HOW TO SCOPE AND PLAN A PROJECT

This booklet is a companion to the Project Managers' Manual and to the Project Plan Template.

It describes a five step approach to scoping and planning a project. If you follow these five steps they will generate a viable plan for the project and the information you need to complete the Project Plan Template included in the e-learning support tool "How to Manage a Project".

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Introduction

A Project Scoping Study gives the project manager the opportunity to look at and assess the project before it becomes formally "live". Not so much to query whether the project should go ahead but to establish how it needs to be organised and managed, specifically:

- what the project aims and objectives should be
- what the risks and possible difficulties are,
- how the project should be organised and tackled.

Such a study may take only a week or may take several months depending on the size of the project. Usually it is based around discussions with key stakeholders (those with a vested interest in the project) and potential team members and contributors. The findings and conclusions are summarised in a Project Plan.

If a team is involved in the project, it is invariably best to scope a project as a team.

This booklet describes a five step approach to scoping and planning a project. If you follow these five steps they will generate a viable plan for the project and the information you need to complete the Project Plan Template included in the e-learning support tool "How to Manage a Project".

Contents

The Five Step Approach to Scoping

Basically there are five steps to go through in scoping a project. This booklet will lead you through them step by step. In summary they are:

Step 1: Project Objectives and Terms of Reference

What the project is there to achieve and by when. Best done by:

- **Stakeholder Analysis:** Reviewing the various stakeholders of the project (those with a vested interest in the project and its outcomes) and establishing the criteria by which they will assess the project.

- **Develop Project Terms of Reference:** Developing these to satisfy stakeholder requirements, as far as is possible. Consists of an overall definition and description of the project and its aims, supported by project objective for each of the major stakeholders.

Step 2: Project Benefits & Costs

The benefits and costs of doing the project. Initiator sponsors, project manager and team need all to be clear about these before investing time, effort and energy into a project. To also cover how the project fits into other organisational initiatives and projects.

The depth depends on the project - in many organisational project, a simple brainstorm is sufficient. The details are often used later when marketing and communicating the project.

Step 3: Top-Level Plan

Certainly a top-level plan (project stages) and if possible milestones/Gantt charts showing planned progress.

Step 4: Project Organisation

- **People:** Those actively involved in carrying-out the project—project sponsor, project manager, the project team—and the key responsibilities and delegations. Any other key contributions needed—specialist support, contractors, and others.

- **Project Control:** Planned review meetings (sponsor/manager), team meetings, and end-of-phase reports.

Step 5: Implementation Issues & Risks

Identification of key likely implementation issues and general strategies (pilots, surveys) for resolving or avoiding them.

Step 1: Project Objectives and Terms of Reference

The first step is to establish the terms of reference and objectives of the project - what it is to deliver, by when, and at what costs. The aim is to produce Terms of Reference which define the project in terms of what it is to deliver both to those requesting the project and to the key stakeholders - those with a vested interest in the project and its' outcomes. These should be along the lines illustrated below:

Project to introduce Project Management Training

Overall Description

To develop and introduce project management training into the Department of Health for managers who manage projects as part of their wider responsibilities. Training to be cost effective and start late 1999.

Key Objectives

- For the **Managers & Staff**; to provide training for managers and staff which is practical and relevant, and which builds skills and confidence in their ability to manage their projects and produce successful outcomes.

- For **Senior Management;** to support them with a programme of training which will lead to an increase in the organisation's project management capability, and a consistent approach to its management of projects.

- For the **IT Unit**; to support rather than conflict with the established PRINCE methodology used by the IT Unit in project managing IT projects.

- For the **Human Resources Unit**; to ensure that it has project management training, which is leading edge, which fits with its other training, and which is seen to make a significant contribution to the organisation's effectiveness and capability.

This provides an overall description of the project, often with some background and reference to time and cost constraints, together with a statement for each of the key stakeholders summarising what the project will aim to deliver to each of them.

We suggest the following two-stage process:

1. **Stakeholder Analysis**
    Carry out a review of the various **stakeholders** of the project (those with a vested interest in the project and its' outcomes) and establish the criteria (four or five) by which they will assess the success of the project. We have provided a worked example of such an analysis overleaf.

2. **Develop Project Terms of Reference**
    The development of **terms of reference** to satisfy those criteria. Best with an overall definition and description of the project and its aims (possibly including cost, time and quality) supported by project objective for each of the major stakeholders. When agreed with the Sponsor, this then forms the terms of reference.

Likely Participants
- Project Management skills
- Personal & Career Development
- Interesting, Practical, Relevant Training
- Confidence

IT Unit
- Fits with Current Procedures

Participants line
- Better management of Projects
- Confidence in Project Management capability

To introduce Project Management Training to the

H.R. Unit
- Good Training Course
- Coherence with other training
- Contributes to "Leading Edge" Portfolio

Project Sponsors
- Projects easier to start-up & establish
- Better Project Delivery
- "House Style" & clarity of roles

Top Management
- Better management of Projects
- Satisfy "Modernising Government"
- "House Style" for Project Mgt.

