DC958
Project Management

Professor Vikki Locke

DAY ONE

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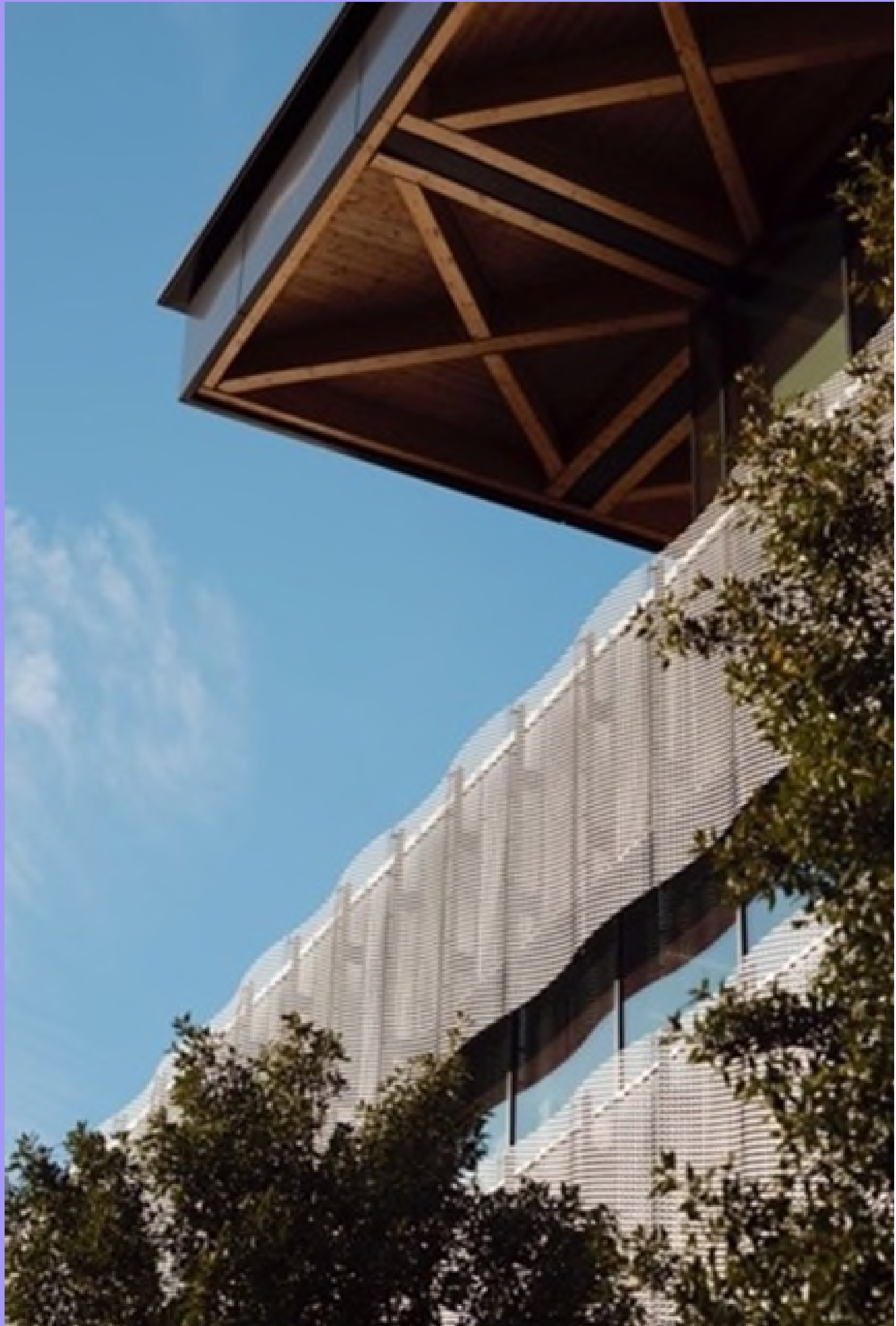

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LOUGHBOROUGH BUSINESS SCHOOL

Project Management Specialist
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PM experience: Hospitality & Creative Industries
National Health Service
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LB UG Refresh Project

