Project Management Essentials

WORKBOOK

Learning Log

Section of session	Key learning point

Action Plan

Action	Priority	When by?

Introduction

A project is a unique venture with specific start and end dates. This is different from an ongoing task that doesn't have an end date. Projects are run by people and often involve different parts of an organisation. Constraints on project include quality, time, scope and cost. It is often a juggling act between these items and it is the role of the project manager to achieve the best combination of these to make a successful project. Usually projects are divisible in to stages or phases each with their own set of priorities and goals.

The training that accompanies this workbook is designed to help you run your projects successfully. Using scenarios and examples from your own projects, you will complete the various forms associated with each phase of the project. There are also group activities to help establish understanding of what makes successful projects and what makes them fail. You will also learn the steps involved in handing a project over, once complete and evaluating and reviewing the project.

The Project Manager

The tasks to be handled by a project manager to successfully manage a project include:

- Integration Management - This is developing and managing the direction of the project
- Scope Management - This includes planning, defining and managing the scope of the project.
- Time and Cost Management - This covers developing a schedule, allocating resources and managing funds for the project.
- Quality Management - This involves taking care of the quality of the process in question such that it meets or even exceeds various quality parameters set earlier.
- Human Resource Management - A manager needs to take care of his team, encourage and motivate them and make sure the team moves in the right direction.
- Communication/stakeholder Management - The manager needs to prepare a communication plan and make sure that there is a healthy communication, both horizontally and vertically.
- Risk Management - Various risks involved in a project should be identified and a mitigation and contingency plan needs to be developed to ensure that the project is not derailed at any point.
- Supplier Management - Various materials needed during the project need to be procured and managed with the

A project manager is usually responsible for the success or the failure of the project. They first need to define and scope the project, seeking sign-off of the various stages with the project sponsor. If the scope of the project is not very clear, or the project is executing poorly, the manager is held accountable. However, this does not mean that the manager does all the work by himself or herself. There can be an entire team under the project manager, which helps to achieve all the objectives of the project. However, if something goes wrong, the project manager is ultimately accountable.

Particularly on smaller projects, the project manager may need to take on multiple responsibilities, such as assist in gathering business requirements (scoping), design a suitable data base for managing the project and prepare project documentation.

Project People

Before a project starts, consideration needs to be given to the project team whose responsibility it is to run the project.

The project sponsor is often the initiator and budgetary authoriser of the project to whom the project manager will report. This may be a plant manager, Area Manager or Section Manager in the case of smaller projects.

Depending on the size of the project, there will be a number of interested parties (including stakeholders who will need to be consulted and reported to at various stages of the project, to be discussed later).

Project team members, managed by the project manager for the purposes of the project, will be chosen for their particular skills and knowledge of different aspects of the activity. The project team may consist of a project manager, project team members and internal and external suppliers. Larger projects may also require project support roles, looking after documents and maintaining files relating to the project.

Phase 1 - Project start up

The Project start up process consists of gaining sufficient information at the project start up point. This is covered in the form of an activity using form A, on the following pages.

Based on the project details you have brought with you, select a suitable project and use the known information to populate **Form A** on the following pages. You may make up project information where details are unknown or where you do not have a project you have been involved in.

FORM A:

Project Start-up Form			
Project Title: A very brief title		**Sponsor:** Insert actual sponsor name	
State below the link with the corporate agenda – the actual wording please. Put here the actual words in the corporate agenda – showing the link with this project			
Project Background: The background to the project. Enough information to inform the reader.			
Project Benefits: An outline of what the benefits are to the organisation, individuals or stakeholders in delivering the project.			
Project Objectives: The specific objectives for the project. NOTE: the objectives can be one line or more detailed text.			
Project Deliverables: What you will be delivering at the end of the project. NOTE: these are what you will have at the end of the project, e.g. a report, a building, improved service levels etc.			
This project will include:		**This project will not include:**	
This section defines the boundaries of the project.		Planning details should <u>not</u> be included at this stage.	
Success Criteria:	How you will measure the success of the project. NOTE: the success criteria must be measurable.		

