlog".

Downstream Impact

When any change to the plan occurs, or is requested, we can look at the Gantt chart and see quite quickly what the most likely "downstream impacts" of that change will be
For example, in the sample Gantt chart, if Task 4 is going to be delayed by a week due to the absence of the decision maker we can see that it will have no detrimental effect on the project schedule, as the dependent task (9) isn't due to start til the following week. But…
If the decision maker for Task 2 were to delay it would have a knock-on effect on Tasks 3,4,5,6 & 9, and the delay in Task 4 would affect the start of Task 16. And…
If the decision maker for Task 10a were to delay making the decision this would have a critical effect

We can also use some of the methods of Cause and Effect Analysis in reverse to assess Downstream Impact where it is less obvious:

By following the project timeline along from the point of change we can ascertain the impact the change will have in the future. At the point of each activity or task we need to assess any impact that may be felt at that task by the changes we have made. We can reverse the use of the "families" of the Ishikawa Cause and Effect tool here (Manpower, Machinery, Method, Management, Material.)



It is also wise to generate a list of all the stakeholders in the project outcome, as well as the active participants in the planning and management of the project, to assess whether there is any pertinent impact on these stakeholders.

For example:

Project team	Deciding managers
External Customers	Users of the end product
Shareholders	Other staff (internal customers)

Changes due to something not going according to plan…..
We should use the same process to assess the likelihood of downstream impact when we have to make changes to the timeline as a result of something going awry. A late delivery, unexpected difficulty or staff sickness may cause a deadline to be missed or a decision to slip. Whilst we may have to accept the inevitability of this we can mitigate the *effect* by looking at the downstream impact and changing the plan for the future to take the change into account .

Where a task ***costs*** more than anticipated we must look at the downstream impact to see what effect this will have on project cash flow in the future, can we realistically claw back the cost override from a later task or will we need to ask for an increase in budget (in the case of a budget increase can we realistically pass that on to the client, if there is one, or will this simply change the cost/benefit analysis?)
When we need to change the plan we must inform everyone of the effect this will have on them otherwise there will still be unfortunate fallout.
A sample change proforma is included on the next page, again there is an annotated version following it.

An overriding principle to remember is “Bad news early!”- If something is going to go wrong, get out there and tell the people who can do something about it.

Blank Change Proforma that you can reproduce

Change Request Number	**Detail of Change requested**	**Task Number(s)**
Impacted Tasks		

No	**Task**	**Impact**	**Changes Made/Team Member Informed**
Stakeholders Effected			
Deciding managers			
External Customers		**Users of the end product**	
Shareholders		**Other staff (internal customers)**	

Sample Change Proforma with Notes

Change Request Number (numbers make filing and finding easier, the more you end up with the less successful your initial planning was*)	**Detail of Change requested** (give details in as relevant a way possible; the task details are Description, Fulfilled by, duration, Completion date, Quality Standard, Sign off by or Funds Required, any change must relate to one or more of these, unless the change is a totally new task, in which case it needs all this detail) **A change may well be an overspend; if so, you will need to either get authority to increase the budget or you will have to find savings elsewhere, the latter will have downstream impact**	**Task Number(s)** (which tasks is the change to, if a new task it will need a new number, by inserting 12.1 or 12.a you avoid having to renumber all the later tasks)
Impacted Tasks		

No	**Task**	**Impact**	**Changes Made/Team Member Informed**
(Self explanatory?)	(Self explanatory?)	(Self explanatory?)	(“Changes made” means in writing to the plan) (Is the team member responsible for the impacted task aware and accepting of the change?)
Stakeholders Effected			
Deciding managers (are they and have they been informed of the changes if appropriate?)			
External Customers	(ditto)	**Users of the end product**	(ditto)
Shareholders	(ditto)	**Other staff (internal customers)**	(ditto)

(*for whatever reason; it could be that you skimped, or that the sponsor didn’t set the right objective, your organisation engaged in lots of scope creep or the environment changed hugely)

Communicate

Communications must be actively managed to between project manager and team on the one hand, and the appropriate stakeholders on the other, the subjects that need to be *communicated* will include Progress and Problems, Past and Presumed.

Big Project Management Methods demand a formal Communications Plan but for the smaller project it is probably adequate to simply decide and agree a straightforward schedule of communications such as that that appears below.