Agenda

01 Module Introduction & PM in Context

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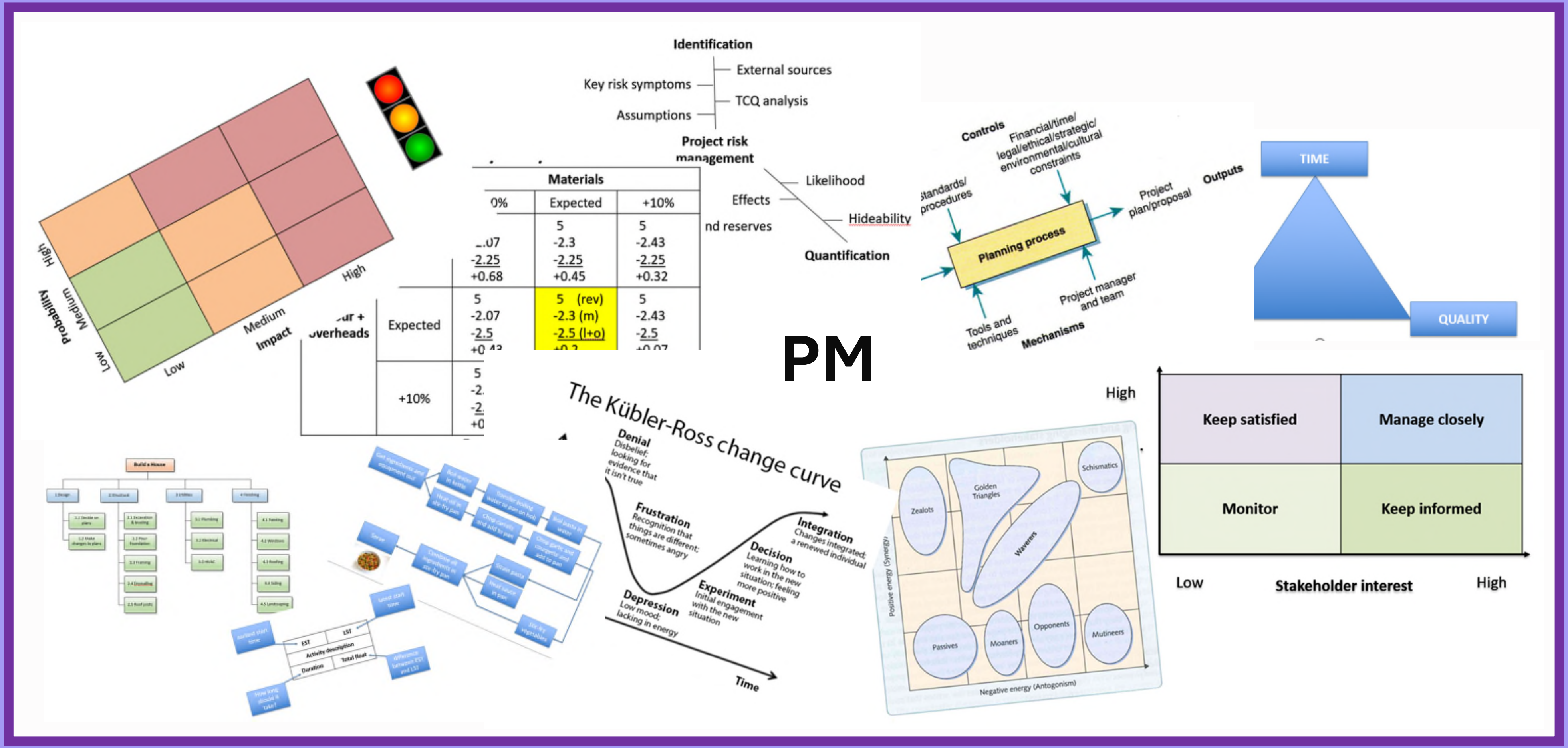
Session Aims

- Introduce the module outline ...
- ... and the field of project management
- Investigate research project management
- Explore how PM applies to your research

Module Introduction

DAY	TOPIC	ASSESSMENT
Mon	1. Module Introduction & PM Context 2. Risk Analysis & Mitigation Risk in Practice	• Risk Management Plan
Tues	3. Stakeholders & Communications Stakeholders & Comms in Practice 4. Planning Tools & Strategies	• Stakeholder Management Plan
Wed	Planning Tools & Strategies in Practice 5. Project Teams 6. Wrap-up	• Comprehensive Research Plan • Teamwork Task

Concepts, Tools, Techniques & Strategies



Project Management

"Not only is project management critical to most careers,
the skill set is transferable
across most businesses and professions.
At its core, project management fundamentals are universal. …

In a world where it is estimated that each person is
likely to experience three to four career changes,
managing projects is a talent worthy of development."

