

Project Risk Management

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PMG 510
Project Risk Management

Lecture 6



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Outcomes of the chapter:

- **Upside of risk**
- **Opportunity assessment**
- **Riskiness index**
- **Upside in strategy**
- **Upside in projects**
- **Upside in operations**
- **Strategic risk response**
- **Types of controls**

Defining the upside of risk

Upside of risk

- There is a belief amongst risk management practitioners that **risk management** makes **a significant contribution** to the operation of the organization, and this contribution is often described as **the upside of risk**.
- In simple terms, **the upside of risk** is achieved when **the benefits obtained from taking the risk** are **greater than any benefit** that would have resulted from not **taking** it.
- In other words, the organization has received **an overall benefit** from **undertaking the activities** that resulted **in exposure to the risk** or set of risks involved.

Defining the upside of risk

Upside of risk

- **For example:**
 - ✓ a manufacturing company that produces waste by-products that create a disposal problem may achieve the upside of risk by selling the unwanted byproduct or by identifying a means of adding value to the waste product and selling it as another product stream.
 - ✓ This is an example of identifying a difficulty for the business and, in solving that difficulty, acquiring additional benefits that had not been foreseen and were not otherwise available.

Defining the upside of risk

Upside of risk

- In simple terms, the upside of risk may just be the reward for taking the risk in the first place.
- **For example:** Climbing a challenging mountain may be a significant risk, but the upside of taking that risk is when the climber has safely reached the summit and gains that reward.

Defining the upside of risk

Defining the upside of risk:

- Fewer disruptions to normal operations and greater operational efficiency resulting in less downside of risk
- Ability to seize an opportunity because competitors did not identify the cost-effective solution to a risky feature of a contract
- Specifically identifying positive events during the risk assessment and deciding how to encourage those events
- Opportunity management, by completing a detailed review of a business opportunity before deciding to embrace it
- Achieving a positive outcome in difficult circumstances as an unintended and/or automatic result of good risk management

Defining the upside of risk

Upside of risk

Honesty box and the upside of risk

- ✓ Consider the case of the vendor in Wall Street, New York City, who set up a stand and sold donuts and coffee to passers-by as they went in and out of their office buildings.
- ✓ During the breakfast and lunch hours, he always had long lines of customers waiting. He noticed that the time wait discouraged many customers who left and went elsewhere.

Defining the upside of risk

Upside of risk

Honesty box and the upside of risk

- ✓ He also noticed that, as he was a one-man show, the biggest bottleneck preventing him from selling more donuts and coffee was the disproportionate amount of time it took to make change for his customers
- ✓ Finally, he put a small basket on the side of his stand filled with dollar bills and coins, trusting his customers to make their own change.
- ✓ You might think that customers would accidentally count wrong or intentionally take extra quarters from the basket, but what he found was the opposite – most customers responded by being completely honest, often leaving him with larger-than-normal tips.

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Defining the upside of risk

Upside of risk

Honesty box and the upside of risk

- ✓ Also, he was able to move customers through at twice the pace because he didn't have to make change.
- ✓ In addition, he found that his customers liked being trusted and kept coming back. By extending trust in this way, he was able to double his revenues without adding any new cost.

Defining the upside of risk

Opportunity assessment:

- **The opportunity evaluation** is designed to identify the additional profit opportunities that could arise from **winning that business**.
- The **evaluation** will also look at **the potential disadvantages** of successfully acquiring the client prospect.
- When undertaking such an **opportunity assessment**, there has to be the possibility that the organization will **advise the client prospect** that they do not wish **to tender for the business**.

Defining the upside of risk

Opportunity assessment:

- When seeking to identify opportunities, many organizations facilitate a risk assessment workshop that seeks to identify and analyze hazards and opportunities at the same time
- One of the challenges when undertaking a risk assessment workshop that covers both opportunities and hazards is that a wide range of people will need to attend the workshop.
- Hazards tend to be operational- and compliance-related, whereas opportunities tend to be associated with strategy and tactics.

Defining the upside of risk

Opportunity assessment:

- As with hazard risks, the identification and analysis of opportunities has to be followed by evaluation of the opportunities and the identification of actions or controls that will need to be in place to ensure that the anticipated benefits are more likely to be achieved.
- The opportunity assessment methodology will need to be applied to the opportunities that have been identified, analyzed and recorded on the risk matrix.

