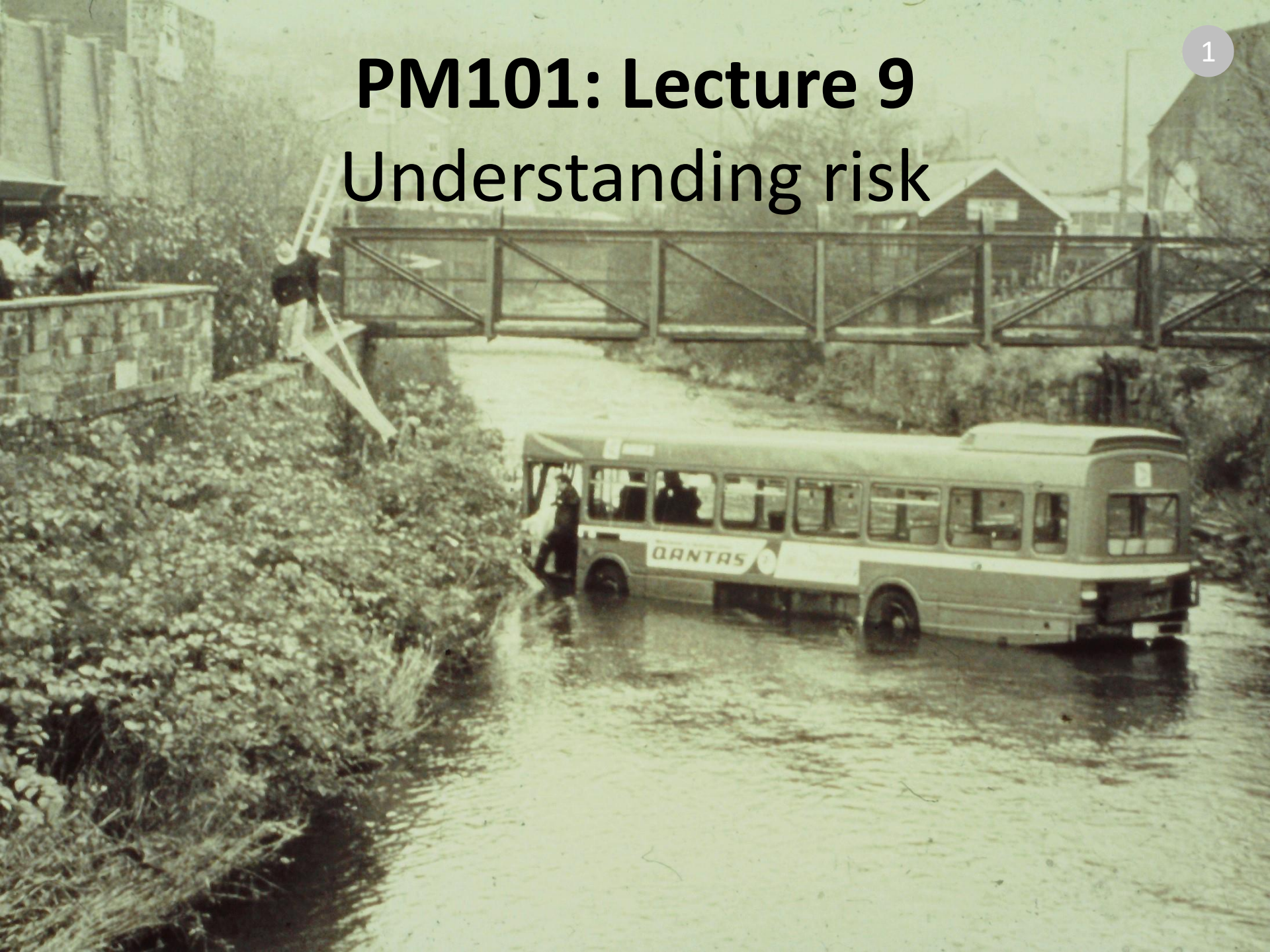
PM101: Lecture 9

Understanding risk



Why risks are so important

Every project is a journey into the unknown.