Note:

- The above analysis provided the information we needed to create the example terms of reference shown on the previous page.

- We find this approach provides the best balance between on the one hand taking account of conflicting requirements and on the other having a clear project focus.

- It needs to be done during the initial scoping study (perhaps updated later) and is best done with the project team, possibly supplemented by key stakeholder representatives. This not only creates better terms of reference but is also excellent team-building.

- The resulting terms of reference then provide an excellent basis for the project plan and for discussions/negotiations with the Project Sponsor and possibly certain key stakeholders.

Step 2: Benefits & Costs Analysis

In a Project Scoping, the purpose of this analysis is not to question whether the project is a sensible idea or not. That would be part of the initial project proposal.

An analysis of benefits and costs at this stage provides two key pieces of information:
• A summary of benefits which can be valuable when marketing and communicating the project.
• Likely costs, some of which may well influence how the project is implemented.

In most policy and organisational projects, it is not necessary to go into too much depth at this stage - a simple brief brainstorm is often sufficient. As a group simply brainstorm list the benefits and then the costs of doing the project.

Note: Costs and benefits should not be just the financial aspects but all aspects - people, facilities, disruption, confusion - a broad listing.

Analysis of Benefits & Costs	
Main Benefits	**Main Costs**
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•

Key Points are:

• Not just financial costs and benefits but also performance improvement, disruption, increased workload, etc.
• It can have a strong influence on the way that you decide to tackle the project.

Step 3: Top Level Plan

Planning is one of the main secrets to successful project implementation. In the first place, during the planning stage a good plan enables the Project Manager to analyse how the work needs to be carried out and identify the options. In the second place, during the implementation stage it provides a "baseline" to enable the Project Manager to judge whether the project is on course or not and thus control it.

To do this in practice, you need to focus on the project and draw up a complete list of the activities and tasks to be carried out showing the people or sections who would need to do them. Then chart these activities using either a Critical Path analysis network, a Gantt chart, or milestone plan.

With this chart, talk to the people who would need to be involved about their contribution and to get their ideas, their estimates of time involved, and their availability. Continue this until you have a fairly complete map of the project. During this process you will start to identify possible difficulties and blockages and should become clear as to which activities are the critical ones – those, which could delay the whole project.

Having done that, simply get the team and other contributors to talk and think about what needs to be done, and then use charts to communicate that to others.
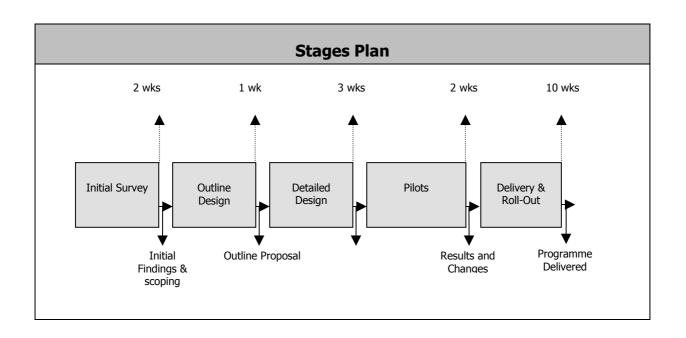
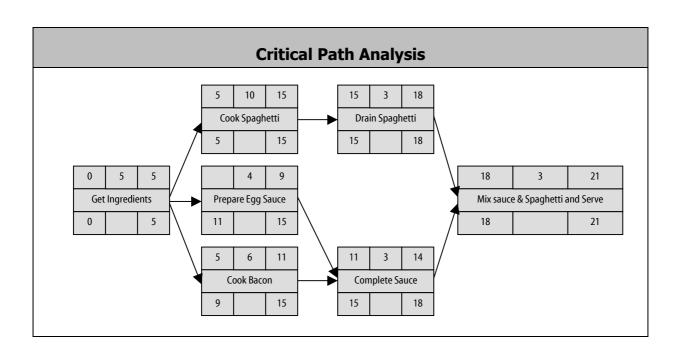## Planning Sheets, Milestone Plans and Gantt Charts

You will almost certainly need to use one of the following planning techniques to plan your project.
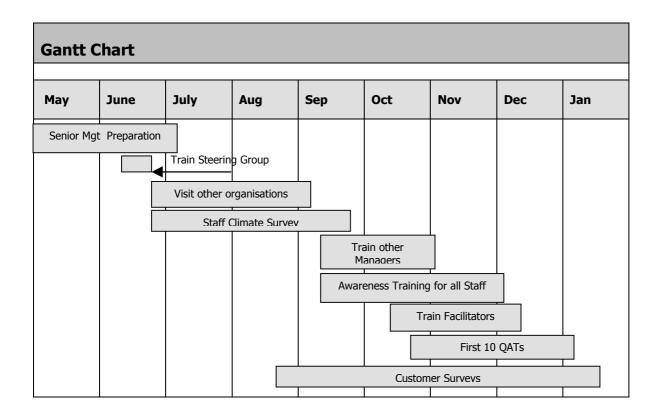
- **Planning Sheets** simply list the activities to be carried out with key data.
- **Stages Plan** lays out the progress in a series of stages
- **Critical Path Analysis** links the activities together to form a network. To use this technique you will most likely need to have received training in it.
- **Milestone Plans** focus mainly on the end-dates by which something needs to be complete or by which certain objectives need to be achieved.
- **Bar or Gantt Charts** focus more on the activities to be carried out to complete the project.