Form A, Part 2:

Constraints: Examples here can be specific (a skill which the project team must have) resources, or a legal deadline – NOTE: only include time and money if you can quantify them.			
Key Assumptions: The assumptions you are making in putting this document together.			
Project Manager: Who fulfils this role and what they do.			
Project Sponsor: Who fulfils this role and what they do.			
Project Board/ Steering Group Members: Who fulfils these roles and what they do. NOTE: may not be appropriate for <u>all</u> projects.		**Project Team Members:**	
Budget			
Resource Costs:		**Other Costs:**	
Total costs (attach a breakdown of the overall budget)			
Start Date:		**Completion Date:**	
Signature of Project Manager:		**Date:**	
Approval from Sponsor:		**Date:**	

Phase 2 - Initiate

Phase 2 introduces the forms required when initiating a project:

Milestone plan (Gantt chart)

A milestone can be described as an event on the project's schedule that indicates the completion of an activity associated with the project. This could be the completion of a piece of work associated with the project, a review meeting with the sponsor, a review meeting with the supplier, completion of a significant element of the project. Milestones should enable the project manager to gauge whether or not the project is proceeding as expected.

Refer to the **Milestone plan form B** on the following page and populate the form with possible milestones, including timescales, related to making a cup of tea. Assume that all necessary ingredients and tools are in place.
Note: Record the time in units of minutes.

Consider how the milestones in the activity compare to real milestones in a project.

Examples of milestones are:

- Completion of installation of a piece of equipment related to the project
- Completion of quality checks for the installed equipment
- Meeting with sponsor to discuss progress of the project
- Completion of PIR of those activities (Post Implementation Review)

FORM B:

Milestone Plan

Enter milestones for each phase on charts below

	TIME (in suitable units - days, weeks, months, etc.)														
MILESTONES	**Responsibility**														

Critical path analysis

Critical path analysis is used to identify the longest-duration path through the length of the project. There are 6 steps involved in determining a critical path:

1. Specify the individual activities
   For each activity, show the earliest start date, estimated length of time it will take, and whether it is parallel or sequential.

2. Determine the sequence of those activities
   Identify whether the activities are parallel or sequential. If tasks are sequential, show which stage they depend on.

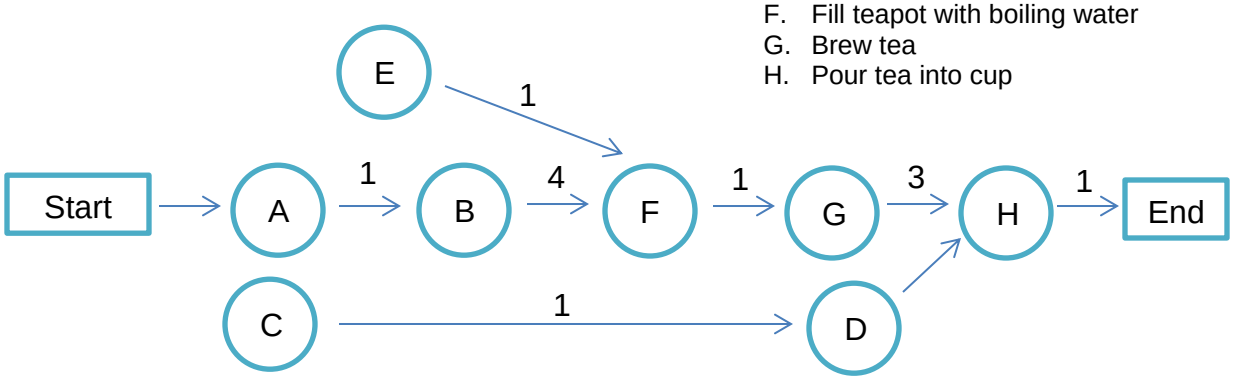
3. Draw a network diagram
4. Estimate the completion time for each activity
5. Identify the critical path (longest path through the network)
6. Update the critical path diagram as the project progresses

For activities on the critical path:

1. A thorough identification of all major activities requiring time and resources must be made during the planning process.
2. Logical sequencing of these activities must be made.
3. The time required for each activity must be estimated or determined.
4. The overall research or planning project is scheduled according to the estimated times, resulting in a determination of the most efficient plan for carrying out the various activities.
5. Continuous evaluation of the planning and implementation progress according to a predetermined schedule is required so necessary decision-making for maintaining a schedule can be made.

