Faculty of Engineering and Mathematical Sciences

Project Management & Engineering Practice (GENG 5505)

Assoc Prof Cosimo Faiello

THE UNIVERSITY OF
WESTERN
AUSTRALIA

SEEK WISDOM

Project Management & Engineering Practice (GENG5505)

Integration management: Unifying a coordinated approach
(Ch 12)

(Week 7a) - Lecture thirteen, 16th April 2024

THE UNIVERSITY OF
WESTERN
AUSTRALIA

Overview

1. Developing the project proposal
2. Developing the project management plan
3. Directing and managing the work
4. Monitoring and controlling performance
5. Performing integrated change control
6. Closing down the project
7. Mapping project processes

Developing the project proposal

➢ Confirms the existence of the project itself (as distinct from an operational priority)

➢ Enables the foundational understanding of the project

➢ Validates the alignment of the (change) project to the strategic direction of the organisation, while also considering the ongoing operational priorities

➢ Documents (in broad terms) the organisational need, assumptions, constraints, stakeholder requirements, provisional estimates of both time and money, and high level risks (among others)

Developing the project management plan

The goal is to have all plans integrated into a single, comprehensive and endorsed project management plan that defines the basis of all project work:
- Scope management plan
- Time management plan
- Cost management plan
- Quality management plan
- Human resource management plan
- Communications management plan
- Risk management plan
- Procurement management plan
- Stakeholder management plan
- Integration management
- And a plan for TBL

Directing and managing the work

➢Ensuring project objectives are accomplished

➢Creating deliverables in line with the planned work

➢Providing opportunities for the project team to learn and develop

➢Obtaining and allocate the required resources

➢Establishing open communication channels

➢Generating performance reports

➢Engaging with stakeholders

➢Monitoring risk events and treatment responses
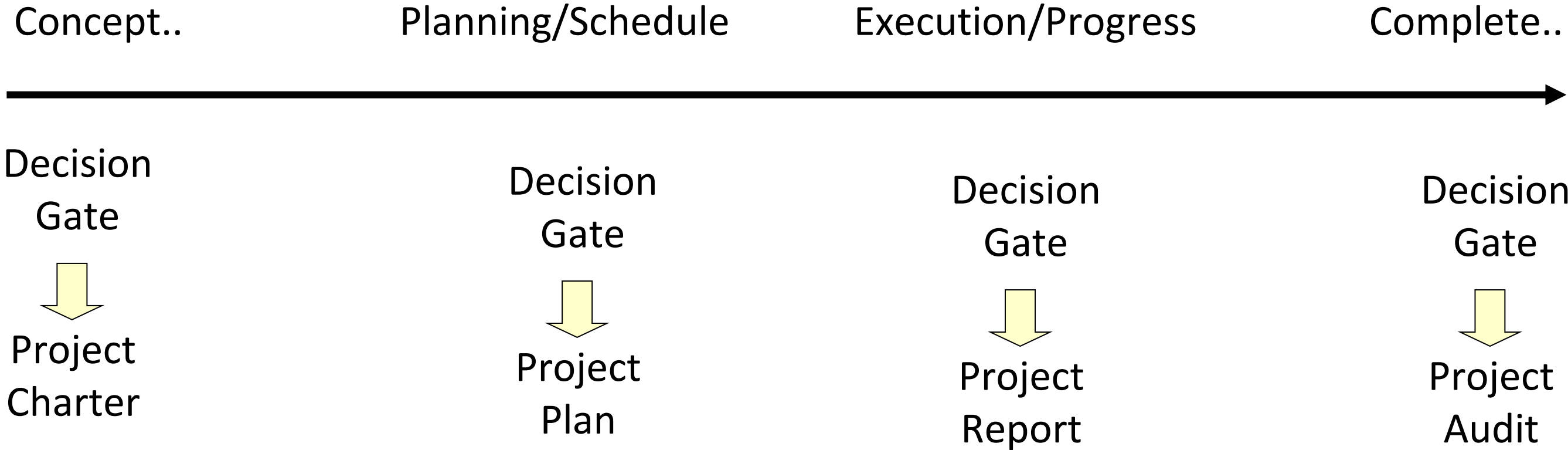
➢Documenting the lessons learned

➢…

Monitoring and controlling performance

➢Comparing actual project performance against planned performance (as per the plan)
➢Assessing performance to identify what corrective or preventative actions may be required
➢Recommending appropriate follow-up action
➢Identifying and responding to existing, recurrent or new risks
➢Maintaining accurate records
➢Circulating all the relevant reports and information
➢Verifying the implementation of all approved changes
➢…

Performing integrated change control

➢A formalised, agreed and practised integrated change control process in place from the project's inception ensuring only approved changes are incorporated in to the revised baseline;

➢Written and recorded in variation registers or change logs, change requests nominate the required change along with any justification and impact revisions to the time and cost baselines;

➢Working in conjunction with other stakeholders, the project manager will ensure that any proposed change is reviewed, evaluated, approved, delayed, rejected or actioned, and that these decisions are communicated.

