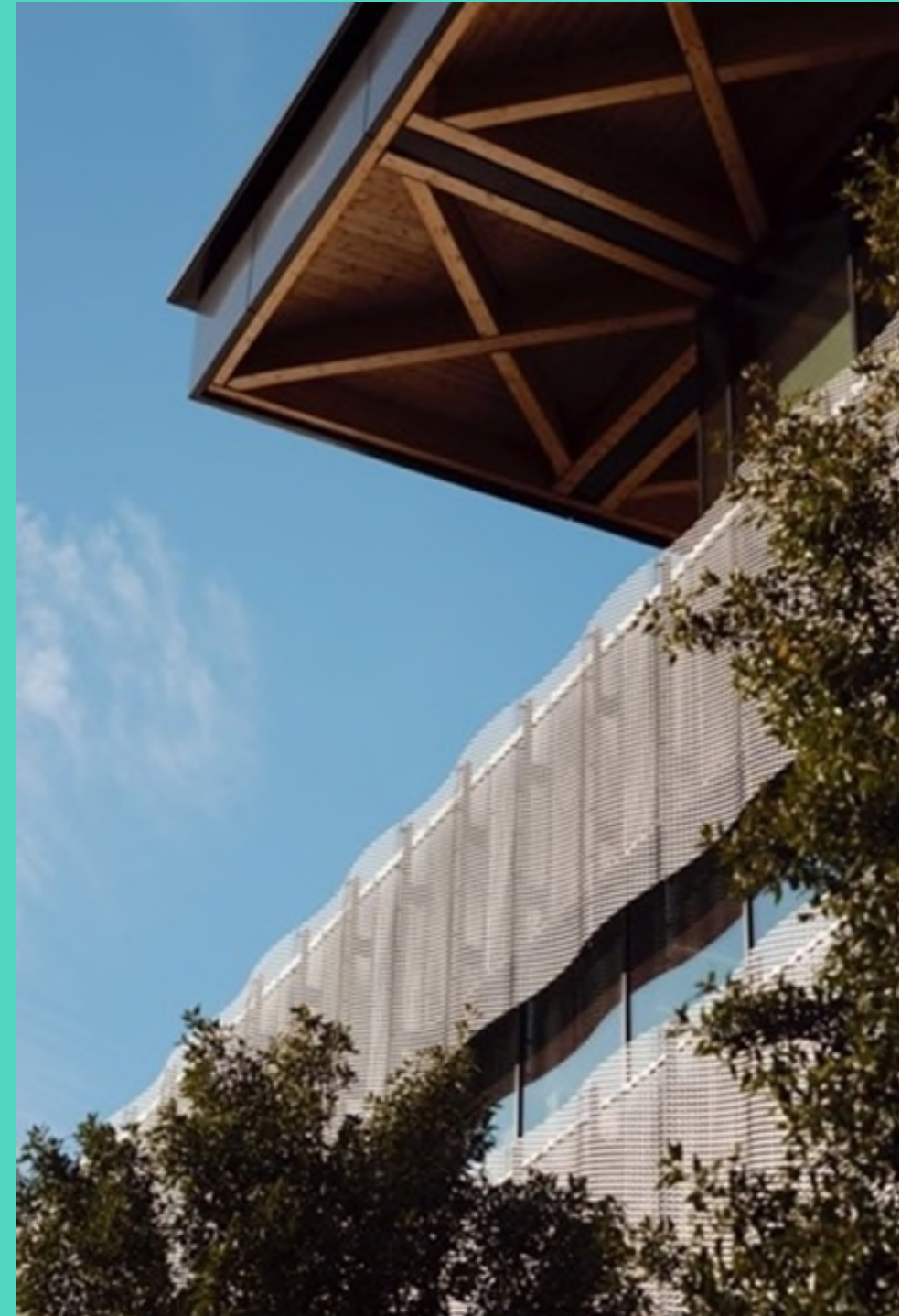




DC958 Project Management

Professor Vikki Locke
DAY TWO

**UNIVERSITY
OF WARWICK**



Agenda

- 01** | Module Introduction & Project Management Context
- 02** | Risk Analysis & Mitigation
- 03** | Stakeholders & Communications
- 04** | Planning Tools & Strategies
- 05** | Project Teams
- 06** | Wrap-up



Session Aims

- Explore stakeholder analysis
- Investigate stakeholder management
- Examine communications planning
- Explore how PM applies to your research

What are stakeholders?

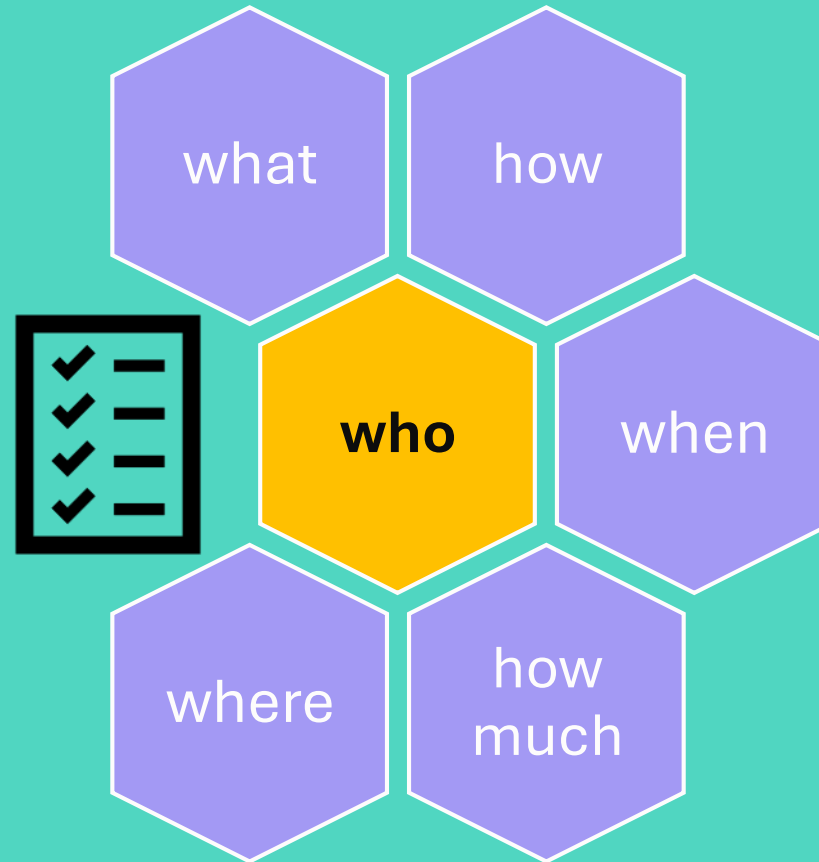
“Individuals and groups
with an interest in
the project process or outcome”

(Maylor & Turner 2022:30)

Stakeholder Types

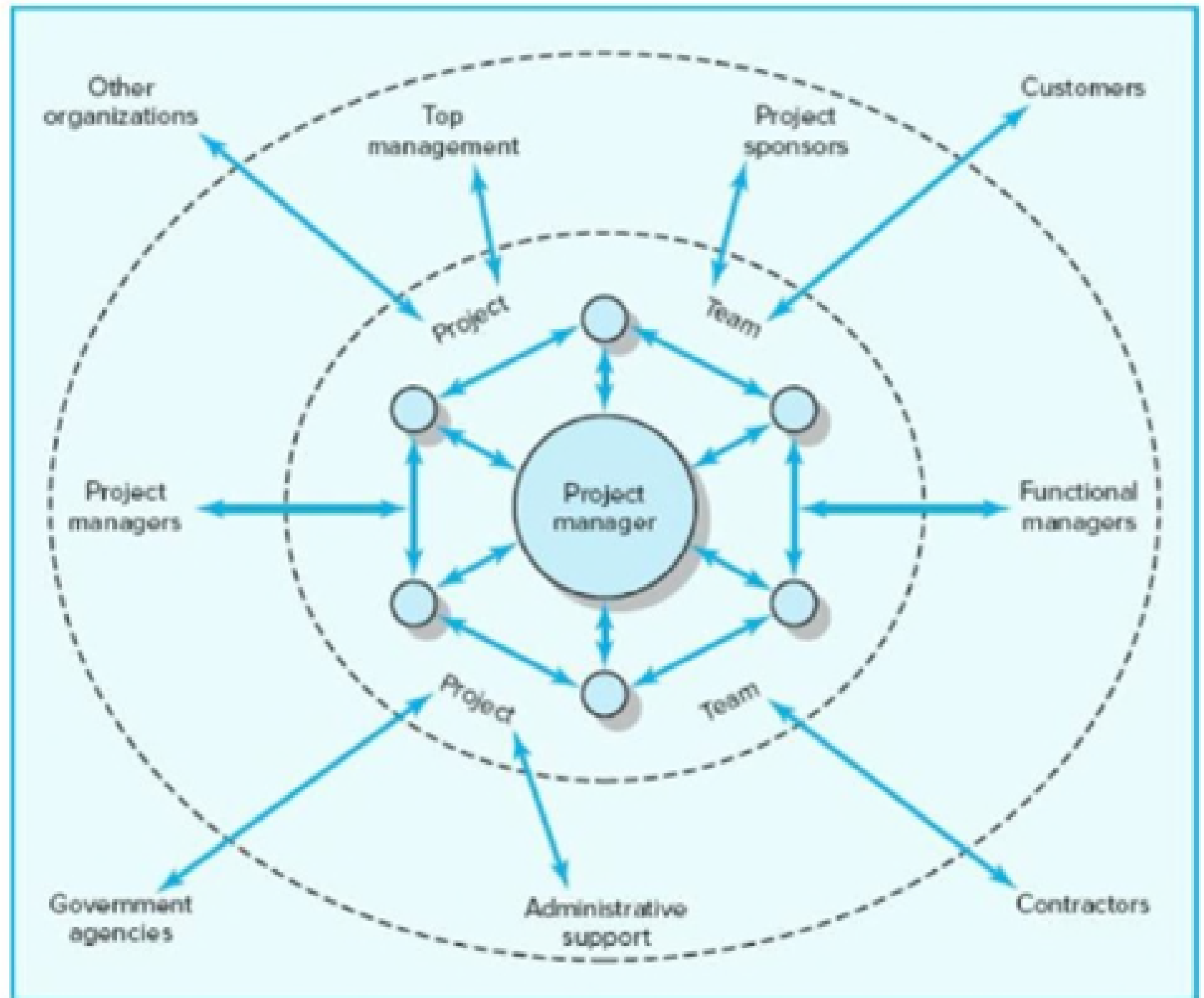
internal

external



Stakeholder Network

(Larson & Gray
2018:342)