Referring to the previous activity a critical path diagram for making a cup of tea may look like…

A. Fill kettle with water
B. Boil kettle
C. Add milk to cup (optional)
D. Add sugar to cup (optional)
E. Add teabag to teapot
F. Fill teapot with boiling water
G. Brew tea
H. Pour tea into cup



Stakeholder Plan

Stakeholders are likely to have a significant impact on a project. Examples of stakeholders are an end user or customer, a sponsor, an expert to be consulted before during and after the project.

A different approach is needed for different stakeholders.

A sponsor is likely to be involved in the finances and will want to see the objectives met and benefits realised. They would not necessarily have the expertise of a typical end user so their technical input should be carefully monitored. The end users will know more than anyone what the product is supposed to do once delivered. It's therefore very important to listen to the end users and arrange end user testing where appropriate. Sometimes you need input from experts in other fields. People like graphic designers, support reps, sales or sometime lawyers and accountants.

Referring to the scenario below, populate the Stakeholder Analysis form, **Form C**, on the following page, based on who you consider the stakeholders are.

Scenario:

Dig It Gardening Supplies Ltd, electronic reporting system

The HR director has instigated a new electronic reporting system to be introduced to all offices.

The reporting system aims to increase management information and is to be used to report hours against budget, the amount of work produced and the average amount of work completed per hour.

Although the project will be managed internally, the new system will be installed by an external I.T. company.

The data for the report will be input by administration staff using time sheets, overtime documentation and absence figures submitted by the staff and authorised by the line managers. The reports will be analysed by office managers and used to monitor performance and to report to the head office. Reports will also be used for performance management of all staff in the office.

Motivation in the offices has been low recently and some members of staff are suspicious of the purpose of the system and think it may be used to gather evidence to reduce staff numbers.

FORM D:

Stakeholder Plan

The purpose of stakeholder analysis is to inform the project manager and sponsor who should contribute to the project, where barriers might be, and the actions that need to be taken prior to detailed project planning.

Stakeholder	Their interest or requirement from the project	What the project needs from them	Perceived attitudes and/or risks	Actions to take

Using the blank stakeholder analysis form below, **Form D**, complete this based on your own project.

Stakeholder	Their interest or requirement from the project	What the project needs from them	Perceived attitudes and/or risks	Actions to take

Risks and issues

Risks

A risk is an uncertain event or series of events that, should it occur, will have an impact on the achievement of the objectives.

A risk could be described as a threat or opportunity. When describing actions on the Risk log, consider the following possible responses:

Avoid (e.g. changing a supplier in order that the threat can no longer happen)
Reduce (the probability of it happening or the impact the risk will have)
Fall back (reduces the impact only)
Accept (Accept that there is no alternative to the threat)
Exploit (e.g. if a situation arises that delays a project this could mean that equipment which was not initially available , becomes available at a later date and requires less maintenance than the original choice).

When describing a risk, a recommended structure is as follows:

“Because of… (**cause**) there is a risk that… (**event**), which may result in… (**effect**)“

Having identified a risk, a risk management procedure should be followed which has the following stages:

Assess
An estimate of the risk’s impact and probability needs to be made.
Each risk is rated for likelihood (high, medium or low) and impact (high, medium or low) and a score is associated with each. A score is then calculated to evaluate the risk by multiplying the likelihood score by the impact score.

The suggested scoring system is for both likelihood and impact to be rated on a scale of 1 to 3.

For example if a risk has a high likelihood of happening but a low impact on the project it may be calculated as 3 x 1 = 3.

Plan
Plan actions to mitigate the risk.
Depending on the score, action then needs to be considered in order to mitigate the risk.

Implement
The planned action then needs to be implemented and the progress of the actioned tracked until completion when the risk can be closed.

