

Lecture 1

1. Project – a temporary endeavour undertaken to create a unique product or service

1.1. Attributes

- Has a unique purpose
- Temporary
- Develops progressively
- Requires resources, often from various areas
- Has a primary customer or sponsor
- Has specific time, cost, and performance requirements

1.2. Types of information System Projects

a. Software development projects

- A group of people working together to specify, design, develop, test and implement a new system for a 'customer'
- Has a lot in common with other types of construction work except 'intangibility' of software system compare to, say, bridges

b. Package implementation projects

- Buying a pre-existing software package and installing it in a customer's environment requiring:
 - Package customization and tailoring, data migration and cleansing, user training, cutover from old to new system

c. System enhancement projects

- Modifying an existing system to add new features or functions to meet a change in demand/requirements such as legal, regulatory
- Difficulty in keeping existing system operational while work progresses
- Regression testing to ensure enhancements do not compromise existing system

d. Consultancy and business analysis

- Investigating a business issue and proposing solutions using IT
 - May not be clear what the problem is and whether solutions can be found
 - Because the problem is unclear, the scope of the project must be flexible as well as the budget

e. Systems migration projects

- An existing operational system has to be moved to a new operating environment
- May involve some software development, may be necessary to create new interface with other system and might require some retraining

f. Infrastructure projects

- Introduce new hardware or replace old hardware, servers or PCs but can also include construction of physical building infrastructure to house IT
- Can be tricky if 'business-as-usual' must be maintained and space constraints don't allow old and new to sit alongside each other
- Managing sub-contractors to do the non-IT tasks can be complicated and may involve building codes and regulation

g. Outsourcing (an in-sourcing) projects

- Ensuring the scope of the contract is clear and feasible

- Training new people in IT systems to be supported
- Migrating employee contracts (incl. terms and conditions) from one employer to another
- Recruiting new staff to replace those who've left
- Renegotiating agreements with subcontractors and suppliers

h. Business continuity projects

- Resulting from fire, flood, hacker, attack, extortion etc.
- Requires setting up or hiring alternative venue that can support core business functions
- Building emergency contact lists, secure communications equipment
- Computing equipment to run business functions that must be tested periodically to ensure they will operate efficiently when the time comes

1.3. Classification

a. Size

b. Complexity → factors of project's complexity

- Project size: large projects are usually more complex
- Number of users: as the number of users of a system increases, the complexity also increases
- Volume of new information: the greater the volume of new information generated by the system, the more complex it becomes
- Complexity of new information generation: some systems only produce a small volume of new information, but require a great deal of effort to do so

c. Derivative

- Only incrementally different in both product and process from existing products

d. Platform

- Major departures from existing projects. 'Platforms' for the next generation of organizational offerings, e.g., new models of cars, new type of insurance plan

e. Breakthrough

- Typically use breakthrough or disruptive technologies or ideas: e.g., electric cars, mobile apps, patient self-help plans

2. Project Context

2.1. Knowing your context helps

- As a basis for understanding
- As a basis for risk mitigation
- As a way of ensuring business satisfaction
- As a way of influencing

2.2. Lessons in the Business Project Context

- Understand the needs of different stakeholders
- Planning well means you don't promise what you cannot deliver. Negotiate this explicitly (if you have an opportunity)
- If you promise a business outcome, make sure you can deliver it
- If you promise a partial outcome, make sure you understand and articulate what part of the business outcome you are delivering
- If you are on a team that promises a business outcome

3. Planning

The need to build complex products under intense time and budget pressure whilst harnessing a diverse range of expertise towards a single goal under the threat of intense competition demands a methodology by which all of these threads are brought together to meet project objectives

4. The Triple Constraint



Triple Constraint table			
	Accept	Constrain	Enhance
Time		*	
Cost			*
Scope	*		

- Projects must be delivered within cost
- Projects must be delivered on time
- Projects must meet the agreed scope – no more, no less
- Projects must also meet customer quality requirements

5. Planning a Project

- Developing a set of tasks and management actions takes planning
- Step one in the plan is a Charter or Scope Statement
- Charters are essential tools for both internal and external projects
- Charters allow you:
 - To explore the concept and how it might be carried out to preliminary stage to see if it is feasible
 - To ensure all stakeholders are on the same page before a lot of work is done