Stakeholder Analysis

It's a **method** that helps us ...

identify,

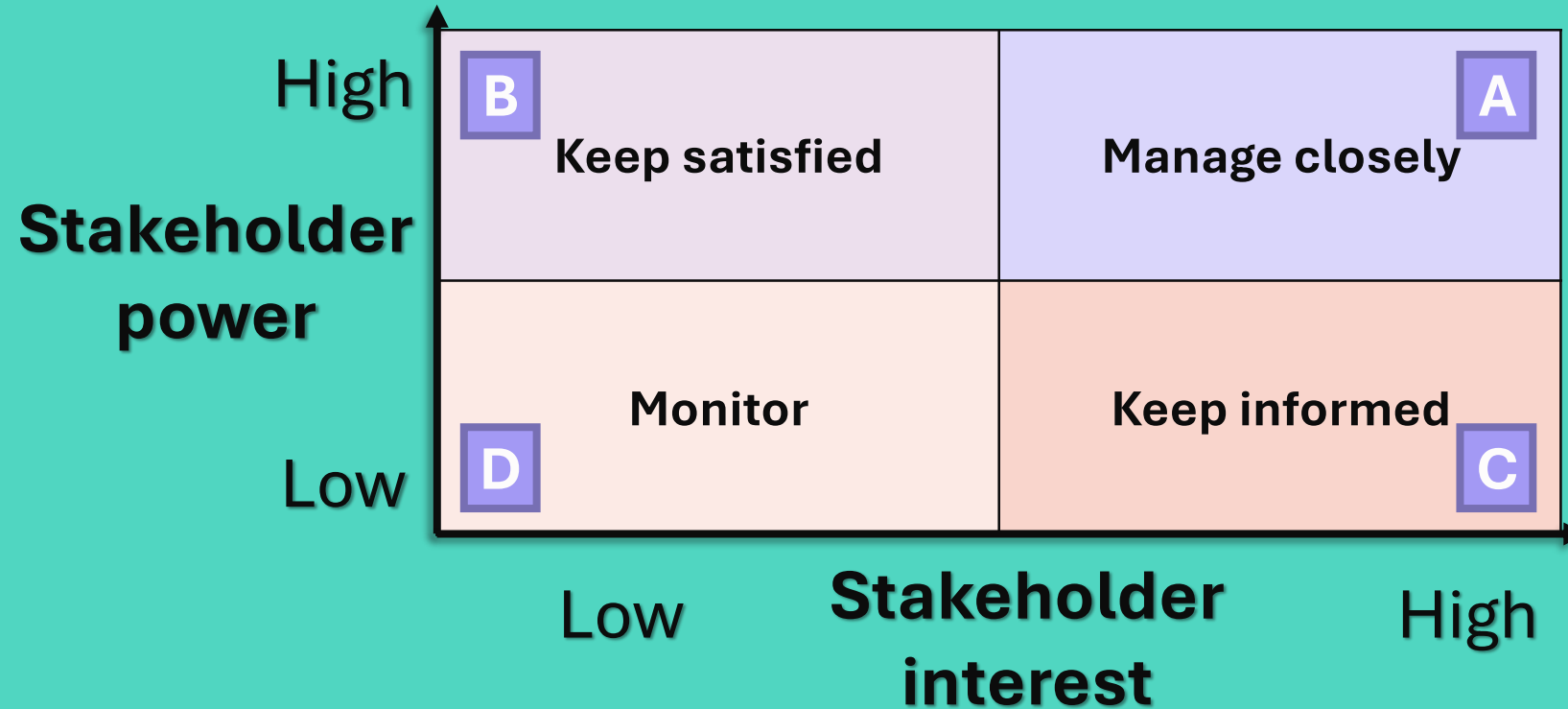
prioritize

and

understand

our stakeholders.

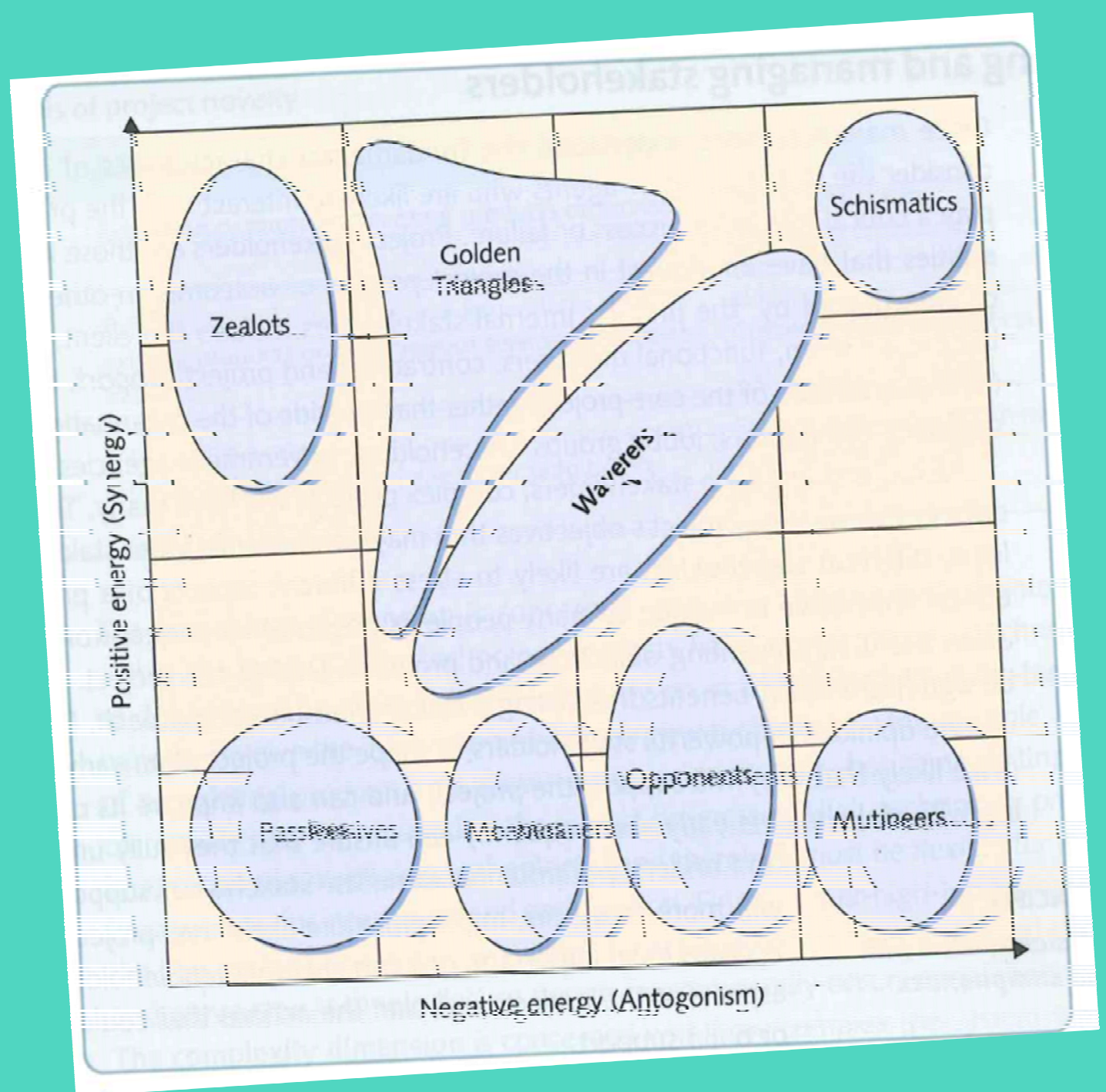
Power Interest Grid



(Adapted from Maylor & Turner 2022:94)

Socio-dynamic Energy Grid

(Fauvet in Slack
et al. 2015:518)



Socio-dynamic Energy Grid Classifications

Golden Triangles – very positive, but also have critical perspective

Zealots – very positive, always agree with PM, don't understand others' doubts, struggle with compromise

Schismatics – very positive and very negative, can be very disruptive and challenging

Waverers – balance of positive and negative, but can waste time while unable to make a decision

Passives – neither positive nor negative, but like to know what's happening and to be involved in decisions

Moaners – more negative than positive and make people know their opinions

Opponents – very negative and work to project failure, very difficult to change their opinions

Mutineers – very negative and very actively disruptive, may try to lead

Management

“management means relationship skills,
the way of interacting with each other,
understanding individual facets, reference culture,
and the relationship network’s context,
with the aim of getting the best
out of the reciprocal points of view
in order to blend them and
make the project a success for everybody and
not just for someone.”