CLOSING DOWN THE PROJECT

Concept..	Planning/Schedule	Execution/Progress	Complete..

Decision Gate → Project Charter

Decision Gate → Project Plan

Decision Gate → Project Report

Decision Gate → Project Audit

Getting client acceptance (100%)

➢Detailed completion checklist

➢Satisfaction levels & surveys

➢Defects warranty

➢Written (formal) acceptance procedure

➢Specification conformance inspection & testing

➢Reviews & evaluations

➢Walkthroughs

➢Final payment

➢..

Debrief the stakeholders

➢ Was the project delivered:
  • On time?
  • On budget?
  • On scope?
  • On specifications?
➢ Were all variations & scope changes addressed competently?

➢ Were TBL and life cycle included?

➢ Were the communication channels effective and kept open at all times?

➢ Was the reporting documentation accurate?

➢ Was the project managed professionally?

➢ Did they have confidence in the project manager & team members?

➢ Were the issues resolved in a win–win solution for all?

➢ What improvements exist for how future stakeholders are managed?

➢ ...

Project performance review

- Final 'kick-out' meeting

- Concise history of the project

- Explanation of variances

- Document successes & failures

- Evaluate project's lessons

- Recommendations for future projects

- Identify processes requiring amendment

- Assess administrative support

- Review project performance

- Evaluate suitability of tools & processes

- Critically assess organisational structure

- Review accuracy of estimates

- Evaluate team performance
- ...

Learning the (many) lessons

➢Missed deadlines

➢Inaccurate estimates & calculations

➢Schedule revisions

➢Inspection & testing failures

➢Poor contractor performance management

➢The lack of team cohesion

➢Cost over-runs

➢Unauthorised scope changes

➢Poor quality work – including TBL - which required reworking

➢Unresolved & escalated conflict

➢…

THE UNIVERSITY OF
WESTERN
AUSTRALIA

SEEK WISDOM

Mapping project processes with KRAC

Take the opportunity with KRAC to challenge and/or change your processes:

K – keep (if it works, keep it)

R – remove (if it doesn't work, remove it)

A – add (was something missing)

C – change (what can change)

Project manager & team

Project manager

➢Were you satisfied with the outcome?

➢Did you have sufficient support?

➢Were your communications approaches effective?

➢Was the methodology/processes appropriate for the type of project?

➢Do you require more training?

➢Were satisfied with your team?

➢...

Project team

➢Was your workload appropriate?

➢Did you experience any team conflicts?

➢Was team communication effective?

➢Was your work related to your skills, knowledge & competencies?

➢Were you adequately rewarded for your project work?

➢...

Celebrate achievement with your team

➢Arrange a kick-out meeting with your team members

➢Acknowledge the team effort

➢Introduce the team members to the client (if they have not already met them)

➢Formally appraise & record the team members' positive performance

➢Ask the team (or individual) how they would like to be rewarded

➢Give constructive feedback to the team (both as a team and individually)

➢Getting all team members to give each other constructive feedback

➢Give the team members challenging duties to move onto

➢Assign team members to new, and perhaps, more complex project work

➢Channel your personal feedback to the team members up the chain of command so a higher authority can recognise their contribution

➢Recommend the team members for promotion as a result of their achievement

➢Hold a memorable party with your team members (and their families)   :o)!!!

THE UNIVERSITY OF
WESTERN
AUSTRALIA

Archiving the project file

➢ Create single source location

➢ Include all supporting information

➢ Completion close-out checklist

➢ Required approvals and sign-off

➢ Secure the complete project file

➢ …

Mapping project processes against the project lifecycle & bringing it all together

➢Mapping the 10 PMBOK processes against the stages of the project lifecycle (Refer to table 12.1, p.402 of textbook)

➢TBL to be included consistently in each stage of the project lifecycle

"Sorry mate. It wasn't until we had finished the house that we realised the plans were upside down."

Reading week 7

Locatelli G., Zerjav V., and Klein G., 2020, Project Transitions—Navigating Across Strategy, Delivery, Use, and Decommissioning, Project Management Journal, Vol. 51(5)

Busby J. S., 1999, An assessment of post-project reviews, *Project Management Journal*, pp 23 - 29