

# Project Management

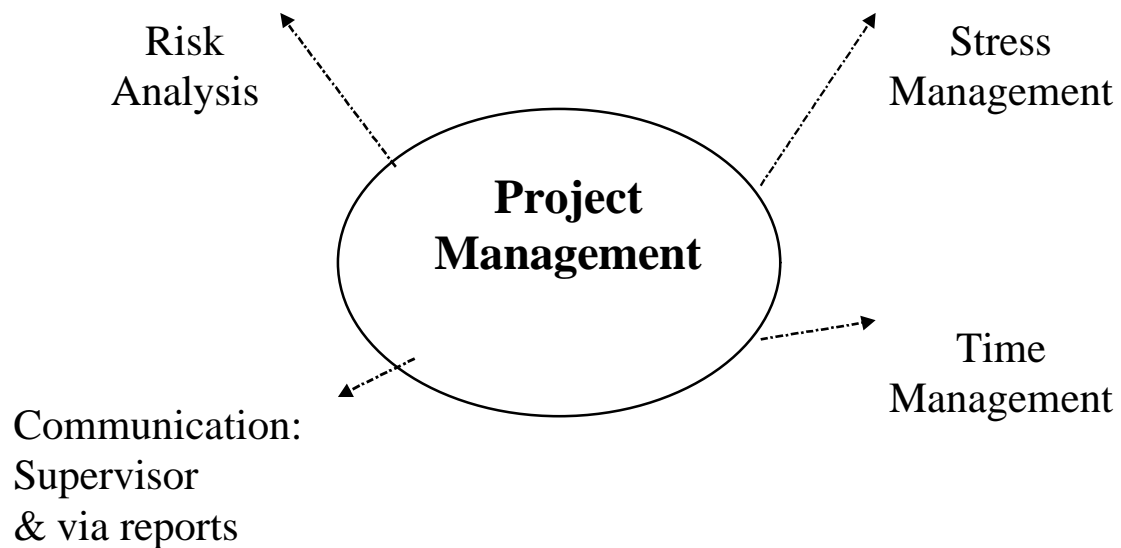
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Further details to be found at:-

<http://www.cis.plym.ac.uk/cis/pfilmore/undrgrad.htm>

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To be successful in the project, a number of skills need to be exercised. These include:-

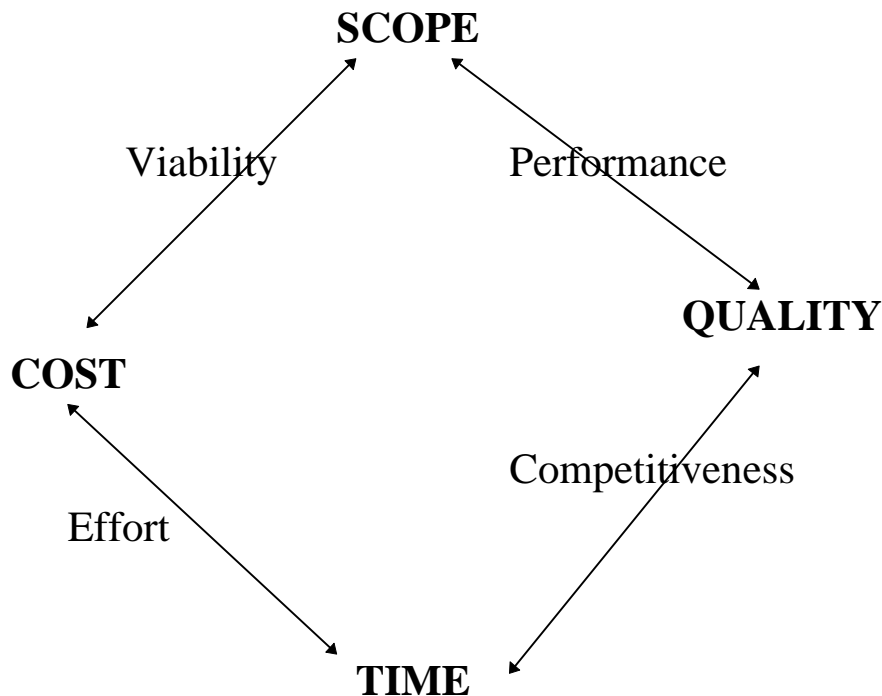


## Definition of a project

‘An endeavour in which human, material and financial resources are all organised in a novel way, to undertake a unique scope of work, of given specification, within constraints of cost, and time, so as to achieve beneficial change defined by quantitative and qualitative objectives.’