(Moresco & Notari 2012:179)

Stakeholder Analysis & Management

“Stakeholder management is
the systematic identification, analysis,
planning and implementation of
actions designed to engage with stakeholders.”

(APM 2012:116)

Responsibility Matrix

“The RM ... summarizes the tasks to be accomplished and who is responsible for what on the project.”

(Larson & Gray 2018:117)

Tasks	Xinwen	Todd	Moataz	Zara
Create design	✓	✓		
Make parts		✓	✓	
Construct		✓	✓	
Check	✓	✓	✓	✓
Test prototype	✓	✓	✓	✓

Communication

“Communication is
the means by which
information or instructions are exchanged.

Successful communication occurs
when the received meaning
is the same as
the transmitted meaning.”

(APM 2012:52)

The Importance of Communication

“Where a project has multiple strands,
communication must be maintained so that
components can move together.

Even where the same people are involved
with different facets of the work,
they may not see the interrelations and dependencies.”

(Kennett 2014:75)

RACI Matrix

Activity \ Person						
	Management of Star's expectations and activities	Editing and final cut	Dance and movement	Scheduling and resource management	Creative input and musical performance	Filming and visual innovation
Ned the Film Editor						
Sophie the Star						
Stan the Star's Agent						
Carrie the Camera Operator						
Pete the Deputy Project Manager						
Liz the Choreographer						

Responsible	Accountable
“The person who performs the activity and is therefore responsible for the action”	“The person who has the power of veto and who carries the can if all goes wrong.”
Consulted	Informed
“Must always be consulted BEFORE a decision or action is taken”	“Must always be informed AFTER a decision or action has been taken”

Online Communication during Research Projects

Increased online communication ...

“may be particularly important in the context of long-term experiments, shift work, and different time zones. ...

may increase attachment to the research group,

job satisfaction, and commitment,

by alleviating feelings of isolation due to irregular hours but also to concentration on a highly specialised endeavour that may not interest local colleagues.” (OECD 1998:197)

A close-up photograph of a person's hands holding a bunch of freshly harvested vegetables. The bundle includes several bright orange carrots with some soil on their roots, and two large, round beets with deep red skin. Green leafy vegetables are also visible, partially obscured by the hands. The background is a dark, out-of-focus garden setting.

LUNCH TIME
12:00-13:00

Communication Plan Questions

- What information needs to be collected and when?
- Who will receive the information?
- What methods will be used to gather and store information?
- What are the limits, if any, on who has access to certain kinds of information?
- When will the information be communicated?
- How will it be communicated?

(Larson & Gray 2018:119)

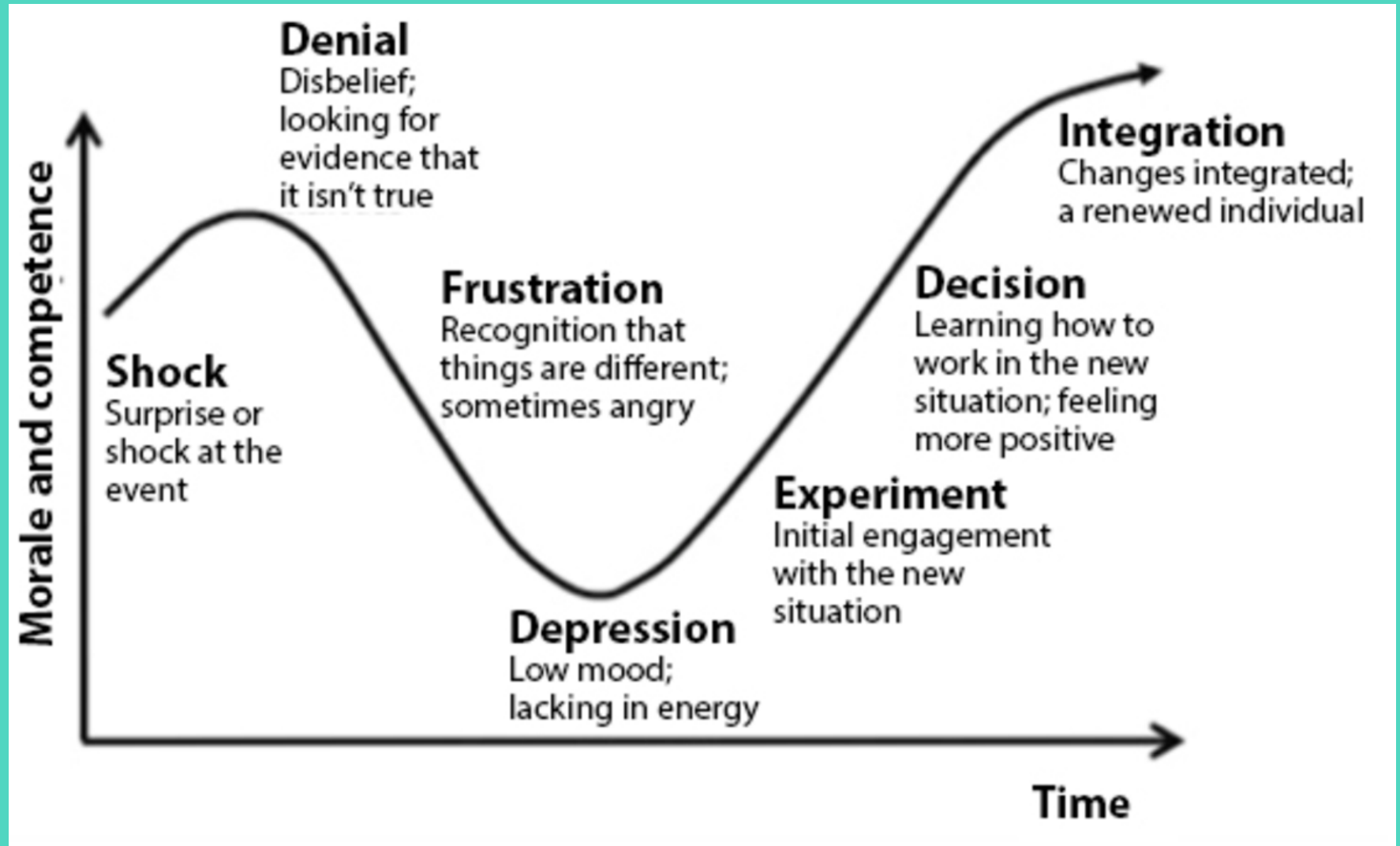
Example: Shale Oil Research Project Comms Plan

(Larson & Gray
2018:121)

What Information	Target Audience	When?	Method of Communication	Provider
Milestone report	Senior management and project manager	Bimonthly	E-mail and hardcopy	Project office
Project status reports & agendas	Staff and customer	Weekly	E-mail and hardcopy	Project manager
Team status reports	Project manager and project office	Weekly	E-mail	Team recorder
Issues report	Staff and customer	Weekly	E-mail	Team recorder
Escalation report	Staff and customer	When needed	Meeting and hardcopy	Project manager
Outsourcing performance	Staff and customer	Bimonthly	Meeting	Project manager
Accepted change requests	Project office, senior mgmt., customer, staff, and project mgr.	Anytime	E-mail and hardcopy	Design department
Oversight gate decisions	Senior management and project manager	As required	E-mail meeting report	Oversight group or project office

Kübler-Ross

Change Curve



Session Aims Checklist

-  Explore stakeholder analysis
-  Investigate stakeholder management
-  Examine communications planning
-  Explore how PM applies to your research

Session 3 References

- APM (2012) *APM Body of Knowledge (6th ed.)* Princes Risborough: APM
- Kennett, B. (2014) *Planning and Managing Scientific Research: A guide for the beginning researcher* Canberra: Australian National University Press
- Larson, E. W. & C. F. Gray (2018) *Project Management: The Managerial Process (7th ed.)* New York: McGraw-Hill Education
- Maylor, H. & Turner, N. (2022) *Project Management (5th ed.)* Harlow: Pearson Education
- Moresco, M. & C. Notari (2012) 'Stakeholders' Worlds' in F. Varanini & W. Ginevri (eds.) *Projects and Complexity* Boca Raton, FL: CRC Press p177-202
- OECD (1998) *Science, Technology & Industry Outlook 1998* Paris: OECD
- Slack, N. et al. (2015) *Operations and Process Management (4th ed.)* Harlow: Pearson

Take a break! Back in **10 minutes!**





04 Planning Tools & Strategies

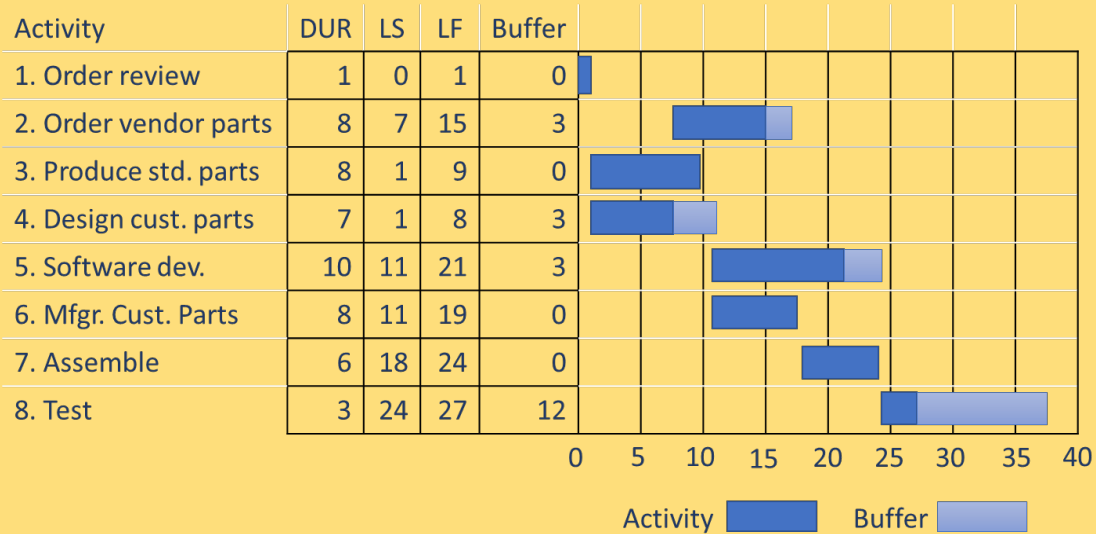


The background of the slide features a close-up, artistic photograph of numerous water droplets. The droplets are in various sizes and stages of formation, with some showing high detail of light refraction and reflection. They are set against a soft, out-of-focus background, creating a sense of depth and movement. The overall color palette is dominated by cool blues and greens, with highlights of white and yellow where the light catches the droplets.