That means there are risks.

Much of project management is about controlling risks.

Managing risks is how project firms make their money.

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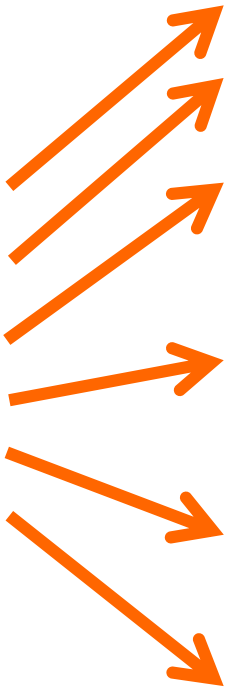
The **big** risks

Generally speaking, lots of small risks have to occur (often in a particular order) for the big risks to happen.



The project is late

It costs more than planned

The output fails to meet the level of quality the customer expects

The output fails to produce the expected benefits for the customer

The customer is very unsatisfied with the whole project experience

External factors undermine the viability of the project

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A **risk** is an **event** which, **if it occurs**, will have a **significant adverse** effect on the project.

Some will argue that risks are always positive because they provide the chance to make money.

Some talk about negative risks and positive risks. Upside risks can be called **Opportunities**.

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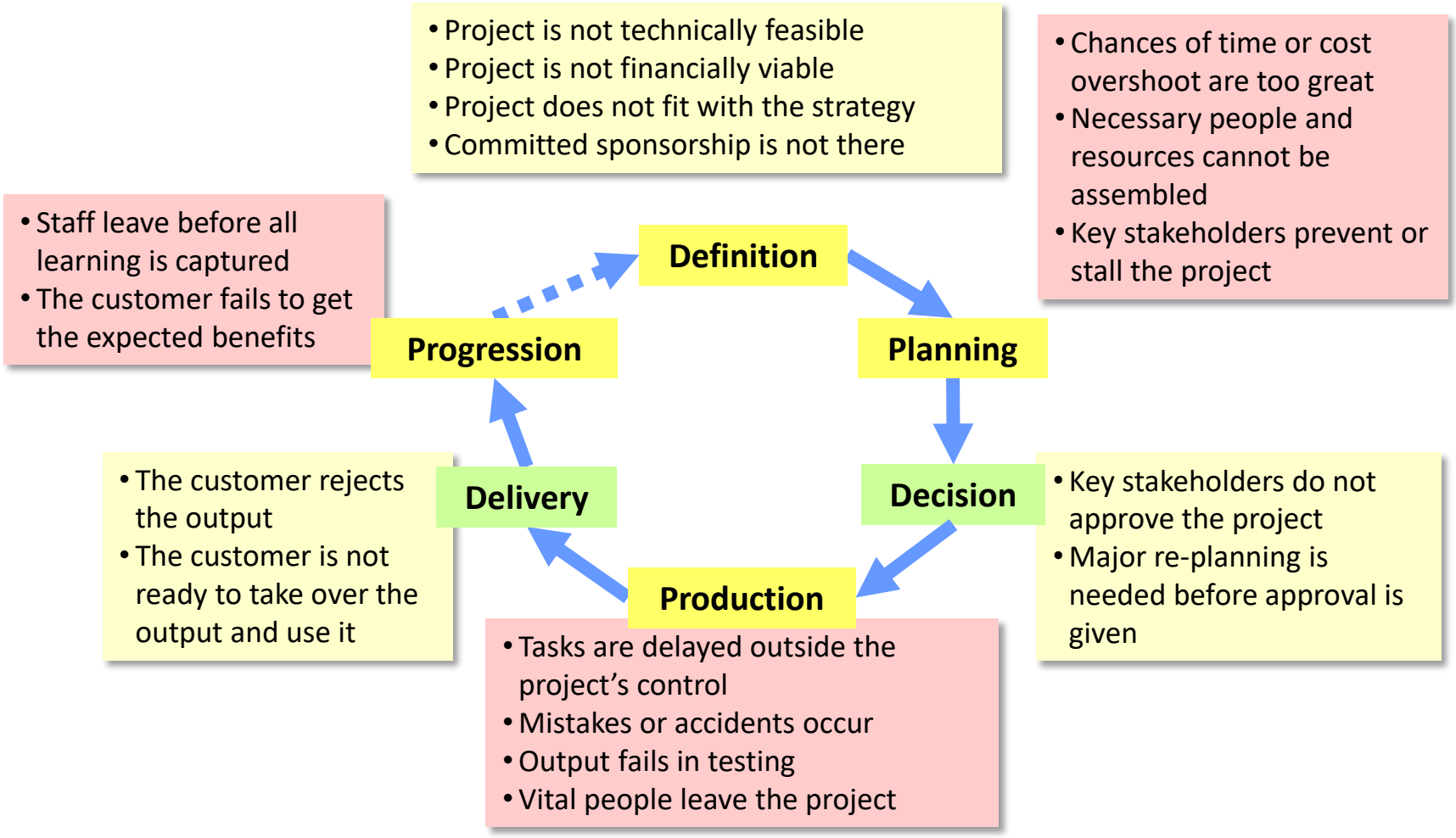
Risks occur throughout the project life cycle