*J. Rodney Turner, The handbook of project based management, McGraw Hill, 1993.*

## The Scope/ Quality/ Cost/ Time ‘Diamond’



# **The Project Life Cycle**

1. Proposal and Initiation
2. Design and Appraisal
3. Execution and Control
4. Finalisation and Close Out

## **Rules**

1. Think about results (e.g., achievements) cf. process
2. Only 'worry' about the detail when you have to (i.e., not too early on)

# Proposal and Initiation Stage

## 1. Definition

Define what you are to undertake

## 2. Objectives

What is the project trying to achieve i.e., how do we know when the project has been successfully completed?

## 3. Scope

- Provide a clear definition of what has to be achieved (what are the success criteria)
- Provide a definition of what is NOT within the project
- Estimate the realistic work required to achieve the project objective
- Divide the project into packages of work
- Estimate costs and risks
- Consider when the work (packages) are to be executed
- State assumptions
- What are the risks? What is the impact of these? Can these be mitigated or are there 'fall back strategies i.e., how to manage the risks?
- How is the progress to be monitored and recorded?
- How is the project progress to be communicated?

## Planning

This is usually by way of a Gantt Chart

### Steps:

#### 1. *Horizontal organisation*

- Define time frame
- Note major activities (e.g., block out exams etc.)

#### 2. *Vertical organisation (define in the following order)*

- Milestones: i.e., define dates when certain things must be completed
- Activities
- Tasks within the activities

When you have identified the above on paper, it is useful to use a tool e.g., MS Project to graphically present the information and then refine the detail.

Microsoft Project is to be found in the SECEE IT folder

See examples e.g., g:\winproj\library\softdev.mpt



## Microsoft Project

Task Name	Duration	T	W	T	F	S	S	M	T	W	T	F	S	S	M
1 <b>Requirements Plannin</b>	<b>24h</b>														
2 Review existing systems	3d														
3 Perform work flow analysis	3d														
4 Model process	2d														
5 Identify user requirements	2d														
6 Identify performance requirer	2d														
7 Identify interface requirement	2d														
8 Prepare Software Requirement	1d														
9 <b>Software Requirements Revie</b>	<b>0d</b>														

### Steps

1. Type in the task names
2. Highlight the activities (e.g., 2 to 9 above) and press the indent button
3. Alter the number of days e.g. by dragging the right hand end of the blue 'bars'
4. Define milestones by altering to 0 days



Task Name	Duration	T	W	T	F	S	S	M	T	W	T	F	S	S	M
1 <b>Requirements Plannin</b>	<b>64h</b>														
2 Review existing systems	3d														
3 Perform work flow analysis	3d														
4 Model process	2d														
5 Identify user requirements	2d														
6 Identify performance requirer	2d														
7 Identify interface requirement	2d														
8 Prepare Software Requirement	1d														
9 <b>Software Requirements Revie</b>	<b>0d</b>														

5. Highlight activities (control & 'click') then use link tool to get above effect.

6. Double clicking on the task name allows many changes to be made to relationships between activities

**Task Information**

General | Predecessors | Resources | Advanced | Notes

Name: Review existing systems      Duration: 3d      [OK]

Percent Complete: 0%      Priority: Medium [v]      [Cancel]

Dates

Start: 01/06/94       Hide Task Bar

Finish: 03/06/94       Rollup Gantt Bar to Summary

[Help]

**Task Information**

General | Predecessors | Resources | **Advanced** | Notes

Name: Review existing systems      Duration: 3d      [OK]

**Constrain Task**

Type: As Soon As Possible [v]       Mark Task as Milestone

Date: As Late As Possible

Subproj: As Soon As Possible

Filenam: Finish No Earlier Than

Must Finish On

Must Start On

Start No Earlier Than

Start No Later Than

WBS Code: 1.1      [Browse...]

