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Professional Issues in IT

Topic 3:
IT Project Management


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IT Project Management Topic 3 - 3.2

Scope and Coverage

This topic will cover:

- IT Project Management
 - What it is and why it is necessary
- IT Project Management Lifecycle
 - What the project management lifecycle is
 - Lifecycle phases and stages



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Learning Outcomes

By the end of this topic students will be able to:

- Explain what IT project management is;
- Identify the project management lifecycle phases;
- Name and explain key stages within lifecycle phases.



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What is IT Project Management?

- IT Project Management is:
"The application of knowledge, skills, tools and techniques to project activities to meet the project requirements."
(PMI 2008:6)
- "A management environment set up to ensure the delivery of a specified business product to meet a defined business case"
(Cadle & Yeates 2001:49)

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Why Project Management?

- IT projects are becoming increasingly complex
 - More specialised
 - Shorter deadlines
 - Increasing numbers of stakeholders
 - Increasingly distance based
 - Tighter budgetary demands
- Projects must be controlled (managed) to stand a chance of being a 'success'
 - Success measured in Time/Quality/Cost

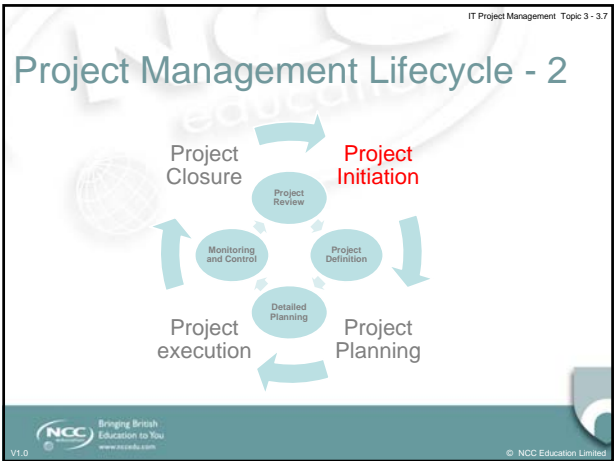
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Project Management Lifecycle - 1

- Concerned with the management of a project
 - Method123 approach
- Project management methodologies
 - Encompass project management lifecycle phases
 - Series of techniques, tools and procedures
 - PRINCE2
- Exists within a systems development lifecycle
 - Operation, maintenance and enhancement after project launch
 - Waterfall/Spiral

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Project Management Phases

- Divisions within a project
 - Subsections for management, planning and control
- Usually sequential although overlap can occur
- Number of phases
 - Dependant on project size, complexity and impact
 - Each phase has multiple stages
- All phases have same characteristics
 - Phase end handover
 - Unique focus
 - Control

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Initiation Phase

Phase 1

- Defining of project:
 - Objectives/scope/purpose/deliverables
- Most important of all phases!
- Key stages of phase
 - Business Case
 - Project Charter
 - Draft Project Plan
 - Phase Review

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Business Case


- 1st step in whole project lifecycle
- Create business case
 - Identify alternative solutions
 - Justify start up of project
 - Identify business problem/opportunity
 - Costs/benefits
 - Recommend solution
- Documentation referred to throughout project
- Project success measured against business case

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Project Charter


- Defines project/ specifies boundaries/ sets scope
- Also known as
 - Letter of contract/ letter of agreement/ project constitution
- One page document
- Powerful communication tool
 - Big picture
 - Common vision
- 3 stage approach
 - Draft/ version 1/ updates

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Draft Project Plan


- Basic summary project plan
- Initial identification of
 - Project objectives
 - Project team
 - Equipment
 - Scheduling
 - Assumptions
- Helps evaluate at this stage whether a project is potentially achievable

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Initiation Phase Review

- To close out initiation phase
- Report on achievements to date
 - Schedule
 - Budget
 - Issues
- Form or report format
- Measure deliverables
- Gain approval to start planning phase

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Planning Phase

Phase 2

- Creation of credible project plans
- Establish project managerial foundations
- Uses project requirements identified in phase 1
 - Quality of phase 1 documentation essential
- Documentation used for monitoring and progress tracking
- Essential management recognise importance of phase

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Planning Phase – Key Stages

- Key Stages of phase:
 - Project Plan
 - Resource Plan
 - Financial Plan
 - Quality Plan
 - Risk Plan
 - Acceptance Plan
 - Communication Plan
 - Procurement Plan
 - Phase Review

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Project Plan


- Detailed document essential to project
- Statement of how objectives will be achieved
- Provides baseline for monitoring progress
- Identify and schedule phases/activities/tasks
- Contains project prerequisites and assumption lists
- Set timeframes/milestones
- Daily measuring of actual vs. planned progress
- Finalise resources

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Resource Plan


- Also known as resource management plan
- Essential comprehensive document
- Necessary for budgeting/forecasting
- Identification of all project resources
 - Team skills/roles and responsibilities
 - Equipment/types and quantity
 - Materials
- Timelines for resources required

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Financial Plan

- Finalise project budget
- Used to measure 'success'
 - Expenditure vs. projected
 - Must be realistic!
- Itemises expenditure areas
 - Labour/equipment/materials
- Includes a breakdown of finances
 - Each stage of project

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Quality Plan


- Vital for success of project
- Finalises milestones for project quality reviews
- Concerned with both internal and external targets
 - Internal company reviews/external customer reviews
- Ongoing measure of project quality
 - Reduction of nasty 'surprises'
- Imparts customer confidence
 - Consultation throughout process

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Risk Plan

- Identification of potential/ real project risks
- Plan for risk reduction
 - Monitor and control
- Essential to a projects success
- Reviewable/ reworkable throughout project life
- Further detail in Topics 7 and 8

