TOPICS:

I. Introduction — Project
II. PM Lifecycle & Knowledge Areas
III. Project Integration Management
IV. Project Scope Management
V. Costs and Resourcing Management
VI. Agile & Agile PM
VII. Mid-Semester Exam (No Lecture)
VIII. Schedule Management
IX. Project Resource & Stakeholder Management, Dispute Resolution
X. Project Quality Management & Communications Management
XI. Project Assignment Presentations (No Lecture)
XII. Risk & Procurement Management

Lecture 1

PROJECT

A project is 'a temporary endeavor to create a unique product, service or result'

Operations is work done to sustain the business. Projects vary yet end when their objective is reached – the landscape of project management is always changing

Project Attributes

- Unique purpose
- Temporary
- Developed using progressive elaboration
- Requires resources, often from various areas
- Have a primary customer or sponsor – who provides direction
- Level of uncertainty

Triple Constraint of Project Management

- Cost/resources
- Quality/scope
- Time/schedule
    - Often say that you can only have 2/3

PROJECT MANAGEMENT

The application of knowledge, skills, tools and techniques to project activities to meet project requirements.

They strive to meet the triple constraint ^ to meet the needs of stakeholders who are the people involved in or affect by project activities

Project Success

- Project met the triple constraint
- Satisfied the customers
- Result of the project met its main objective e.g. saving money, good return on investment

What helps projects succeed?

User involvement, executive/management support, clear business objectives, emotional maturity (not getting overwhelmed but addressing problem), optimizing scope, agile process (change and adapt), project management expertise, skilled resources, execution, tools and infrastructure

Best Practice

Optimal way recognized by industry to achieve a stated goal or objective. Make sure your projects are driven by your strategy, engage stakeholders.

Common causes of project failure

Goals and vision, leadership and governance, stakeholder engagement issues, team issues, requirements issues, estimation, planning, risk management, architecture and design, configuration and information management, quality, project tracking and management, decision making problems

Example final questions

1. How long does an IS project take – can't tell yet
2. PMBOK: Project Management Body of Knowledge
3. Who is included in the stakeholders, not the media coverage
4. What doesn't always help projects exceed – rigidly defined strict spec. Benefit in having senior people

Programme vs. Project

Programme: a collection of projects that share one big common goal

Portfolio: collection of projects that do not depend on each other.

Lecture 2

PM LIFECYCLE & KNOWLEDGE AREAS

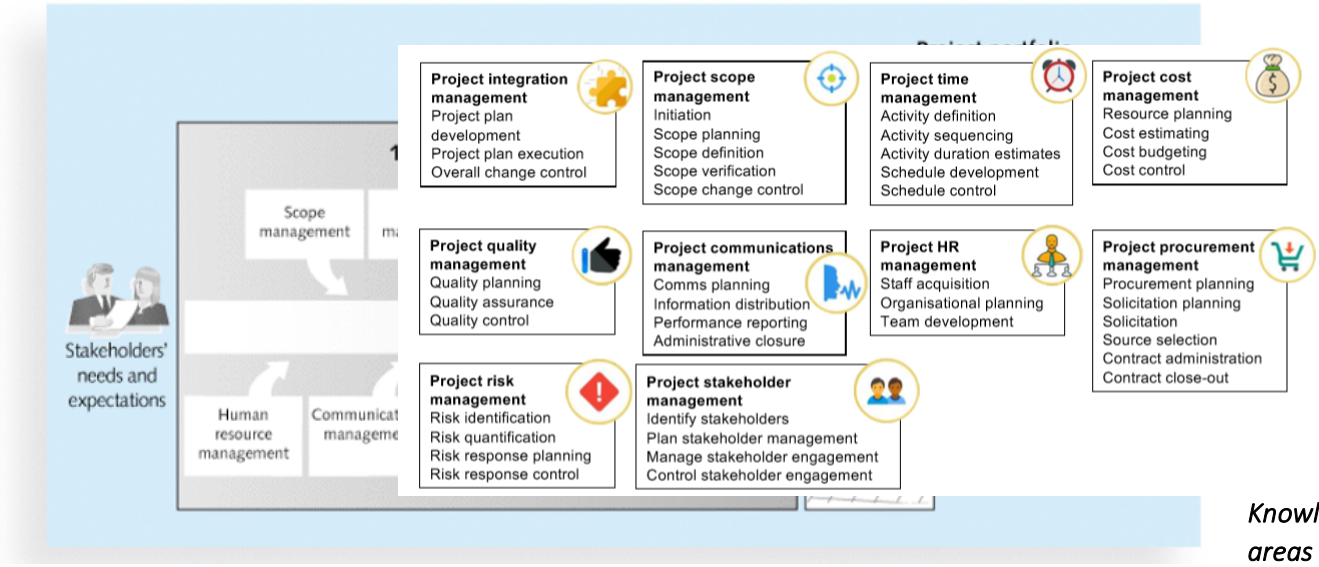
OBJECTIVES:

- PMBOK: PM framework
- Project phases and the project life cycle
- Systems view of PM

PMBOK: THE PROJECT MANAGEMENT FRAMEWORK

Understand Customer requirements and the importance of project sponsors, needs:

1. A champion, motivates the team
2. Project sponsor, supports champion, at a higher level
3. Project sponsor can control fund resources vision and appoint a champion



Knowledge areas describe the key competencies that project managers must develop. → the WHY and WHO's perspective

Super Tools

Have high use and high potential for improving projects success, such as:

- Software for task scheduling
- Scope statements
- Requirements and analyses
- Lessons-learned reports ^Comment on the core of it/who's perspective

Existing effective tools: progress reports, kick-off meetings, Gantt charts, change requests.