Session Aims

- **Explore the concept of planning of projects**
- **Examine and practice using project networks**
- **Investigate adaptive project life cycles**
- **Explore scheduling and project closure**

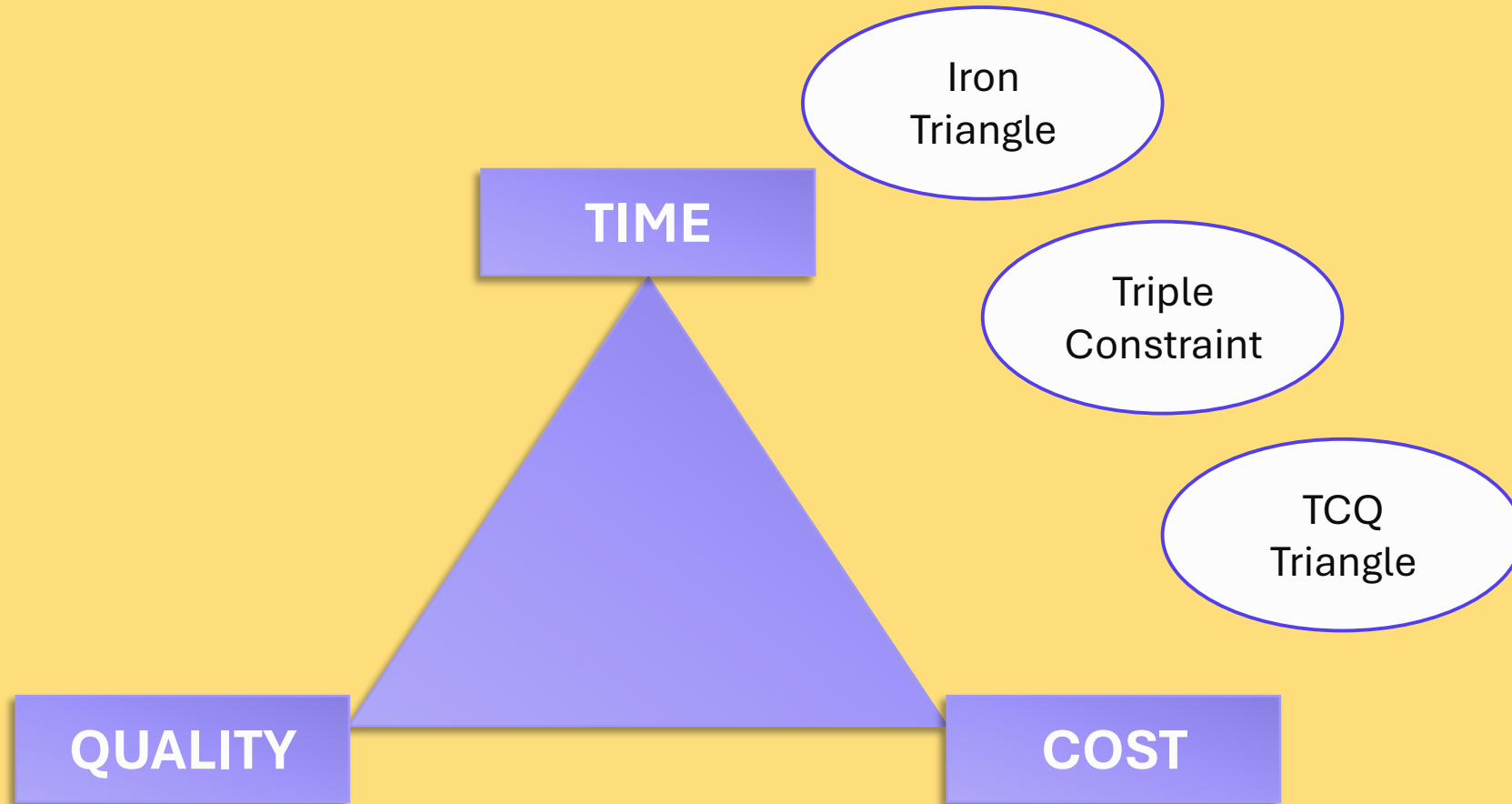
Planning



“Planning determines
what is to be delivered,
how much it will cost,
when it will be delivered,
how it will be delivered and
who will carry it out.”

(APM 2012:110)

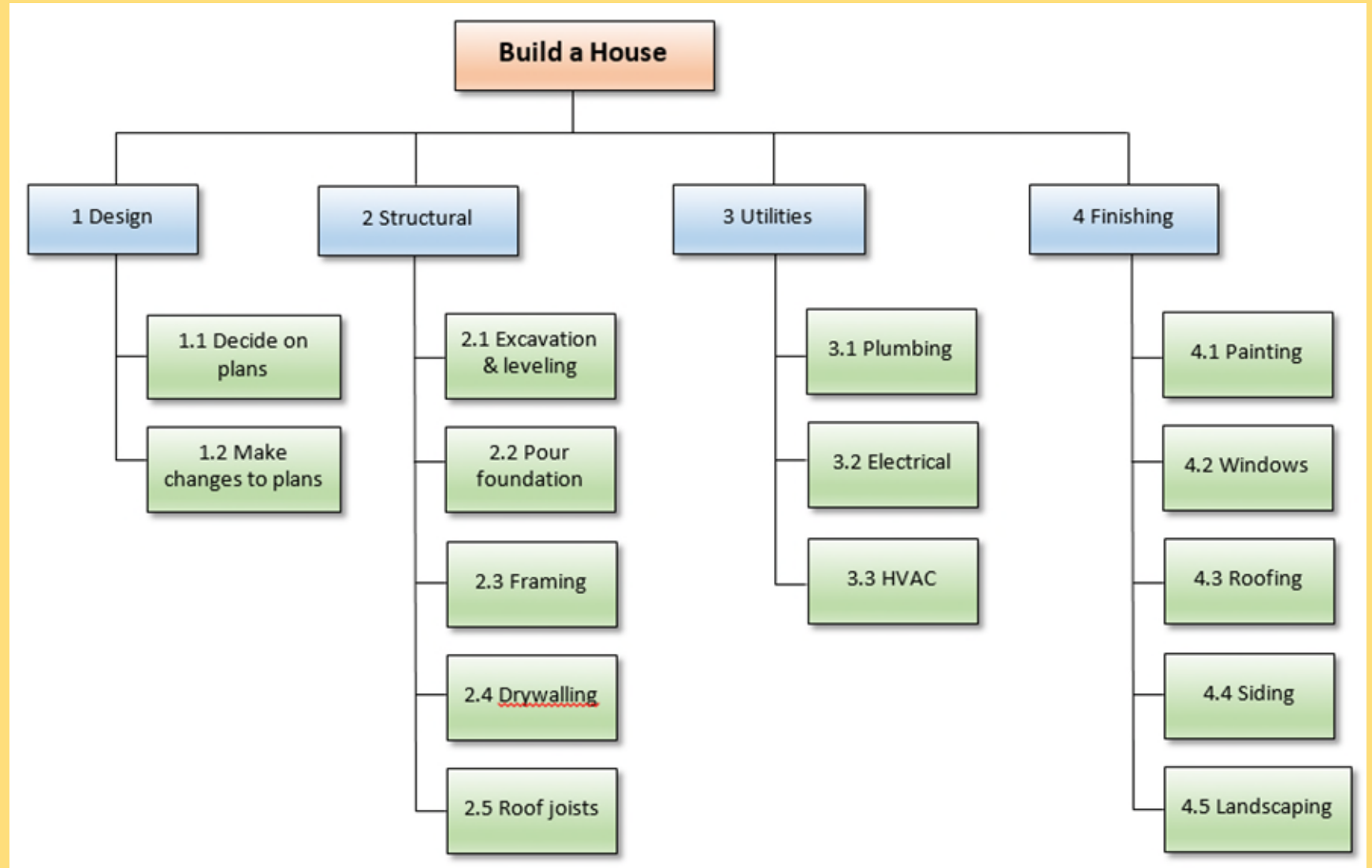
Objectives Triangle



Balancing Costs & Benefits



Work Breakdown Structure (WBS)



