

PD05 – Project Management

Projects

- Projects are novel – a step into the unknown
- Risk and uncertainty
- No two projects are exactly alike

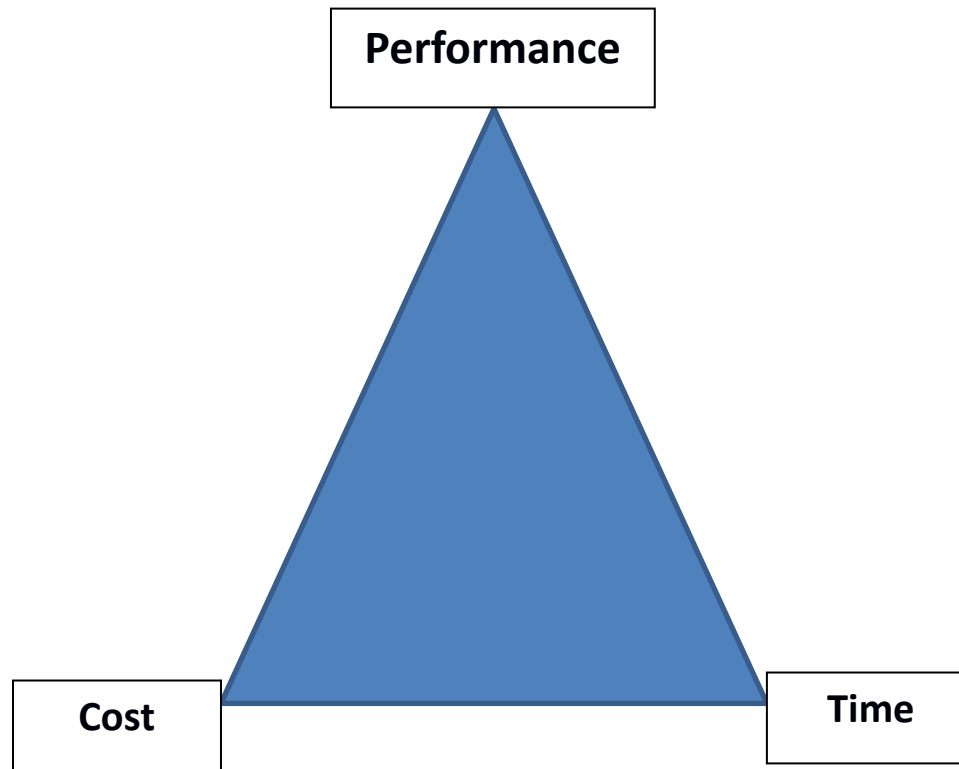
Projects

- Four types:
 - Civil engineering, construction, petrochemical, mining and quarrying projects
 - Manufacturing projects
 - Management projects
 - Research projects

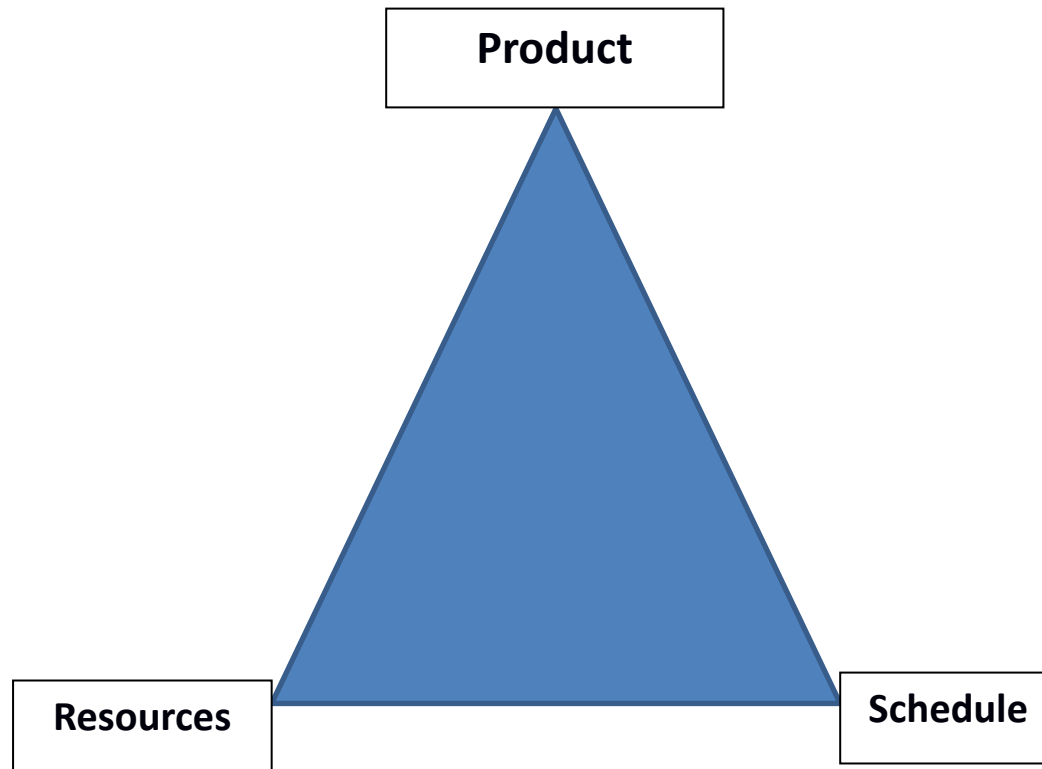
Project objectives

- Performance (and quality)
- Cost (budget)
- Time

Project objectives



Project objectives



Performance/Product

- Successful **Performance** of a project is defined by how well the end **Product** meets the desired specification
- Specifications can, and almost invariably do, change

Time/Schedule

- Time cannot be stopped or stored in a box for a rainy day
- Part of the specification of a project is the time the product is to be delivered: The End Date
- A schedule is a means of defining how the End Date is to be achieved and shows how resources are to be used

Cost/Resources

- Knowing how the available budget is being spent is an essential element
- A budget is often defined as money but can refer to the number of hours (manhours, machine hours, processing hours etc) available
- Resources refer not only to equipment but also to time, money, people, raw materials, facilities etc etc

Project Manager

- So a PM must:
 - Forecast risk and plan to avoid or mitigate it
 - Organise resources to achieve the goal
 - Coordinate and control activities to ensure the right people with the right resources are in the right place at the right time
 - Command (manage) people

Recognise anything about what a PM should do?
No? Go have a quick look at the Fayol lecture in the management module

Reasons for failure

- Lack of coordination between resource availability and activities to be done
- Lack of communication between stakeholders and the project team leading to
 - Lack of quality control
- Poor estimation of costs leading to
 - Inadequate scheduling of resources and activities
- Poorly defined measurables
- Lack of managerial control

Successful projects have...

- A definite start and end
- Tightly managed
- Commitment from all parties involved with clear understanding of:
 - Why is the project needed
 - What is the intended outcome
 - How is the intended outcome to be achieved
 - How each individual's role is to achieve the outcome