(Larson & Gray 2018:5)

Project Definition

"A project is
a temporary endeavour
undertaken to create
a unique product,
service, or result."

(PMI in Larson & Gray 2018:6)

Project Characteristics

Projects are

unique,

temporary

and focused.

(Maylor & Turner 2022)

Project Management Definition

“Project management is
the application of processes,
methods,
knowledge, skills and experience
to achieve the project
objectives.”

(APM 2012:12)

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Types of Project Life Cycles

Linear

- initiating
- planning
- executing
- monitoring and controlling
- closing

(PMI PMBOK 2017)

Combination or hybrid

Agile or change-driven

- Initial planning
- Iterative, incremental or adaptive phases
- “End”

Scientific Research

"Scientific research encompasses
many different styles of activity.
The nature of the work varies significantly,
depending on the problem and the discipline.
The work practices in laboratory-based experimental studies
are distinctly different from field-based observations,
or theoretical observations.
Nevertheless, broad principles can be recognised
that unify the approach to goal-driven research."

(Kennett 2014:1)

Scientific Research Projects

"Projects do not exist in isolation,

so it is useful to look across

the full range of scientific endeavour

because analogies and lessons can often be drawn

from other fields."

(Kennett 2014:1)

Session Aims Checklist

- Introduce the module outline ...
- ... and the field of project management
- Investigate research project management
- Explore how PM applies to your research

Session 1 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

PMI (2017) *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) (6th ed.)* Newtown Square, PA: PMI

02 Risk Analysis & Mitigation

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Session Aims

- Examine risk analysis and mitigation
- Investigate risk management
- Explore risk considerations for research
- Review risk in your practice

What does risk consist of?

“the perceived risk of an activity

is a linear function of five dimensions:

its probability of harm, benefit, status quo,

and its expected harm and benefit.”

(Holtgrave & Weber in Palmer 1996:717)

Risk Analysis & Mitigation

“The objective of the risk analysis is
to enable the project manager
to include **contingencies** [sic],
that is,
having identified the most risky elements of the project,
to put some actions in place
to make sure that the risk is minimised.”

(Maylor & Turner 2022:257)