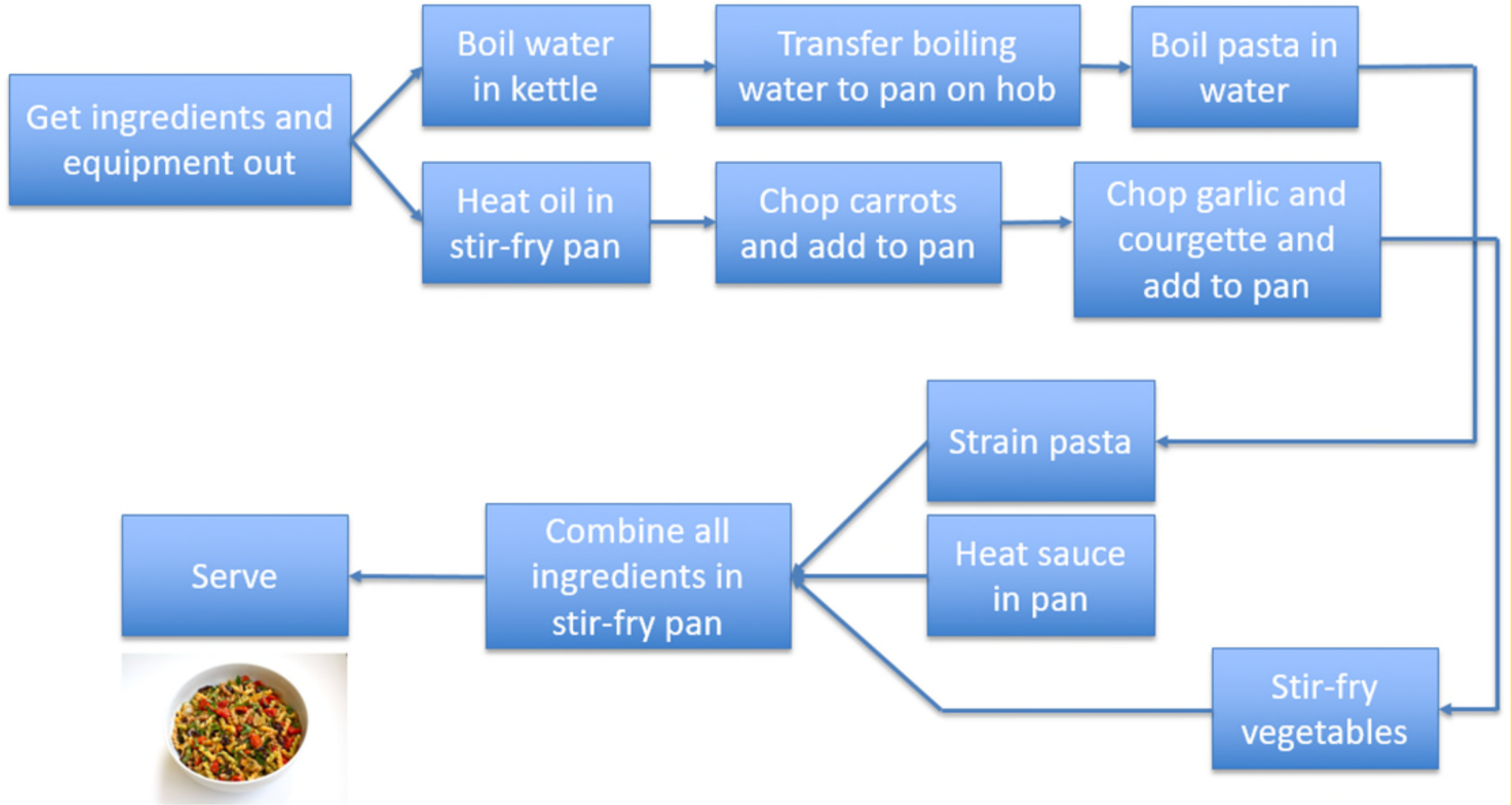
Project Networks

“The project network is
the tool used for planning, scheduling,
and monitoring project progress.

The network is developed from
the information collected for the WBS and
is a graphic flow chart of the project job plan.”

(Larson & Gray 2018:163)

Activity-on-Node (AoN) Diagram

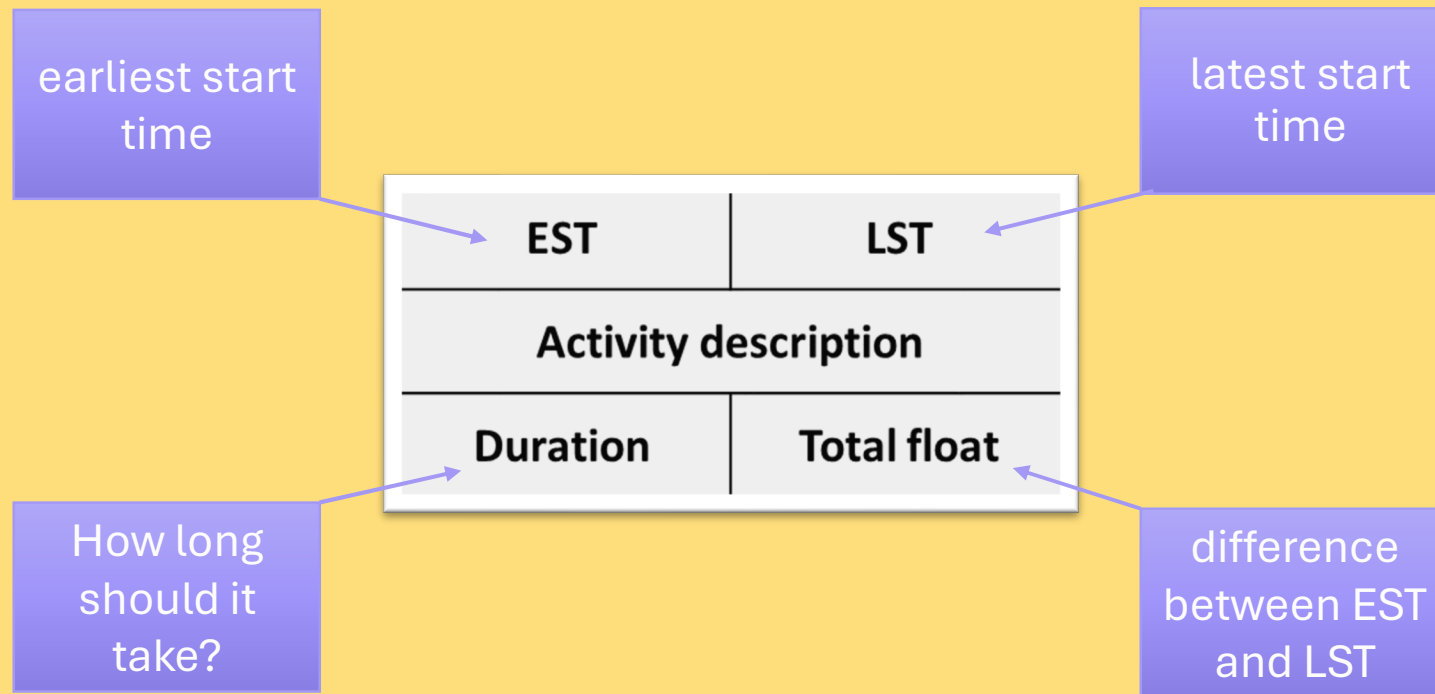


What is the critical path?

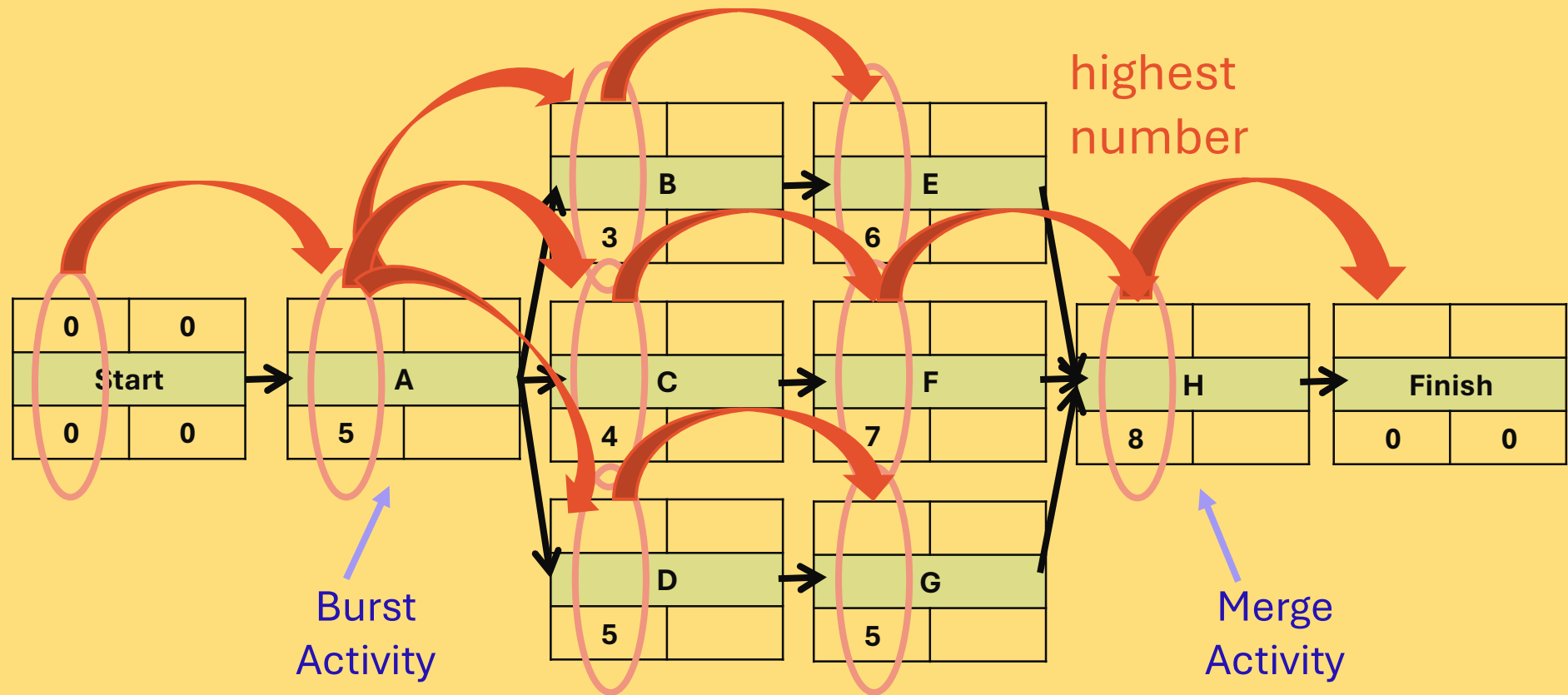
“the longest sequence of activities through a project network, it is called the critical path because any delay on any of its activities will delay the whole project”