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What makes some projects more risky?

Such projects have more risks and the consequences are greater if those risks occur.

- **Long durations** during which currencies can fluctuate, financing costs change, governments can change, laws can be amended, etc.
- The client is in the **public sector** where attitudes, customs and working culture can have a big impact. The project may become a political football.
- A **high dependence on local agencies** for getting permissions.

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What makes some projects more risky?

Such projects have more risks and the consequences are greater if those risks occur.

- A **strong dependence on local staff**, with their working style, language etc.
- **Above average chances of adverse weather**, natural disasters, etc.
- **Large sunk costs in the venture** which cannot be recovered
- **High reliance on local infrastructure** like telecoms, roads, etc.

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Statsport: A new athletics stadium

- **Client is City of Statville**
- Opens 1st August 2025
- **Internationally renowned architect**
- Environmentally state of the art design
- **Brownfield site – old railway yards**
- Close to thousands of homes
- **Paid for by proposed local sales tax**

What are the major risks for this project?

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Politicians don't approve the project

The stadium is not ready on time

The architect's design cannot be built economically

The state-of-the-art equipment does not work

There are toxic materials in the soil

Residents protest against construction noise and dust

The sales tax is not approved by city voters

What are the major risks for this project?

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Risk management is the art and science of identifying, analysing and responding to risk factors throughout the life of a project. *Pinto (2010)*

Identify risks
Identify and categorise risks

Analyse probability and impact
Consider how likely risk is to occur
Consider what the impact would be if it does

Devise risk mitigation strategies
Take action to reduce chance of risk occurring
Find ways to reduce impact if it does

Apply control and documentation
Have an owner for each risk
Have mechanisms to monitor and deal with risks

Risk assessment

Risk planning

Risk administration

See Pinto, J. (2010), *Project management, achieving competitive advantage*. Upper Saddle River, NJ, US: Prentice Hall, p221. Teale, D. (2001). *Successful project risk assessment* London: Hodder & Stoughton, p5

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Identifying potential risks

Expert opinion – Specialists in areas of risk

Past history – Lessons from previous projects; risks and ways to deal with them

Team based assessments – Multi-disciplinary team assesses risks together

Idea generation techniques – Ways to reveal important but less obvious risks

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The risk of groupthink

Same background, same education, same experience, same attitudes

=

Narrow view of potential risks

=

Big risk of missing very significant risks

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Understanding risk: core ideas

Understanding and managing risks is at the heart of the project.

A risk is an event; it is obvious when a risk occurs.

Risks can arise throughout the project life cycle.

A number of factors will make certain projects more risky than others.

Risk identification and analysis begins in the Definition phase and continues throughout the project.

Risk identification can involve expert opinion, studying past history, team-based assessments and even idea generation techniques.

A broad-based assessment of risks avoids the danger of groupthink.

See Zavanak page *Risk in projects*.

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