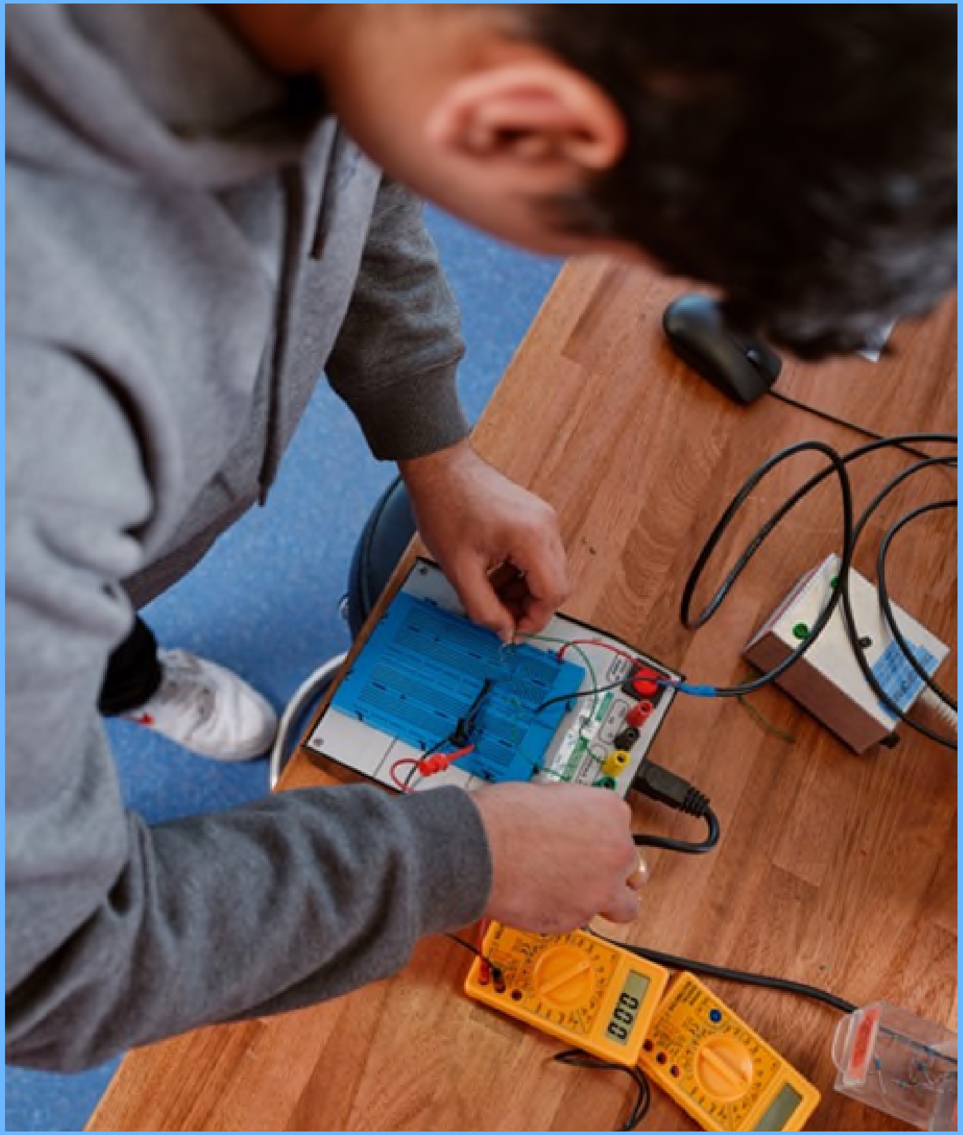
Risk Analysis Steps

Identification

Quantification

Mitigation

(Maylor & Turner 2022)



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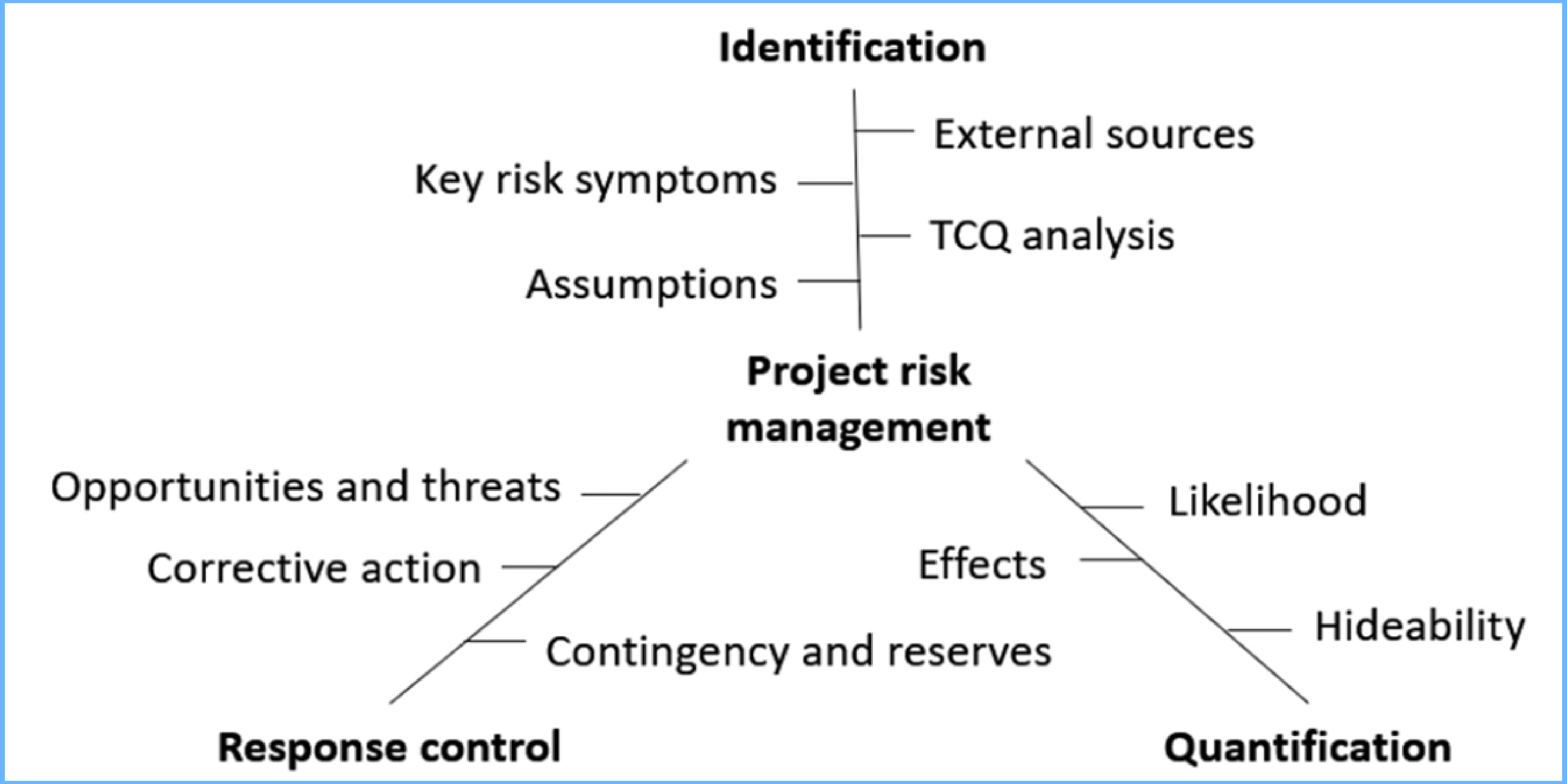
Risk Management Schema