(Slack et al. 2013:702)

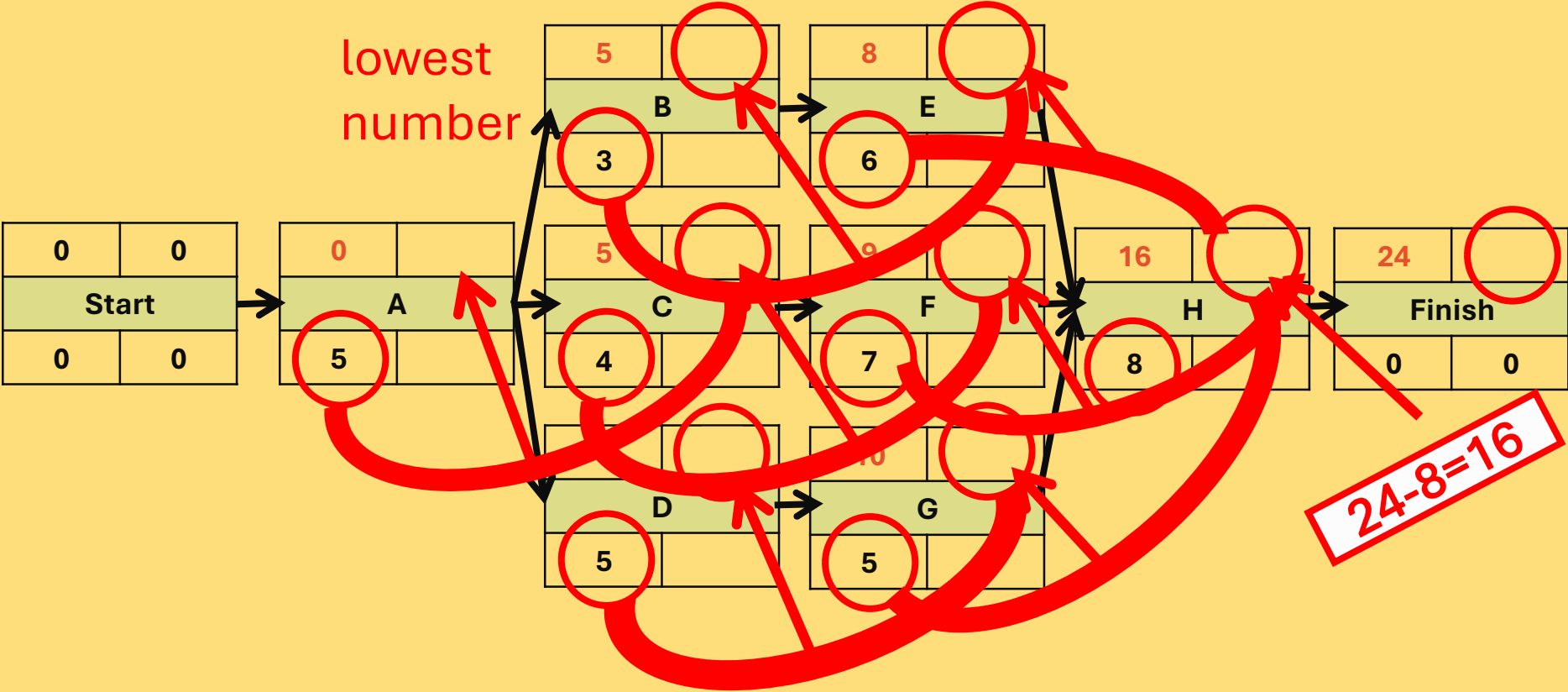
The Critical Path Node



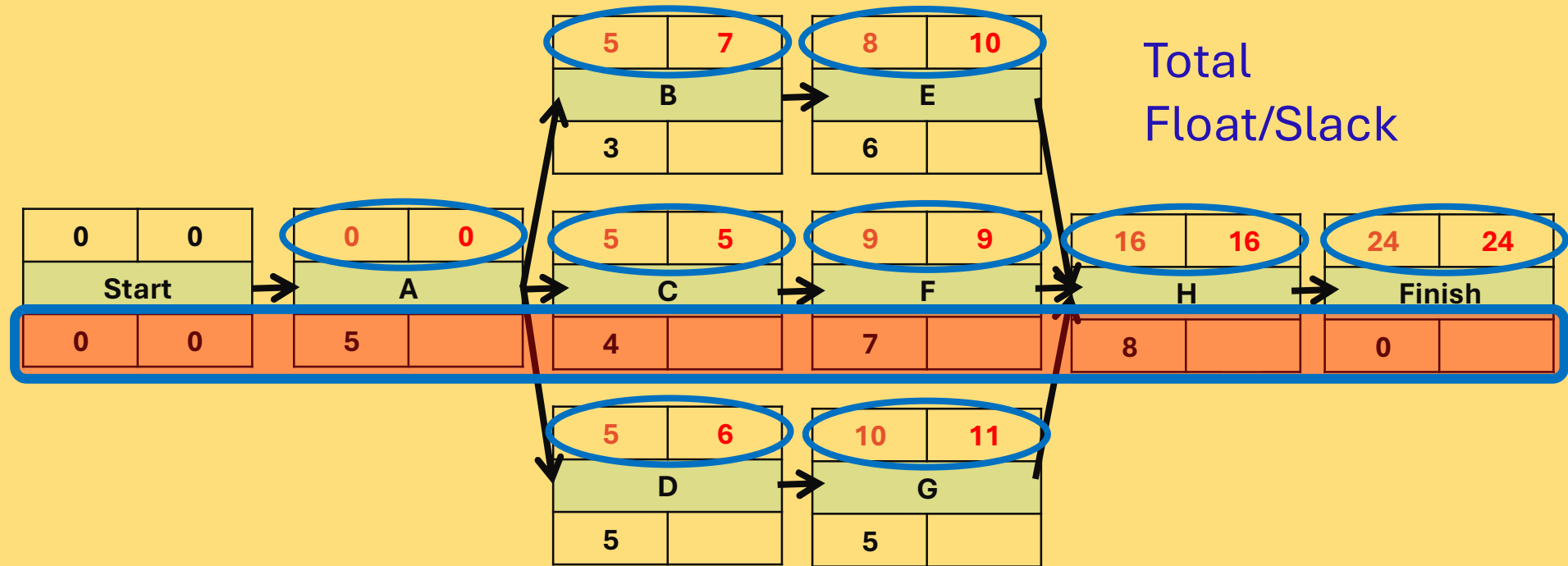
Forward Pass



Reverse Pass



Where is the critical path?



Take a break! Back in **10 minutes!**



Schedule Management

“Schedule management is
the process of developing, maintaining and communicating
schedules for time and resource.”

(APM 2012:150)

Time Planning

“A time-constrained project is one that must be completed by an imposed date.”

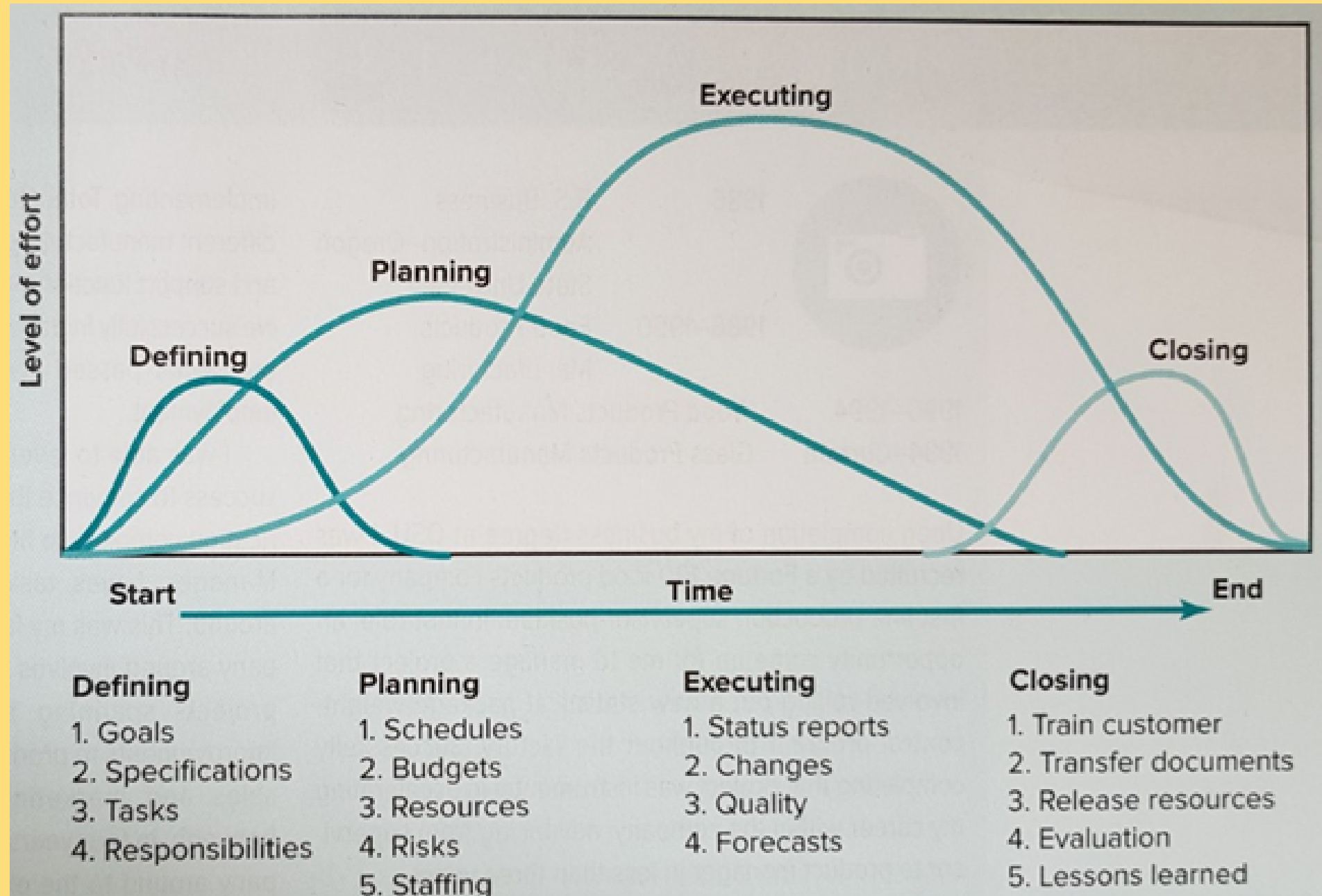
(Larson & Gray 2018:255)



