Projects and the four stages

MODULE 4 | PART A.1 | STUDENT COMPANION

Project management: planning, controlling and coordinating resources and activities so a project meets its objectives on time and within budget, while anticipating its risks. A project is unique and temporary; an operation repeats.

What makes it a project?

Unique

The main difference from day-to-day operations - and the source of high uncertainty

Solves a problem within a defined scope

Profit, cost or process goals agreed with the funder; must add value for them

Defined start and finish

Heavy investment comes before the benefits, so the finish date is watched closely

Related activities and resources

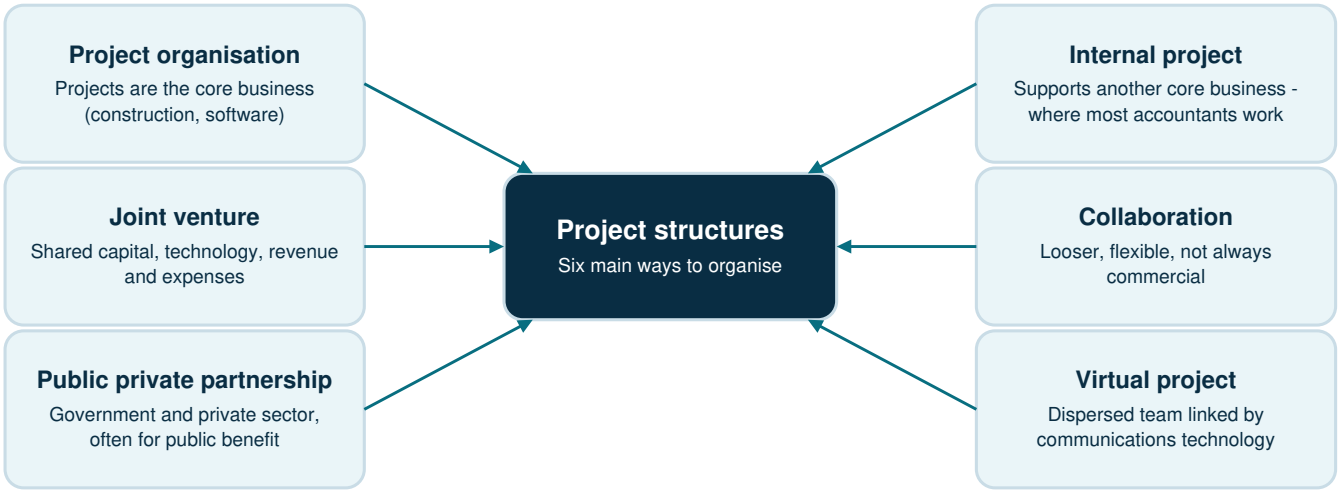
Decide which activities run in sequence and which can run at the same time

Sydney Opera House: planned as about four years and $7 million; took about fourteen years and $102 million

The four stages and the management accountant

Stage	What happens	Management accountant
1. Selection	Objectives, acceptable performance and deliverables set; team formed; feasibility and justification. Objectives: specification, budget, completion time. Criteria: strategic fit and risk	Identify and quantify risks; SWOT; financial viability
2. Planning	Five areas: scheduling; optimising cost and time; budgeting (resources and a framework for variance analysis); performance measurement (KPIs, milestones); incentives. Sponsor then approves or stops	Budget, financial planning, KPI design
3. Implementation and control	Work starts; progress against milestones, dates and budget. Price variances from inflation and currency; cost variance and schedule variance	Ongoing variance analysis; KPI tracking
4. Completion and review	Deliverables finished; team released; lessons documented	Final project cost; close the accounts

Six ways to structure projects



What changes across borders

Five differences

Wider spread
More complex purpose
Larger scope
Higher risk
Higher coordination, transport and communication costs

How to cope

Right team
Satisfied, collaborating stakeholders
Careful resourcing
Constant monitoring
Capture lessons as you go

Cultural fluency

Strategic: how business works across cultures
Workgroup: how mixed teams operate
Personal: etiquette, language, skills

A technically excellent project can still fail without cultural fluency

Case notes

Sydney Opera House: construction began in 1959 on a plan of about four years and an estimate of A$7 million; it opened in October 1973 at a cost of A$102 million - more than fourteen times the first estimate.

Project track record: Bent Flyvbjerg's database of more than 16,000 projects found only about 8.5% on budget and on time, and about 0.5% on budget, on time and delivering the promised benefits.

Joint venture: Sony and Honda formed the 50-50 joint venture Sony Honda Mobility in 2022 to develop electric cars. **Collaboration and virtual project:** the Event Horizon Telescope linked radio telescopes worldwide in April 2017 and released the first image of a black hole in April 2019.

Sources: Guinness World Records and PMI on the Sydney Opera House; Flyvbjerg & Gardner, How Big Things Get Done (2023); AP and company reports on Sony Honda Mobility; Event Horizon Telescope collaboration announcements, 10 April 2019.

Practice questions

MODULE 4 | PART A.1 | TRY THESE BEFORE THE WORKED ANSWERS

Question 1 - Project or operation?

Activity	Project or operation? Why?
(a) A bank's call centre answering customer enquiries	
(b) Moving a company's servers to a cloud provider by June	
(c) Producing the monthly payroll	
(d) Designing and launching a new loyalty app	
(e) Restocking supermarket shelves overnight	
(f) Building a temporary stage for a one-off festival	

Question 2 - The accountant at each stage

A university plans to replace its student enrolment system within eighteen months. Describe one contribution the management accountant could make at each of the four project stages.

Question 3 - Which structure?

Situation	Structure
(a) Two mining companies pool capital to develop a deposit overseas and share profits	
(b) A council and a private consortium build and run a new aquatic centre	
(c) A bank's IT team upgrades its payments system	
(d) Engineers in four countries design a product together online	
(e) Universities informally share data to study bushfire smoke	

Worked answers

MODULE 4 | PART A.1 | WORKED ANSWERS - ATTEMPT THE QUESTIONS FIRST

Question 1 - Project or operation?

Activity	Answer
(a)	Operation: continuous and repetitive
(b)	Project: unique, deadline, ends when migrated
(c)	Operation: repeats every month
(d)	Project: new deliverable, defined scope and launch date
(e)	Operation: routine
(f)	Project: one-off, temporary, defined start and finish

Question 2 - The accountant at each stage

Selection: quantify risks such as data migration failure, run a SWOT analysis and assess financial viability (costs versus savings and benefits). **Planning:** prepare the project budget by activity and milestone and help design KPIs such as enrolment processing time. **Implementation and control:** report cost and schedule variances and track the KPIs, including licence costs paid in foreign currency. **Completion and review:** confirm the final cost, close the project accounts and record lessons for future IT projects.

Question 3 - Which structure?

Situation	Answer
(a)	Joint venture
(b)	Public private partnership
(c)	Internal project
(d)	Virtual project
(e)	Collaboration (no commercial motive, flexible)