Refer to the Risk log, **Form E**, and list a number of potential risks to either your own project or an imaginary project using the above format. For each risk identify the likelihood of it happening, the impact it will have (consider cost, timescale, scope of the project and the benefits the project is designed to produce).

Risk Log

Score as follows, for Likelihood and Impact: High = 3, Medium = 2, Low = 1

Nature of Risk or Uncertainty	Likelihood High/ Medium/ Low	Impact High/ Medium/ Low	Likelihood x Impact [Score]	**Actions required and who will take responsibility to manage the risk**

Issues

Issues are identified in the “Deploy” phase but to clarify, the difference between a risk and issue a definition of an issue is…….

…….. An unplanned event which has happened and requires action. An issue can be raised at any time during the project.

An issue **has** happened and a risk **may** happen.

Issues can be classified into three types:

1. A change to the project requirement – e.g. the sponsor may ‘move the goalposts’ - the number of users is increased or the outcome of the project may change.

2. A ‘product ‘or ‘deliverable’ of the project may change or may not have been accounted for.

3. Other problems or concerns may arise – e.g. a supplier may go out of business, unexpected slippage on delivery or budgets may be reduced.

Notes:

Phase 3 – Deploy

This phase is concerned with the Status report and Change request forms.

Refer to the scenario below, the Milestone plan and **Status Report form**, **Form F**, on the following pages and have a go at completing form F based on the information in the scenario.

Dig It Gardening Supplies Ltd. Sales training

Project: To plan, scope, design, implement and evaluate a sales training course. The course is to be rolled out to the complete workforce of 500 people, to be designed externally and delivered internally. Procurement manager Sid Spade has been appointed as Project Manager.

The project start date was 1st April and was due to be completed by 30th September.

The target for the number of attendees is 100 per month from May to September inclusive. Design work was due to be completed by the end of April. Status reports are to be completed each month.

Following the scoping which included a cost calculation, a budget was set and a timescale for completion up to and implementation was agreed. Quality checks were also put into place. Stakeholders at all levels were consulted

The roll out of the training intervention was delayed by 2 weeks owing to design work over running. This was caused by the external suppliers, who were designing the course, failing to meet their agreed timescale. The finished work did not meet all objectives but the decision was made to run with the materials produced as a further delay in commencing the implementation could not be tolerated by the sponsor (senior sales manager, Lorna Mower).

A further interruption to the roll out was experienced when a major contract was won but because of tight deadlines, all non-operational work was suspended causing a further 2 weeks delay to the training.

Course booking were also interrupted when department managers were asked to reduce costs.

To date (31th August) the total number of courses delivered are about 25% down on the targeted figure. Course fill is also down – the average is 6 attendees as opposed to the target of 10 resulting in only 180 people being trained. The course booking process is outside of the scope of the project and is the responsibility of the internal training department and there appears to be some

problems with line managers of the attendees recognising the importance of the training. The training administration manager, Dawn Dibber was consulted as a stakeholder in the project and course numbers were agreed.

Regular milestones meetings were scheduled with the area managers and the meeting with the North territory area manager, Billy Shears, to discuss progress was due on 15th August (delayed until the 17th August). All training for North territory staff was due to be completed by the end of August. This milestone was completed on time.

An update meeting with the sponsor has been arranged for 20th September.

As a result of these factors, consideration will need to be given to changes to the project but to date no recommendations have been decided.

Notes:

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Milestone Plan

Dig It Gardening Supplies Ltd. Sales training project

		TIME												
MILESTONES	**Responsibility**	**April**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**					
Design	ABC consultants													
Training delivery South	ABC consultants													
Training delivery West	ABC consultants													
Training delivery East	ABC consultants													
Training delivery North	ABC consultants													
Training delivery wash-up	ABC consultants													
Sponsor meetings														
Area manager meeting South														
Area manager meeting West														
Area manager meeting East														
Area manager meeting North														
Handover	Sid Spade													
PIR	Sid Spade													

Form F:

Status Report

Project Title:	Number: 1
Project Sponsor: Lorna Mower	Project Manager: Sid Spade

Progress Report	Report No.