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Acceptance Plan


- Also known as success plan
- Defines measurable tasks required to be completed for project to be accepted by client/stakeholders
- Formal agreement document
 - All parties know where they stand
 - Aim to negate risk of client dissatisfaction
- Should be reworked as criteria changes
- Includes:
 - Deliverables/ testing/ criteria/ standards/ milestones/ payment plans

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Communications Plan

- Exists to inform
- Ensure all stakeholders receive clear, up-to-date information at regular intervals
 - Remove opportunity for confusion/excuse
- Goes beyond the project
 - Can effect organisation at strategic level
- Enables regular feedback
- Opportunity to continually improve communication

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Gantt Charts - 1

- One of the oldest and most useful planning tools
- Can be used to show both planned and actual progress of project tasks
- Very easy to read and useful for all types of plan both at high and detailed levels
- The horizontal axis represents time
- The vertical entries maybe tasks, resources or anything else that needs to be controlled over a time duration.

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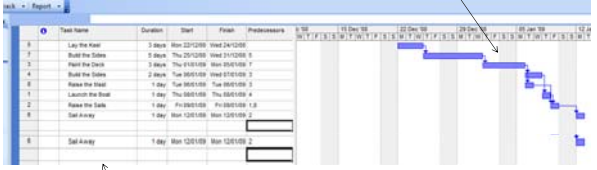
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Gantt Charts - 2

- Calendar style bar chart tool for communicating all types of plans



Bar represents time

This could be a list of tasks or resources

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Procurement Plan

- Also known as a purchase plan
- Opportunity to plan ahead purchasing of products/services needed for project
- Defines timeframes
- Justifies need
- Reduces chance of project halting due to lack of supplies

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Phase Review


- Exists to report progress to date
 - Client/stakeholders/project team/management
- Documented process for end of project review
- Identifies and records
 - Project on schedule to date (or not!)
 - Any issues/ risks identified
 - Resolutions
- Aim
 - Receive approval to continue

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Execution Phase

- Phase 3
- Performance-based phase
- Building and management focused
 - Building project deliverables
 - Managing project for success
 - Client handover
- Longest phase
 - Time and resource heavy
- Invoking planning phase documentation


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Execution Phase – Key Stages

- Key stages of phase
 - Build deliverables
 - Perform
 - Time Management
 - Cost Management
 - Quality Management
 - Change Management
 - Risk Management
 - Perform
 - Procurement Management
 - Communications Management
 - Phase Review

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Time Management

- Exactly as name suggests
 - Manages and measures time within project
- Done well, time management has huge influence on delivering project to schedule
 - Done poorly and can absolutely effect success of project
- Essential to record time spent on tasks
 - For later tasks on this project
 - For future projects where similar tasks will be undertaken
 - For interim payments to team members within project

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Cost Management

- Essential to monitor and control cost throughout life of project
 - Failure resulting in increased budget = client and management dissatisfaction
 - Potential strategic level impact
- Aim
 - To deliver project on cost

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Quality Management


- Ensures all deliverables attain required standard
 - Lack of quality jeopardises project success and organisation at strategic level
 - Wastes time/resources/budget
- Sets quality targets
 - For project/project team/deliverables
- Monitors
 - Proactive identification of quality issues
- Aim
 - To resolve any quality issues that may impact project success

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Change Management


- Procedure for implementing change once project has begun
 - Identification of required change
 - Measurable potential effect(s) of change
 - Control the process of implementing the change
 - Record change details
 - Manage any impact
 - Review decision
- Aim
 - To minimise the impact of any change on a project
 - To manage client expectations throughout project

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Risk Management

- Monitoring and controlling of risk within a project
- It is essential that it is taken seriously.
- Often, a specialist Risk Manager is assigned to project
- Attempts to pre-empt possible risks with plan
- Aim
 - To minimise the impact of risk on project
- We will focus on risk management in Topic 7 & 8

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Procurement Management

- Managing the purchase of goods/services from suppliers during a project is essential
 - Ensuring goods/services are available when required
 - Poor procurement management can result in a project stalling or falling over
 - Goods/services match requirements
 - Procured within budget constraints are essential or renegotiation will be necessary
 - Costing time/money
- Aim
 - Keeping project on track

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Communications Management


- Managing expectations through communication
 - When people feel informed and included processes often run more smoothly
- Informing interested parties about developments
 - Not as easy as it sounds. Different interested parties require different information
 - Management of company developing project will have access to information that a client should never see.
 - Accountants will be interested in the bottom line, not excuses as to why overspend occurred.
- Aim
 - Keeping all parties informed with the right type of information

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Execution Phase Review


- Internal review of success of project
 - Ideally going beyond time/cost/quality
 - Project team success: Structure/compatibility/expertise
 - Strategic impact of project
 - Communication success
- Documenting of findings
 - Ensure completion of detailed documentation of all findings associated with project
 - Important for future projects
 - Aids organisation in future decision making

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Closure Phase


- Final Phase (in four phase approach)
- Formal project closure
- Documentation of everything necessary to close out project
 - Deliverables met
 - Client approval gained
 - Handover process
 - Any payment due (if penalties incurred due to over-run)
- Key Stages of phase
 - Perform project closure
 - Project review

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Perform Project Closure


- Official handover of all project deliverables to client
- Achieve client satisfaction
- Record & collate all information generated throughout project life
- Confirm that all suppliers have been paid

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Project Review


- Review of performance throughout project lifecycle
 - From beginning to end/ internal and external
- Can be undertaken internally or organisation may employ external expert for review
- Aim
 - That project can be judged a success!

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Any Questions?

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