[Cancel]      [Help]

**Task Information**

General | **Predecessors** | Resources | Advanced

Name: Identify interface requirements      Duration: 2d

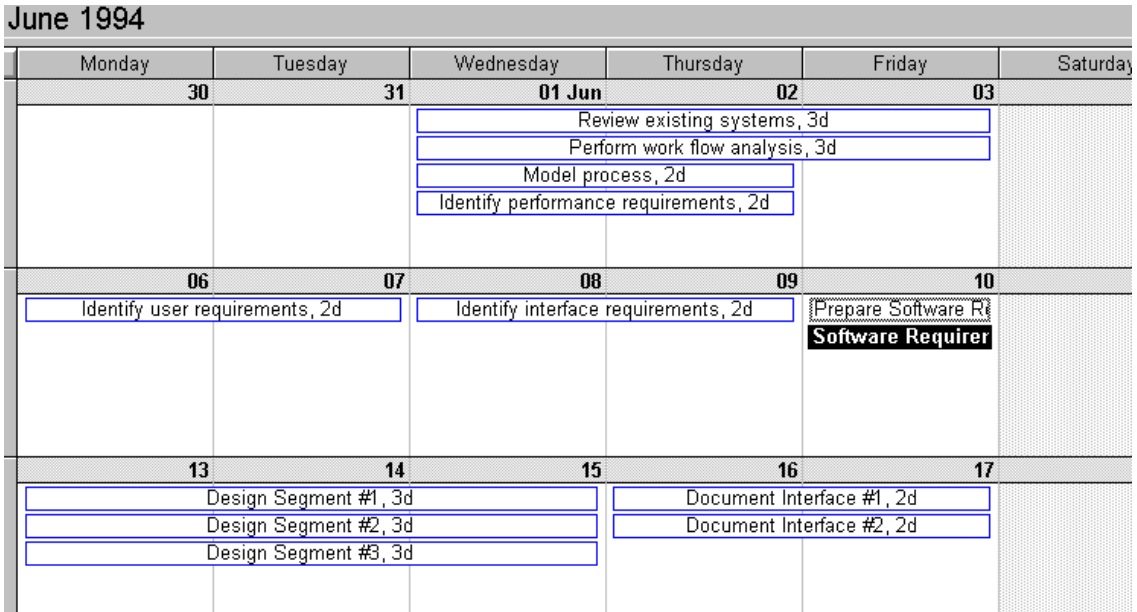
**Predecessors:**

ID	Task Name	Type	Lag
5	Identify user requirements	Finish-to-Start (FS)	0h

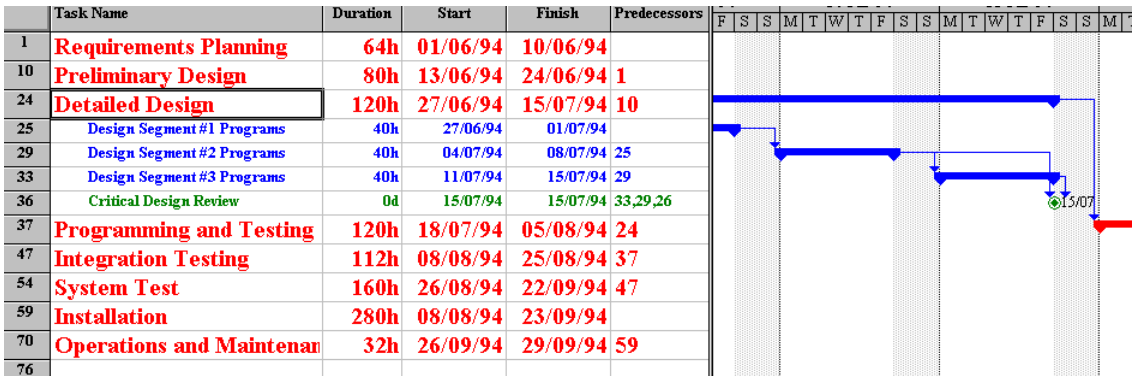
NB you can have a number of predecessors (ID is the task nos.)

# View

E.g., Calendar



Different Gantt views using the ++ tool to alter detail level



By placing cursor at front of blue arrow, you can drag a black bar to show how far the activity has progressed



Use Format Timescale to alter the horizontal time axis