8. HANDLING RISK

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Project management 101 *by Zavanak*

8.1 What is risk?

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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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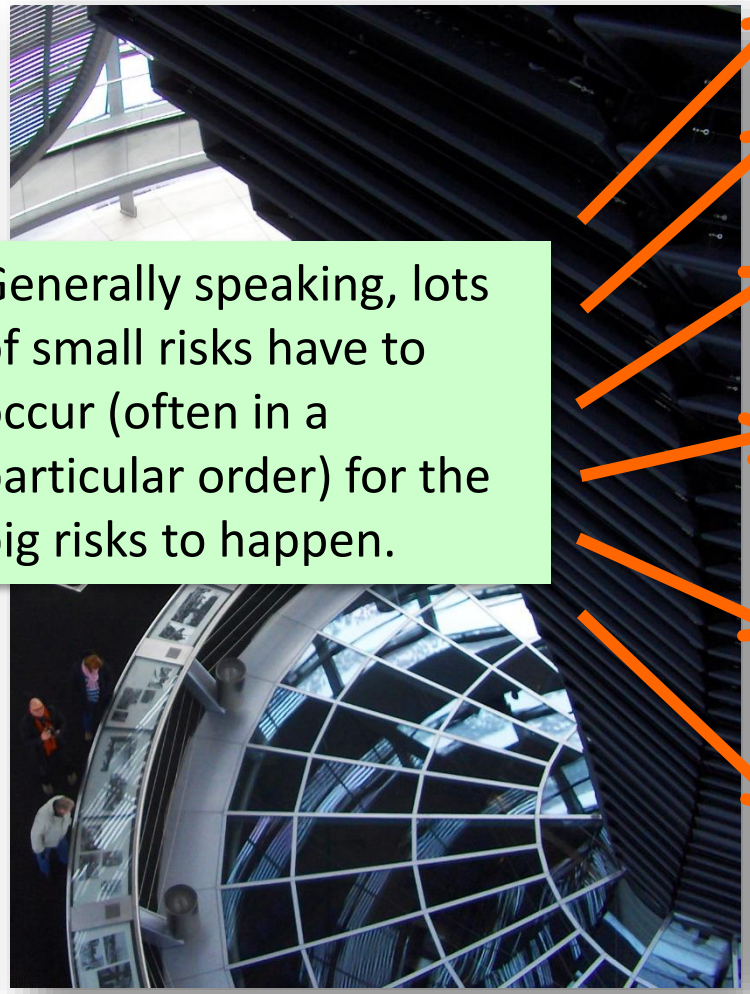
The big risks



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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What is a ‘risk’?

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

Events which can be anticipated are called risks. Events which cannot be anticipated are called **uncertainties**.

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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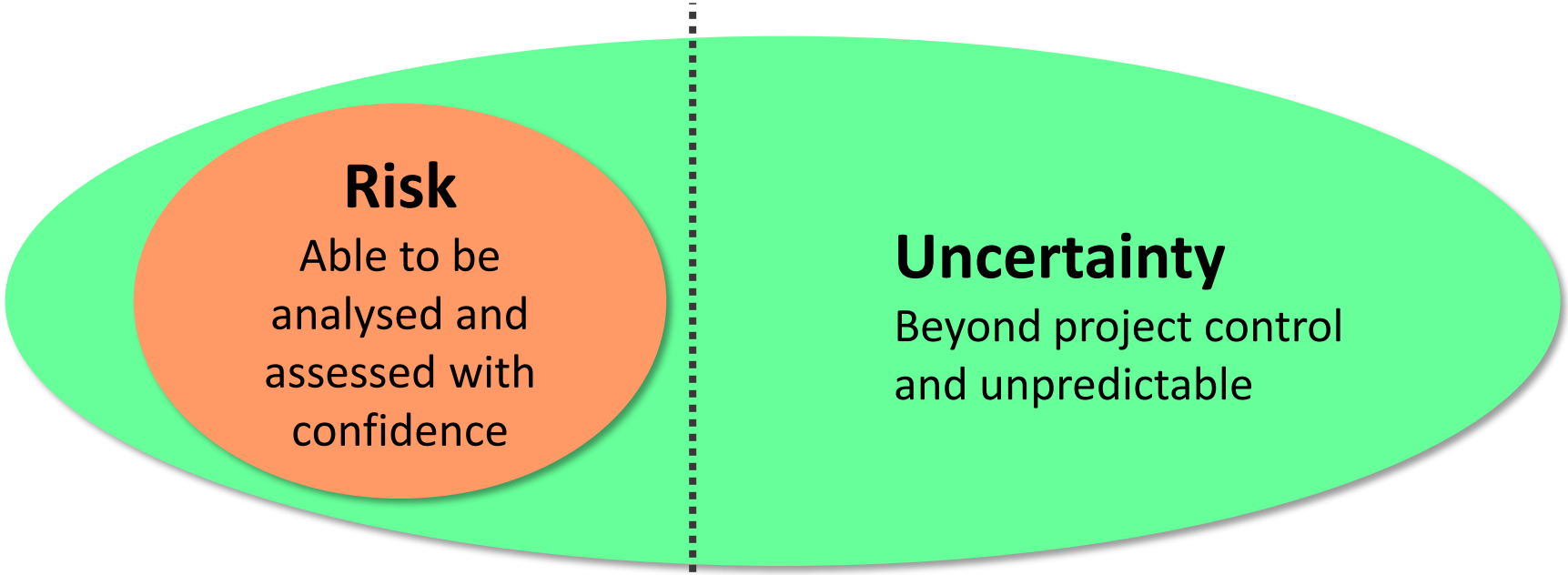
Risk and uncertainty