6. Charter

6.1. For the Client:

- A general agreement to carry out the project, demonstrating an understanding of the project and what the client hopes to achieve
- Header Information
- Objectives / Deliverables
- Major Tasks and Milestones
- Technical Requirements (if relevant)
- Costing estimate (can be in Objectives)

6.2. For the project team:

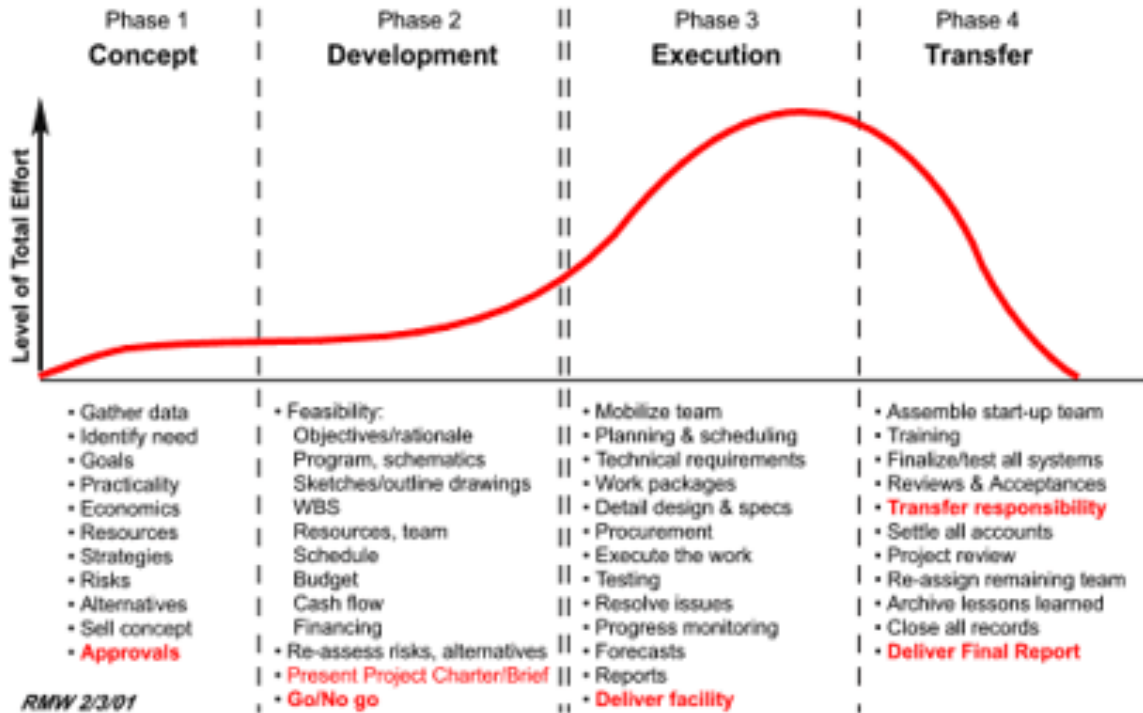
- Resources needed
- Distribution of workload
- Roles

d. Responsibilities

7. Project Development Life Cycle

7.1. Projects progress through a number of typical stages:

- a. Concept (idea)
- b. Development (definition/production/planning)
- c. Execution (operation)
- d. Transfer (divestment/closing)



7.2. Reason to study the life cycle

- a. Compression of the Product Lifecycle
- b. Knowledge explosion
- c. Triple Bottom Line (Planet, People, Profit)
- d. Corporate Downsizing
- e. Increased Customer Focus

7.3. Management actions in project development lifecycle

- a. **Conceptual Phase**
 - Determine that a product is needed
 - Establish goals
 - Estimate resources
 - Convince organization of need
 - Appoint Key Personnel
- b. **Development Phase**
 - Define Targets
 - Prepare schedules
 - Define and allocate tasks and Resources
 - Build the project team

c. **Execution Phase**

- Perform the work of the project
- Ensure that team members perform their work
- Monitor progress

d. **Termination**

- Assist in transfer of product/completion of report or deliverable
- Transfer human and non-human resources to other parts of the organization
- Ensure commitments are completed
- Terminate project
- Reward personnel