Stakeholder→ Frequency↓	Sponsor	Team	User Group	Customer
Daily	No	Yes, e-mail (proforma)	No	No
Weekly	Yes, e-mail (proforma)	Yes, meeting	No	No
Monthly	Yes, meeting	Yes, meeting	Yes, e-mail	Yes, e-mail
Special at	All Milestones, e-mail Completion, newsletter and party	All Milestones, meeting Completion, newsletter and party	Major Milestones, meeting Completion, newsletter	Major Milestones, e-mail Completion, newsletter

The red sections of the above are an example that may be used, where "(proforma)" follows an agreed format that could be as simple as:-

Tasks Completed
Tasks in hand
Progress to plan (Y/N)
Support needed

Remember that communication is two-way; this isn't all the Project Manager "telling", a lot of it is the other parties passing information into the Project Manager as the conduit!

The trick is to get an appropriate balance between information overload and keeping people in the dark.

Appreciate.

At the completion of milestones it is appropriate to show that we appreciate the appropriate people.

One of the most motivating things for most humans is to be appreciated.
A pat-on-the-back, a word of thanks or a compliment on a job-well-done is often more motivating than a big award ceremony or even a bonus!

Get to know your project team and show your appreciation in a way that is appropriate to each individual; some people will like to be mentioned in front of their colleagues and thus will really value being singled out at a project meeting for praise. Others have a low embarrassment threshold and would prefer it if you just caught them alone and told them in private what a good job they have done.

Most people value appreciation that comes from their *boss,* the person they know, rather than the organisation. So often a quiet "coffee and doughnut"/"pint and a packet of crisps" bought by you, is more motivating than an "Employee of the Month Award" with a gift voucher and a plaque from the company.

If a job has been done by a sub team make sure that you give your appreciation to the whole of that team not only to the leader to pass on.
Similarly if you get praise from your sponsor or client ensure that you pass that on both ways; tell the sponsor/client that you couldn't have done it without the team and tell the team that the sponsor/client noticed a job-well-done.

Validate

When the project reaches its end it is necessary *validate* the end product to ensure that it fulfils the criteria laid down in the initial objective.

Sometimes a project validation will be very easy:
~If the project was to build a house, then the Building Regulations Inspectors' sign-off and the clients' final cheque against the project cost will validate the project.
~If the project was a fundraising ball, then the final count of the income, with the expenses removed, will validate the project.

Sometimes there will be a more complicated process to address:
~If the project was a sponsored walk you actually need to get all the walkers to collect all their sponsorship money and bank it before you can assess whether the event was a success.
~If the project was a business relocation you need to find out what, if anything has been lost in the move, and whether for example all the PCs worked on completion or not. One file lost or one PC not working properly doesn't mean abject failure, but it does show a level of failing to succeed!

It is important to carry out this validation as soon as possible after the project has been completed.

Celebrate

Finally we will want to *celebrate* our success

Once we have completed the project and validated the level of success we need to formally disband our project team, close the file and celebrate our success. Why? In order for people to recognise that the project is over, the team will no longer meet in this context and their efforts are appreciated. It allows people to achieve closure, recognise their own job-well-done and it motivates them to want to work with you again!
A celebration doesn't have to be a big affair but a few words of thanks from the sponsor or client, and a token of appreciation, be it cake and coffee or a party in the local will go a long way.

Educate

After the project is over we want to *educate* ourselves, and others to ensure that in future we don't re-invent the wheel.

We learn new knowledge and skill in one of two ways: *intuitively* or *intentionally.*

Intuitive learning

In order to learn intuitively we need to do something quite a few times and then it becomes second nature and we are often not consciously aware of the detail of what we have actually learned. This is mostly seen in someone with lots of experience who can't actually explain what it is that makes them good at this. It was learned through trial and error or through repetition but without much conscious analysis. It works in similar ways for knowledge as well as a skill. Once we have learned something intuitively it tends to become "habit" and can be difficult to unlearn

(Think about a short car journey you regularly take, you probably got lost a few times when you started taking this journey but now you do it on autopilot. When someone asks you how to get from here to there it is often very difficult to actually give accurate directions of street names or which turning to take)

Intentional Learning

When we learn intentionally we can do so before or after the event; we can either say "I'll try this and see if it works, and if so why", or we can say "I did this, now I ask myself "why did it work out the way it did?""