(Maylor & Turner 2022:246)

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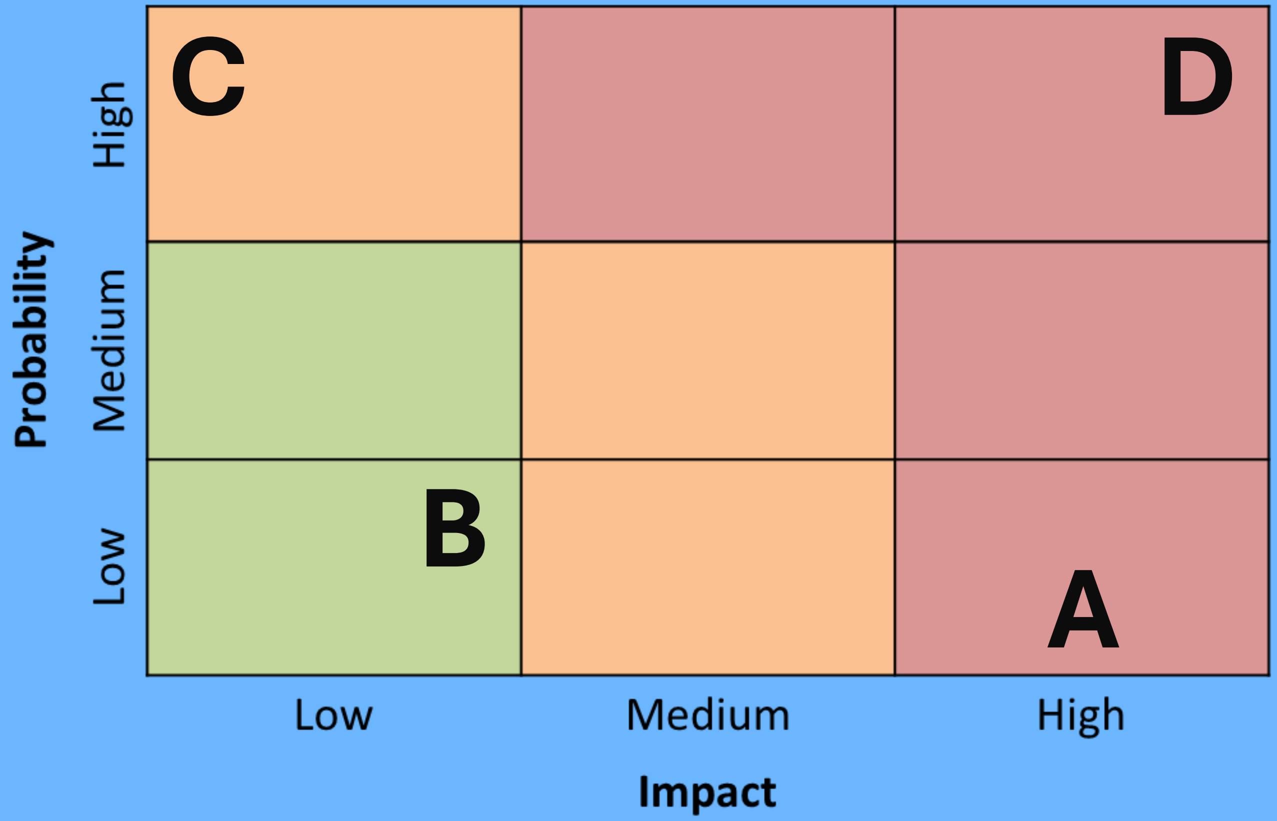
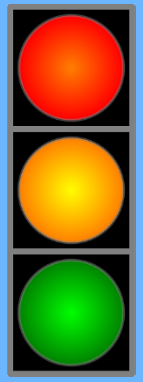
“

The risks associated with a project have to be judged in context.