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Traditional Project Life Cycle

(Larson & Gray
2018:9)



How accurate can our plans be?

“Time and costs are at best, only guesses,
calculated at a time when least is known about the project.

Quality is a phenomenon,
it is an emergent property
of peoples’ different attitudes and beliefs,
which often change
over the development life-cycle of a project.”
(Atkinson 1999:337)

The Problems with Time Estimates

Parkinson's Law

Self-protection

Dropped baton

Excessive multitasking

Resource bottlenecks

Student syndrome

(Larson & Gray 2018:295-296)

Planning Considerations

Uncertainty

Optimism bias

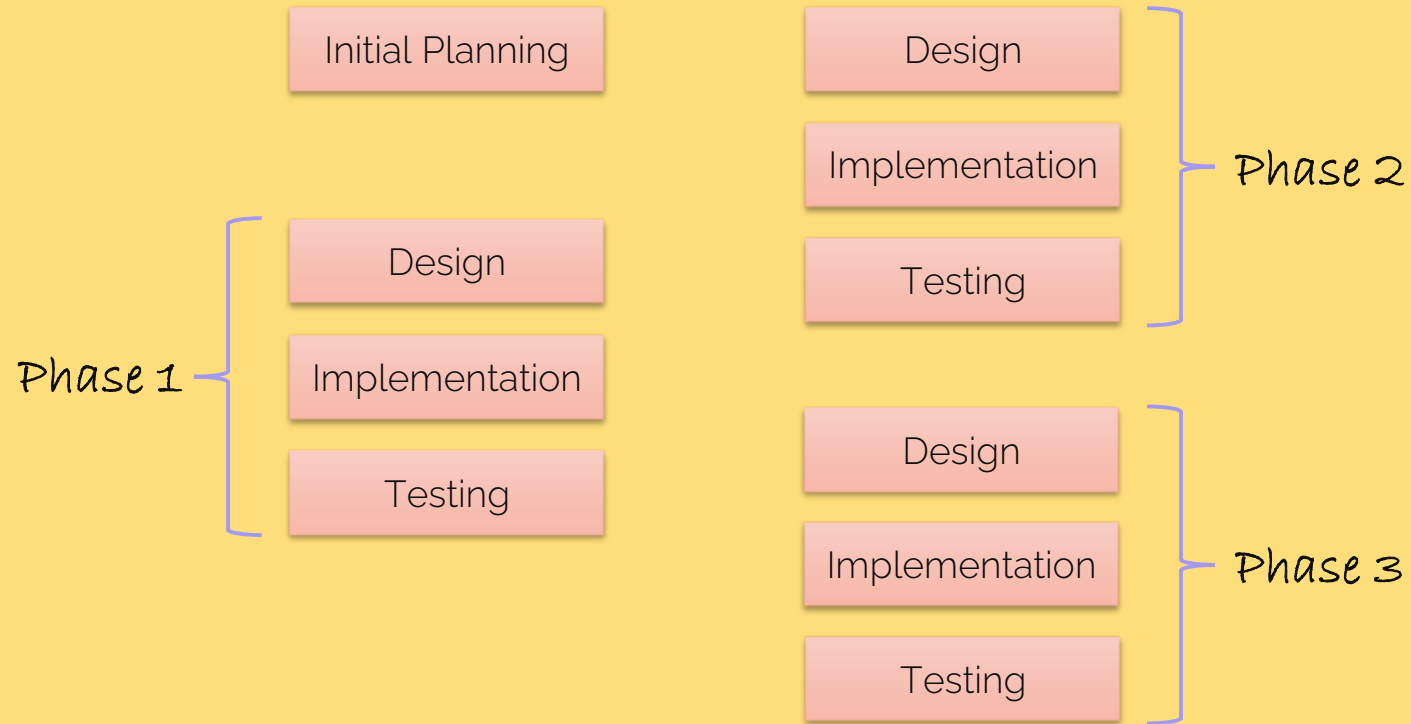


Embracing Project Complexity

unique temporary focused
emergent uncertain integrating
mission-focused socially-constructed
(Maylor & Turner 2022)

VUCA – volatility, uncertainty, complexity and ambiguity
technology, disruptors and deltas
(AXELOS 2018)

“A big project should be a sequence of smaller projects”



(Berkun
2008:30)

Contemporary Project Life Cycles

Predictive life cycle

Iterative life cycle

Incremental life cycle

Adaptive life cycle

Hybrid life cycle

(PMI 2017)

Adaptive Project Life Cycles

“Adaptive life cycles are
agile, iterative or incremental.

The detailed scope is defined and approved
before the start of an iteration.

Adaptive life cycles are also referred to
as agile or change-driven life cycles.”

(PMI 2017:19)

Rolling Wave Planning Approach

“the level of detail of the plan increases with the proximity to the date.
The overall schedule of activities is determined at a high level, with the details being worked out as the project progresses”



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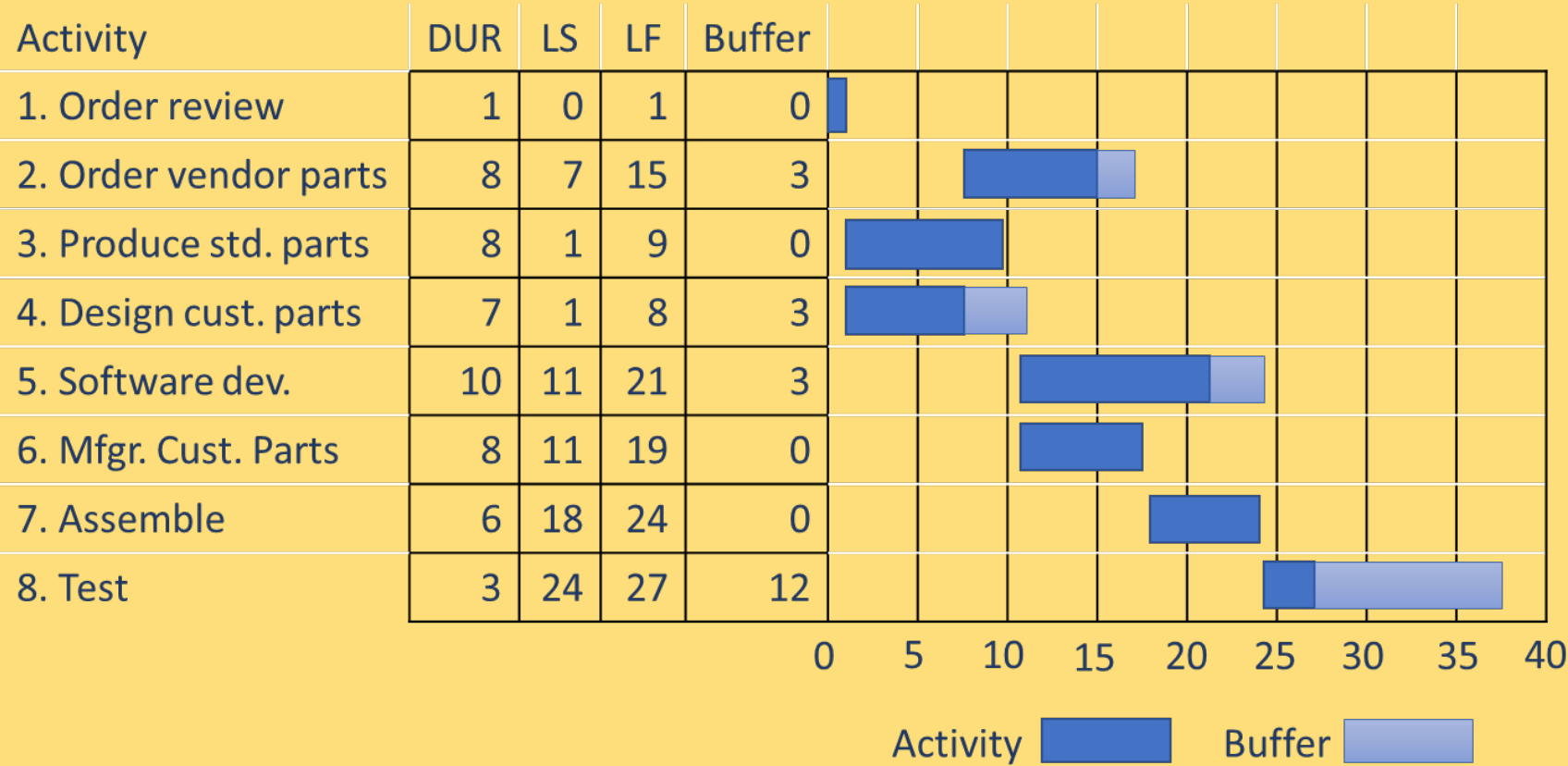
Buffers

Project buffer

Feeder buffer

Resource buffer

(Larson & Gray
2018:296, 300)



Project Closure

The two main reasons for a project to stop:

- successful completion of objectives or
- premature termination due to failure.