Since we are taught to "learn from our mistakes" we often ONLY do this when something has gone wrong and we didn't get the desired outcome from the action we took. If we simply took stock of our *successes* more often we could actually see *why* we were successful and we could *aim* to replicate that.

Generally intentional learning is faster than intuitive learning. It is also more easily transferable to others.

With longer projects you should do this at each milestone and keep a "Learning Log" as you go, but with shorter projects it can be done at the end. Remember to look at the things that went right as much, if not more, as the things that went wrong. Draw generic learning points from the experience; they may be as large scale as "That went well because we planned in detail, so In future it is a good idea to plan in detail" or as small scale as "That went wrong because the person responsible didn't know what their budget was because it wasn't re-written on the task sheet after we changed it, so in future we must ensure that all changed data is passed on and WRITTEN down".

And that is all there is to planning and managing projects!

Except…..

5 Ways To Deliver A Project Faster*...

1: Look for Shortcuts in your Plan
Most humans spend 80% of their time *doing* and only 20% *planning*. This is because *doing* is generally thought of as more exiting and other people, seeing you doing something, think that you are working, rather than *thinking about* working, so people roll their sleeves up and get started *doing* as quickly as possible.
But if you spend a bit more time really planning, then you can usually find ways that enable you to produce the same project outcome in less time.
So, when you finish writing your project plan, stop and take a bit of extra time to analyse your plan from the point of view of spotting more activities and tasks that can be run concurrently. By doing this, you'll find that you can schedule things to be done in a way that takes less time, with less effort.

2: Automate Routine Manual Tasks
You can automate many of your regular manual tasks to help you do things faster overall. Here are some of the manual tasks that many Project Managers do each week that could be automated;
Summarizing data for your Weekly Status Reports
Collating Timesheets and Expense Forms
Updating your Project Plan with timesheet data
Working out whether the project is on track
Reporting on risks, changes and issues.

You don't need to perform these tasks manually. You can invest in project software or you can get a lot of it done with spreadsheets or even Outlook. Your team can remotely enter the data you need and the software will group and summarise it all for you. All you need to do is analyse that data and view the current status of your plan to ensure it remains on track.

3: Manage the Doing Carefully

When your project gets underway; monitor your project against the plan vigilantly. It's very easy for the plan to exist in isolation to the team's actions on their specific tasks. You need to *lead* the team by making sure they fully understand the way their task or tasks relate to the plan as a whole. This means that they complete only those tasks which have been planned, and not other tasks which have cropped up along the way, or which they quite fancy doing! So "Plan the Work and Work the Plan.

You can also save time by:

Working your suppliers and contractors hard (not unfairly but assertively)

Mitigating risks and issues *before* they affect the timeframe

Saving all non-critical tasks until after the critical aspects of the project are complete

Not allowing unplanned tasks to be completed, unless critical

Not implementing change requests, unless they are critical.

4: Allocate Resources differently

Usually, the easiest way to shorten the length of the project is to assign more resources to it. However, this isn't possible for many projects because they have a limited budget and therefore limited resources.

But that's not to say that you can't increase resources (or allocate them differently[2]) for the *right tasks*. In most projects there are tasks on the "critical path"; those that must be completed to deliver the project. If you assign more resources to these tasks than are "necessary", you can usually complete them earlier than expected; it makes sense that *if* every critical path task is completed faster, then the entire project will be delivered quicker than expected.

5: Do the Critical Tasks first

In many projects the last 20% of tasks, take 50% of the length of the project. This is because (in the laudable spirit of "quick wins") the team have left the difficult tasks until the end. Unfortunately this happens to be when they are tired and need a holiday and the deadline is looming and any delays have caused you to be behind schedule already!

Instead, identify the tasks in your plan that are the most complex and challenging to complete, <u>if possible</u>, tackle those tasks at the *start* of the project, when people are fresh and enthusiastic. You'll find that they can complete those tasks faster and better than if

[2] It may make sense to hire a temp or outsource a particular task if it frees up a multi-skilled project-team member to get on with another task, perhaps one on the critical path

they were left until the end of the project. Now with those difficult tasks completed, the rest of the project should be easier to deliver, with fewer problems and less crisis management

*Perhaps not surprisingly a lot of these tips will not only increase the *speed* of delivery but will often, as a side effect, *reduce* the overall cost of delivery