Each technique has its strengths and weaknesses and you need to select the technique most suited to your particular project. Each is illustrated on the following pages.

Planning Sheet					
Activity	**Date Activity can <u>Start</u>**	**Date Activity must <u>Finish</u> by**	**Estimated Duration**	**People and Resources involved**	**Estimated cost in time or resources**

Stages Plan

2 wks	1 wk	3 wks	2 wks	10 wks
Initial Survey	Outline Design	Detailed Design	Pilots	Delivery & Roll-Out

Initial Findings & scoping

Outline Proposal

Results and Changes

Programme Delivered

Critical Path Analysis

5	10	15
Cook Spaghetti		
5		15

15	3	18
Drain Spaghetti		
15		18

0	5	5
Get Ingredients		
0		5

	4	9
Prepare Egg Sauce		
11		15

18	3	21
Mix sauce & Spaghetti and Serve		
18		21

5	6	11
Cook Bacon		
9		15

11	3	14
Complete Sauce		
15		18

Gantt Chart

May	June	July	Aug	Sep	Oct	Nov	Dec	Jan

Senior Mgt Preparation

Train Steering Group

Visit other organisations

Staff Climate Survey

Train other Managers

Awareness Training for all Staff

Train Facilitators

First 10 QATs

Customer Surveys

Milestone (End-Date) Plan

Decide on Kickstart of Initiative

Steering group Chosen

Start Staff Climate Survey

Steering Group trained

Start Customer Surveys

Visits to other companies

Staff Climate Survey Complete

Train Other Managers

Facilitators Trained

Complete Awareness Training

10 QATs formed & working

Holidays

April	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan

Step 4: Project Organisation and Responsibilities

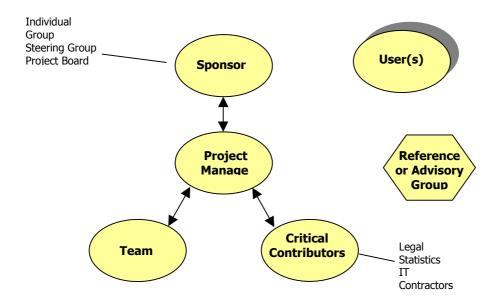This step covers how the project will be organised and controlled. This should cover:

1. **Those actively involved in carrying-out the project**
    The key players in the project organisation are depicted below. It should include Project Sponsor, Project Manager, the project team - and the key responsibilities and delegations. Also any other key contributions needed - for example specialist support, lawyers, IT, or contractors.

    On the diagram below showing the key roles and individuals or groups who carry them out, map out the individuals or groups who will be fulfilling these roles.

2. **Project Control**
    In particular, what project review meetings, team meetings, and end-of-phase reports should be planned into the time schedule.

Key Points

*   Of these roles, the key ones are clearly those of Sponsor and Project Manager.

*   Each project should have a named Project Manager who is the focal point of the project, and a named Project Sponsor who "sponsors" the project on behalf of the organisation. The sponsor may be an individual or a group – perhaps a steering group or a project board.

*   Functions of the Project Sponsor include:

    *   To support the Project Manager when needed (resources, blockages, etc)
    *   To try protect the project from undue extraneous influences
    *   To forewarn the Project Manager on relevant changes elsewhere in the organisation or other projects
    *   To sell the project into the strategic arena and the rest of the organisation
    *   To take key information about the project into the rest of the organisation

Step 5: Implementation Issues and Risks

In spite of all the planning and thinking done, all projects face unforeseen pitfalls. Experienced Project Managers know this and will try to look ahead and predict such pitfalls beforehand and find means to avoid them.

Having planned the project in some details, the next step is to carry out a risk assessment to see how robust the plans are. The three steps are:

1. **Brainstorm the Risks and implementation issues**
   Identify the risks and implementation issues with a straightforward <u>brainstorm</u> of all the things that could disrupt the project - that could cause problems when you start implementing the project.
   • Best done with the project team and relevant others.
   • Sometimes called creating a "risk register"

2. **Prioritise them on a Hi-Lo diagram**
   From that register, identify those that are **high priority - items,** which are both likely and would have a major impact.
   • Best done by mapping them on a Hi-Lo diagram - see below.

3. **Develop actions to reduce the risks**
   For each of the high priority items (highly likely to happen and with a high impact on the project), identify ways to diffuse them and reduce the risks: -
   • either changes reduce the likelihood of them happening
   • or to reduce their impact on the project if they did happen.

Hi-Lo Diagram