(Adapted from Maylor 2010:362)



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Types of Project Closure

“Normal ...

Premature ...

Perpetual ...

Failed project ...

Changed priority”

(Larson & Gray 2018:516-517)

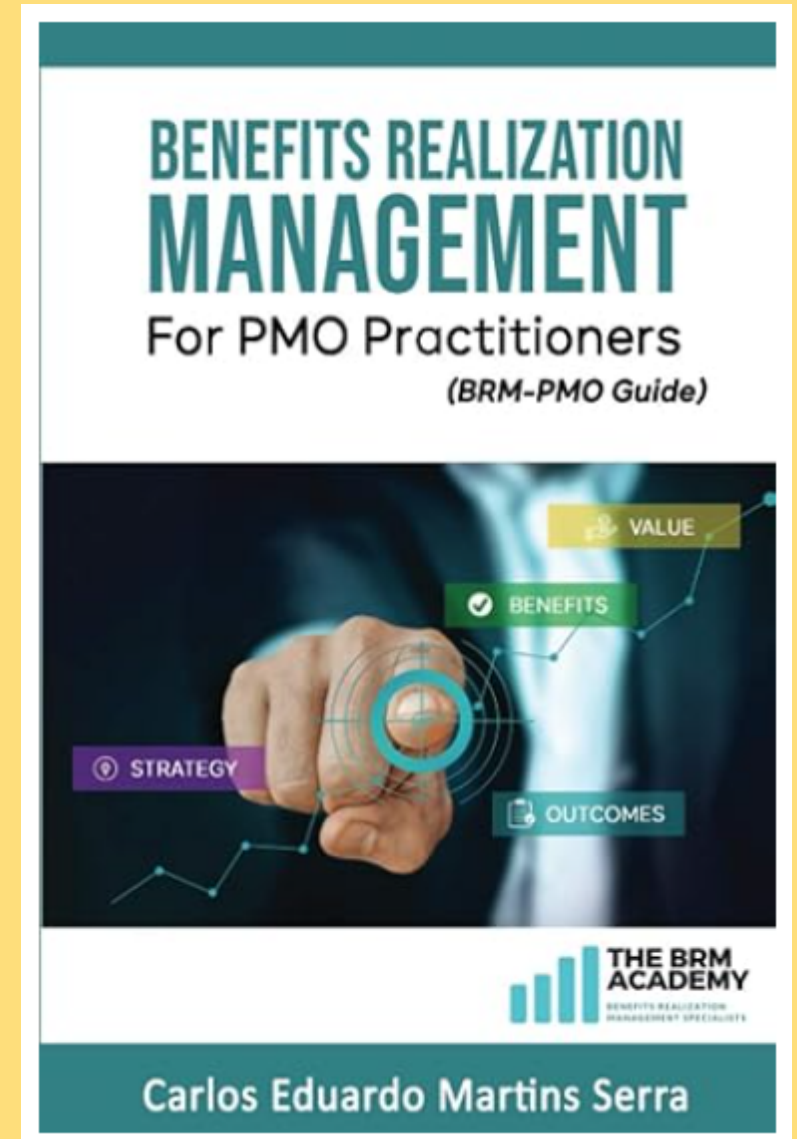
Learning or Lessons Log

Lesson Type	Lesson Detail	Date Logged	Logged by	Priority (RAG Status)
Stakeholder	Mismatch of output and expectations – set expectations better at start of project	08.06.23	LY	R
Comms	Team comms issue – have more regular face-to-face meetings	05.06.23	FB	A

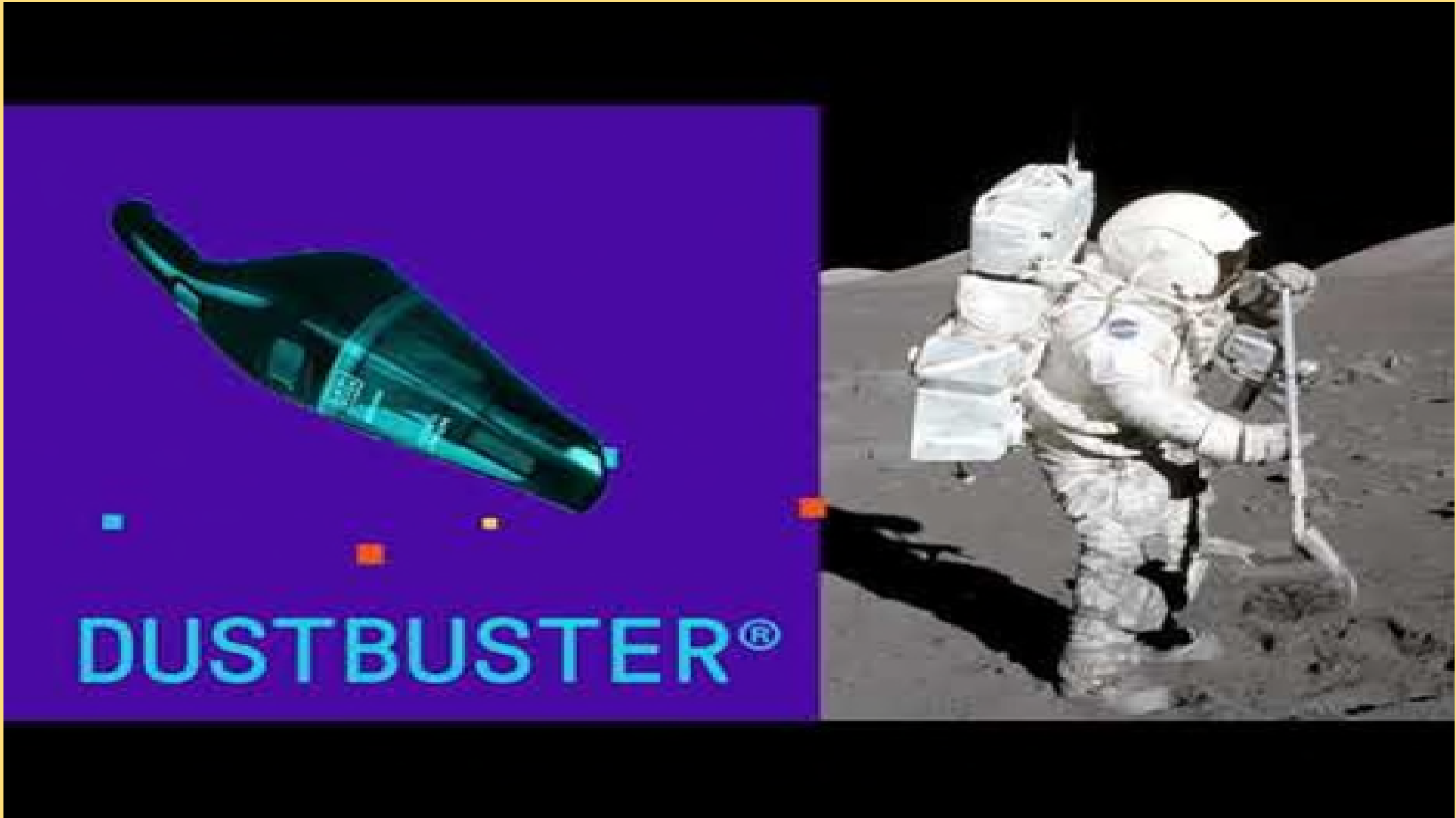
Benefits Realisation Management

“Benefits management is the identification, definition, planning, tracking and realisation of business benefits.”

(APM 2012:124)



50 Most Influential Projects



Session Aims Checklist

-  Explore the concept of planning of projects
-  Examine and practice using project networks
-  Investigate adaptive project life cycles
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Session 4 References

- APM (2012) *APM Body of Knowledge (6th ed.)* Princes Risborough: APM
- Atkinson, R. (1999) 'Project Management: Cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria' *International Journal of Project Management* 17(6):337-342
- AXELOS (2018) *A Guide to AgileSHIFT* London: AXELOS
- Berkun, S. (2008) *Making Things Happen: Mastering project management* Sebastopol, CA: O'Reilly
- Kendrick, T. (2012) *Results Without Authority: Controlling a project when the team doesn't report to you* New York: AMACOM
- Larson, E. W. & C. F. Gray (2018) *Project Management: The Managerial Process (7th ed.)* New York: McGraw-Hill Education
- Maylor, H. & Turner, N. (2022) *Project Management (5th ed.)* Harlow: Pearson Education

Thanks! See you tomorrow!

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