

SWEN90016

Software Processes & Project Management

Marion Zalk
Department of Computing and Information Systems
The University of Melbourne
mzalk@unimelb.edu.au

2021 – Semester 2 Lecture 1



Lecture 1 – Intended Learning Objectives

Module 1: Subject Introduction

1. Get to know your teaching staff, subject learning objectives, subject content and semester structure.

Module 2: Introduction to Projects

- 1. Understand key elements of a Project and why organisations use them.
- 2. Understand the foundational components of Project Management.
- 3. Understand key skills and responsibilities / activities of a Project Manager.



Module 2.1 – What is a Project

A temporary endeavour to create a unique product, service or outcome.

Key characteristics:

- Introduce CHANGE to the organisation
- TEMPORARY, it has a defined beginning and end
- CROSS-FUNCTIONAL, cuts across organisational boundaries
- Deals with the UNKNOWN
- UNIQUE
- They all vary in SIZE − ‡ / † , \$'s and ⊕



Module 2.1 – Why do organisations use Projects

- Provides strategic alignment of key activities and visibility at the appropriate levels
- Mechanism to prioritise activities (Benefits, Regulatory, HW Refresh)
- Allows organisations to deliver change in a structured and formal manner outside of BAU
- Effective and efficient management of organisations limited resources (people & \$'s)
- Establish ownership and accountability Process and the Benefits
- Provide clarity, buy-in and agreement across what will be done, when, who, why and the outcomes

www.pmi.org/about/learn-about-pmi/what-is-project-management



Lecture 1 – Intended Learning Objectives

Module 1: Subject Introduction

1. Get to know your teaching staff, subject learning objectives, subject content and semester structure.

Module 2: Introduction to Projects

- 1. Understand key elements of a Project and why organisations use them.
- 2. Understand the foundational components of Project Management.
- 3. Understand key skills and responsibilities / activities of a Project Manager.



Module 2.2 – What is Project Management

Project Management is the planning, delegating, monitoring and controlling of all aspects of a project, and motivating those involved to achieve the project objectives within the expected targets for time, costs, quality, scope, benefits and risks.

Value lies in:

- Organising and structuring scarce resources
- Managing risk
- Identifying and clearing issues
- Managing and implementing change
- Retaining and re-using knowledge
- Organisational wide learning from past success and failures



Lecture 1 – Intended Learning Objectives

Module 1: Subject Introduction

1. Get to know your teaching staff, subject learning objectives, subject content and semester structure.

Module 2: Introduction to Projects

- 1. Understand key elements of a Project and why organisations use them.
- 2. Understand the foundational components of Project Management.
- 3. Understand key skills and responsibilities / activities of a Project Manager.



Module 2.3 – Project Manager Skills / Attributes

Project managers are highly skilled knowledge workers and change agents. They take accountability, make project goals their own and use their skills and expertise to inspire a sense of shared purpose across the project team. They enjoy the organised adrenaline of new challenges and the responsibility of driving business results.

Core Skills / Attributes:

- Work well under pressure
- Comfortable with change and complexity in changing environments
- Use / have the right people skills
- Adapt, resolve issues and deal with problems
- Effective communicators regardless of hierarchy
- Action orientated and leave nothing for tomorrow
- Command & Control
- Good ones are in demand, hard to find and get paid a lot

www.pmi.org/about/learn-about-pmi/who-are-project-managers



Module 2.3 – Project Manager Key Activities (traditional)

Planning

- Define and clarify project scope
- Develop the project management plan
- Develop the project schedule
- Develop policies and procedures to support the achievement of the project objectives

Organising

- Determine the project team structure
- Identify roles and responsibilities
- Identify services to be provided by external companies
- Staff all project positions and on-going management

Leading

- · Setting team direction
- Owning & coordinating activities across different organisational functions
- Motivating team members
- Assigning work

Controlling

- Defining project baselines
- Tracking project progress
- Project status reporting
- Determining and taking corrective actions



Module 2.3 – Agile Scrum Master Key Activities "a *change is occurring*"

Agile is redefining the way we execute projects and the role of the PM. In pure Agile:

- No defined PM role
- Key activities are spread / shared across team members
 - Key project activities are still undertaken formally with appropriate documentation
- Some alignment between a Scrum Master and a Project Manager
- Move from Command and Control to Servant Leadership
 - Coaches and facilitates teams to deliver
 - Emphasises objectives
 - Is invested in the program's overall performance
 - Asks the teams for answers
 - Allows the teams to self-organise and hit their stride
 - Assists others with fixing issues

www.pmi.org/learning/library/pm-role-lean-agile-world-9350

www.greenleaf.org/what-is-servant-leadership/

https://www.mountaingoatsoftware.com/agile/agile-project-management



Module 2.3 – Project Manager Key Activities – The Market wants it all!

Project Manager Job Ad - Skills and experience

- Minimum 8+ years of experience as a Project Manager managing large, complex projects with multi-functional teams
- Strong stakeholder and relationship management skills
- Experience in managing multi-vendor teams
- Experience and qualifications in Prince2
- Can deal with complexity with very solid Project Management technical skills such as ability to develop and manage schedules, financial workbooks
- Strong stakeholder partnership skills, ability to work with teams at varying levels of project experience
- Key requirement is knowledge of multiple models of technical project delivery such as agile and running sprints but equally able to build confidence with the steering committee with formal project management approaches such as setting and achieving deadlines on timing and scope