(Kennett 2014:56)

Probability-Impact Chart





RAG status

(Maylor & Turner 2022:250)

Risk Register (or Risk Log)

Risk	Urgency	Person Responsible	Action
D	High	Jennah	Obtain back-up equipment
A	High	Yasser	Acquire specialist to step into role
C	Medium	Xinwen	Move to alternative venue
B	Low	Bob	Call ambulance and contact next of kin

Risk Management

"Risk management is

a process that allows individual risk events and overall risk

to be understood and managed proactively,

optimising success by minimising threats and

maximising opportunities."

(APM 2012:178)

Risk Management Options

Identify, quantify and solve
or prepare for
the problem before it happens

Outsource so the contractor deals with the risk

Try it out first in a trial or pilot

PMI Risk Management Template

Risk Management Techniques

Qualitative

“focuses on individual risks”

“is based on educated opinion and expert judgement”

e.g. probability-impact assessment

Quantitative

“focuses on overall risk”

“is based on more numerical approaches”

e.g. sensitivity analysis

(APM 2012:184)

Sensitivity Analysis

£££

		Materials & Equipment		
		minus 10%	expected	plus 10%
Labour & Overheads	minus 10%	5	5	5
		-2.07	-2.3	-2.53
		-2.25	-2.25	-2.25
		0.68	0.45	0.22
	expected	5	5	5
		-2.07	-2.3	-2.53
		-2.5	-2.5	-2.5
		0.43	0.2	-0.03
	plus 10%	5	5	5
		-2.07	-2.3	-2.53
		-2.75	-2.75	-2.75
		0.18	-0.05	-0.28

Sensitivity Analysis

Costs:
Materials £30k
Equipment £25k
Direct labour £30k
Overheads £10k

Budget: fixed at £100k

		Materials & Equipment		
		- 10%	expected	+ 10%
Labour & Overheads	- 10%	100000 -49500 -36000	100000 -55000 -36000	100000 -60500 -36000
		14500	9000	3500
	expected	100000 -49500 -40000	100000 -55000 -40000	100000 -60500 -40000
		10500	5000	-500
	+ 10%	100000 -49500 -44000	100000 -55000 -44000	100000 -60500 -44000
		6500	1000	-4500

Risk Considerations

- Attitude
- Appetite

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Risk Attitude

- “risk averse, where risk is avoided;
- risk seeking, where risk is actively sought;
- risk neutral, where risk is neither actively sought nor avoided.”

(APM 2012:182)

Risk Attitude Types

- “**Pragmatists**, who believe that the world is uncertain and unpredictable;
- **Conservators**, whose world belief is of peril and high risk;
- **Maximizers**, who see the world as low-risk and fundamentally self-correcting; and
- **Managers**, whose world is moderately risky, but not too risky for firms that are guided properly”

(Ingram & Thompson 2012)

Risk Appetite

"Risk appetite is the amount of risk [that]
an individual, group or organisation is prepared to take
in order to achieve their objectives … in a given situation,
influenced by their propensity to take risk and/or
the organisational risk culture.
A P3 manager needs to understand
the risk appetite of the stakeholders."

(APM 2012:182)

Research Risk Types

“Technical risks ...

Infrastructure risks ...

Financial risks ...

Information risks ...

Reputational risks”

(Kennett 2014:56-57)

Session 2 References

APM (2012) *APM Body of Knowledge (6th ed.)* Princes Risborough: APM

Ingram, D. & M. Thompson (2012) 'What's Your Risk Attitude? (And How Does It Affect Your Company?)' *Harvard Business Review* Available online: https://hbr.org/2012/06/whats-your-risk-attitude-and-h [Accessed 26.02.26]

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Palmer, C. G. S. (1996) 'Risk Perception: An Empirical Study of the Relationship Between Worldview and the Risk Construct' *Risk Analysis* 16(5):717-723