RAG Status*:	**RED / AMBER / GREEN**

Headlines

Tasks, Milestones, Outcomes delivered this period		Completion dates	
Tasks, Milestones, Outcomes	Comments	Plan	Actual

Major Risks and Issues Include an assessment of the impact and any actions taken

Recommendations and Requests for Decisions or Support

Tasks, Milestones, Outcomes scheduled for next period		Completion dates	
Tasks, Milestones, Outcomes	Comments	Plan	Forecast

* RED	*"Major concern - escalate to the next level"* Slippage greater than 10% of remaining time or budget, or quality severely compromised. Corrective Action not in place, or not effective. Unlikely to deliver on time to budget or quality requirements
AMBER	*"Minor concern – being actively managed"* Slippage less than 10% of remaining time or budget, or quality impact is minor. Remedial plan in place.
GREEN	*"Normal level of attention"* No material slippage. No additional attention needed.

Issue log

Dealing with the inevitable project problems is easier when you have a record of what the issues are and how they're being resolved. The issues log is used help with this process.

It is essential to log issues in order that action can be taken to avoid the project being disrupted.

This log will enable you to summarise all the problems that occur during a project. You can then view open issues, determine who is handling which problems, and make sure that a resolution is forthcoming.

To use the log, you just need to follow these steps:

- Document an issue, including any pertinent details such as the date and who reported it.
- Determine the impact of the issue
- Determine a priority for the issue. Label it as high, medium, or low.
- Describe the action to be taken. This may be assigned to a team member who is best qualified to deal with the situation.
- Record the action to be taken. You will need to keep track of the status of the resolution, whether it is open or in progress.
- Record the issue as closed when all mitigation is in place and actions complete to resolve the issue

It will be useful to keep track of how the issue was resolved in order that lessons can be learned for future projects.

Using the **issue log, Form G** on the following page, record some of the issues associated with the previous exercise

Form G:

Issue Log

Issue Description	Issue Impact	Priority score High/ Medium/ Low	Action to be taken	Issue closed (date)

Next use **Form H** below and complete this based on your own project.

Form H:

Issue Description	Issue Impact	Priority score High/ Medium/ Low	Action to be taken	Issue closed (date)

Change request

A change request form provides a project manager with a formal method of seeking approval from the project sponsor to amend or review an element or elements of the project, for example a significant change in scope, time, budget or quality.

Using the **Change request form, Form I**, on the following page, complete the form with an example taken from the previous exercise.

Notes:

Form I:

Change Request Form

Project Title	**Project Number**
Project Manager	

CHANGE REQUEST		
Originator Phone:	Date of request	Change request no. *allocated by Change Controller*
Items to be changed		Reference(s)
Description of change (reasons for change, benefits, date required) Estimated cost, and time to implement (quotation attached? Yes / No)		
Priority / Constraints (impact on other deliverables, implications of not proceeding, risks)		

CHANGE EVALUATION		
What is affected	Work required (resources, costs, dates)	
Related change requests		
Name of evaluator	Date evaluated	Signature

CHANGE APPROVAL			
Accepted Rejected Deferred	Name	Signed	Date
Comments			

CHANGE IMPLEMENTATION			
Asset	Implementer	Date completed	Signature

Phase 4 - Handover, Project Closure form

On completion of a project, as a project manager, you will normally be required to handover the finished activity.

What will your end user need to know?

What would you expect to be included in a project closure form?

Phase 5
Evaluation, Post Implementation Review – PIR

Evaluation

The project evaluation and/or the PIR is the Project Manager's report to the sponsor detailing how well the project has performed against its objectives when the project has been up and running for a period of time.

It should also contain information on how it compares to the original planned cost, schedule and risk allowances, the revised business case and final version of the project plan.

The completion of the project rollout brings the project to the final point of closure.

What subjects would you expect to be included in a Project Evaluation form?

Post Implementation Review

A formal Post Implementation Review will contain the following headings and may be a requirement for some projects in addition to or in place of the evaluation process.

- Executive summary
- Background information
- Objectives
- Key outputs
- Key stakeholders
- Lessons learnt
- Conclusions/ recommendations