- What the weather will be next week
- **The chance of a known event occurring**
- How to deal with such an event

- What the weather will be this time next year
- **The project may hit a completely unexpected crisis**
- A serendipitous event might open new opportunities

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Sources of risks

Internal risks - Risks relating to the management of the project, over which the project actors should have some degree of control.

Environmental risks - Risks residing in the world outside the project. The project actors may be aware of these and be able to anticipate them (e.g. changes to inflation rates) but they will have little or no control over them.

Emergent risks - These are highly unpredictable in terms of when they may happen, but experience shows that they do happen. They can be of particular significance to international projects. They may include political revolutions, natural disasters or the outbreak of pandemics.

External risks

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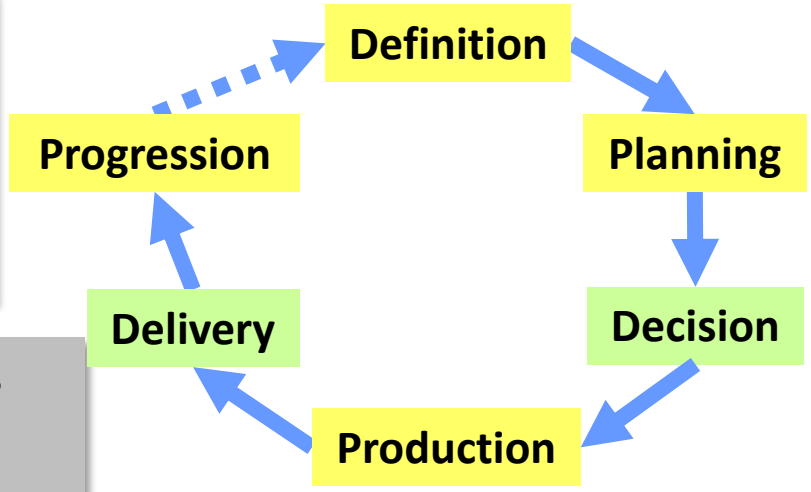
Risks through the project life cycle

- Project is not technically feasible
- **Project is not financially viable**
- Project does not fit with the strategy
- **Committed sponsorship is not there**

- Chances of time or cost overshoot are too great
- **Necessary people and resources cannot be assembled**
- Key stakeholders prevent or stall the project

- Staff leave before all learning is captured
- **The customer fails to get the expected benefits**



- The customer rejects the output
- **The customer is not ready to take over the output and use it**

- Key stakeholders do not approve the project
- **Major re-planning is demanded before approval is given**

- Tasks are delayed outside the project's control
- **Mistakes or accidents occur**
- Output fails in testing
- **Vital people leave the project**

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Why some projects are more risky

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

- The project runs over a **long duration** during which currencies can fluctuate, financing costs change, governments 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.
- There is a **high dependence on local agencies** for getting permissions.
- The respect for **intellectual property** is not sacrosanct.

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Why some projects are more risky

- There is a **strong dependence on local staff**, with their working style, language etc.
- **Above average chances of adverse weather**, natural disasters, etc. exist.
- **Large sunk costs** have to go into in the venture which cannot be recovered
- There is high reliance on **local infrastructure** like telecoms, roads, etc.

The project environment is becoming more uncertain everywhere. Unstable political and economic conditions hinder project investment.

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Statsport stadium: major risks

- **Client is City of Statville**
- Opens 1st August 2027
- **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**

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

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

Identify risks
Identify and categorise risks

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

Devise risk mitigation plans
Take action to reduce chance of risk occurring
Find ways to reduce impact or recover 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

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