5 PROJECT STAGES

- ***Initiate***: potential projects are identified/evaluated in terms of importance to the organisation
  - Usually the shortest phase, very important, develop the project charter and identify your stakeholders.
- ***Plan:*** Scope, time, cost and risk management planning takes place
- ***Execute***: Project plan is followed
- ***Control***: Project performance is measured against the project plan
- ***Close***: Final paper work completed and sign off by all stakeholders

Example of PMBOK:

- Planning processes: scope planning, quality planning
- Executing processes: performance reporting, managing stakeholder engagement
- Controlling processes: cost control, quality control

- Closing processes: close project/phase, close procurement

PROJECT CHARTER

Aka project brief, concept paper, statement of work or high-level plan

Provides context, methodologies, defines initial requirements that will satisfy the needs of the project sponsor and key stakeholders. Forms partnership between sponsor, client, manager etc. by establishing the critical success factors.

Includes: project background, description, purpose, justification, objectives, high-level scope, risks, budget and structure.

For each process there are inputs, tools, techniques and outputs.

Project phases and the project life cycle

Collection of project phases that defines:

- What work will be performed in each phase
- What deliverables will be produced and when
- Who is involved in each phase
- How management will control and approve work produced in each phase

Early phase
Resource needs are lowest, highest level of uncertainty/risk, project stakeholders have greater influence

Middle phase
Certainty of completing a project improves, more resources are needed

Final phase
Ensuring that project requirements were met, sponsor approves completion of the project

Phases of a traditional project life cycle

Work breakdown structure (WBS): in PM it is a deliverable-oriented breakdown of a project into smaller components. Close out phase critical in providing experience and expertise.

Product life cycles

Systems development life cycle (SDLC) describes the phases involved in developing and maintaining information systems. These can follow:

- Predictive life cycle: scope of project is clearly articulated and the schedule/cost be predicted.
    1. Waterfall model: well defined, linear stages of systems
        - Plan next iteration → develop/test → identify risks → determine objectives
    2. Spiral model: shows that software is developed using an iterative > linear. Helpful for risks
    3. Incremental build model: provides progressive development of operational software
    4. Prototyping model: used for developing prototypes to clarify user requirements
    5. Rapid application development model: produce systems quickly w/o sacrificing quality
- Adaptive software development (ASD) life cycle: requirements cannot be clearly expressed, projects are mission driven and component based, using time-based cycles to meet target dates

METHODOLOGIES VS. STANDARDS (give examples)

Methodology: *set or system of methods, principles, rules for regulating a given discipline as in arts/science.* Not a technical standard.

Standard: *Considered by an authority or by general consent as a basis of comparison. Adopted by all*

The importance of project phases and management reviews

The project should pass successfully to continue onto the next. Management reviews (phase exists, kill points) should occur after each phase to evaluate the project's progress and continued compatibility with organisational goods. Also analyse 'what went right'?

SYSTEMS VIEW OF PM

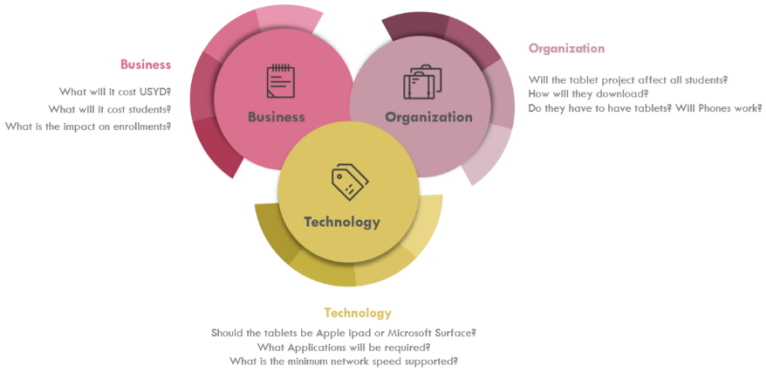
Projects cannot be run in isolation – must operate in a broad organisational environment. Taking a holistic view of carrying out projects within the context of the organisation

Three parts in systems view of PM

Systems philosophy: an overall model for thinking about things as systems

System analysis: problem-solving approach

Systems management: address business, technological, and organisational issues before making changes to systems.



3 sphere model: business, organisation and technology. Must be coherent among the 3 e.g. not expecting each business student to buy an iPhone X, this is a business issue

Organisational culture

Set of shared assumptions, values and behaviours that characterise the functioning of an organisation.

Many experts believe this is the real underlying problem. 10 characteristics of organisational culture:

1. Member identity
2. Group emphasis
3. Unit integration
4. Risk tolerance
5. Reward criteria
6. Conflict tolerance
7. Open-systems focus
8. Means-end orientation
9. People focus
10. Control

Example final questions

1. In PM a programme is different from a portfolio because portfolio do not depend on each other
2. Methodology vs standard
3. Organisational culture
4. Waterfall method
5. Project charter