Defining the upside of risk

Riskiness index:

- One of the features of the enterprise risk management approach is to develop a consolidated view of the risk exposure of the organization.
- The approach used in calculating the total risk exposure of an organization is similar to the approach taken to the measurement and quantification of risk in operational risk management.
- The idea of a 'riskiness index' is to present a semi-quantitative approach that takes a snapshot of the overall level of risk embedded in the organization.

Defining the upside of risk

Riskiness index:

- The overall level of risk will take account of the strategy currently being followed by the organization, the projects that are in progress, and the nature of the routine operations being undertaken.
- Riskiness index approach can offer an opportunity to benchmark risk management performance and track changes over time.

Defining the upside of risk

Riskiness index:

- Calculating the riskiness index of an organization requires identification of the hazard risks actually being taken by that organization.
- In other words, evaluating the riskiness index of an organization helps to identify the actual risk exposure of that organization.
- Having identified the actual level of risk embedded within an organization, the board of that organization can then ask whether the portfolio of risks is within the risk appetite and/or the risk capacity of the organization and compatible with the risk attitude of the board.

Defining the upside of risk

Riskiness index:

- **For example:** The 2016 version of the UK Corporate Governance Code contains the following: requirement for companies listed on the London Stock Exchange:
 - ✓ The board is responsible for determining the nature and extent of the principal risks it is willing to take in achieving its strategic objectives.
 - ✓ Organizations should be careful to ensure that, having identified the risks that they are taking by a mechanism similar to calculating the riskiness index, the board does not then simply decide that the risks it is currently taking must be the same as the risks it is willing to take.

Defining the upside of risk

Upside in strategy

- Organizations will have **a mission statement**, together with a set of corporate objectives and an **understanding of the expectations** of the **different stakeholders** in the organization.
- The board of the organization then needs to **develop an effective and efficient strategy** that will deliver exactly **what is expected** in terms of the mission, objectives and expectations.
- In order to make **correct strategic decisions**, the board of the organization will need **access to risk information**.

Defining the upside of risk

Upside in strategy

- A risk assessment of the proposed strategy, together with a risk assessment of any viable alternative strategies, should be undertaken.
- The availability of this risk assessment information will ensure that the strategic decisions are more likely to be correct.

Defining the upside of risk

Upside in projects

- It is essential that every organization adopts the correct core processes.
- A core process may be considered as the collection of activities that deliver a specific stakeholder expectation.
- This is the meaning of core process that is allocated by business process re-engineering (BPR) practitioners.
- There is a difference between a process being efficient and effective. An efficient process means that there is no disruption and no excess cost.

Defining the upside of risk

Upside in projects

- However, the process may be the incorrect one for cost-effectively delivering the requirements. Where processes need to be improved, a project will normally be undertaken and change achieved.
- In circumstances where a series of projects are required, this is often referred to as a programme of work.
- When a project, or programme of work, is implemented by an organization, the desire will normally be to improve the effectiveness and/or efficiency of core processes.

Defining the upside of risk

Upside in projects

embracing opportunities

- ✓ Consider two simple examples where the global financial crisis has resulted in benefit or upside of risk for organizations.
- ✓ An international restaurant brand has discovered that landlords in city center locations are looking for tenants. This has enabled the restaurant business to relocate into busier parts of a city center at reduced rents, whilst also increasing trade and profits.

Defining the upside of risk

Upside in projects

embracing opportunities

- ✓ With the reduction in industrial activity resulting from the global financial crisis, an electricity generating company has been able to decommission old, costly generating facilities, and thereby reduce the overall cost per unit of producing electricity. This has increased profit per unit and enabled the company to revise strategic plans for future additional generating capacity to reduce generating costs over the long term

Defining the upside of risk

Upside in operations

- It is a fundamental requirement for organizations that they **have effective and efficient operations.**
- Efficient operations should make **best use of the resources** of the organization and should operate **without (or with minimum) unplanned disruption.**
- Undertaking **efficient operations** that use **minimum resources** and produce **maximum output** will deliver **the greatest benefit** to the organization. Operations also need to be effective in that they represent **the best way of conducting the operations.**

Defining the upside of risk

Upside in operations

- For example,
 - ✓ it is possible to have an efficient journey by car or bus across a busy city.
 - ✓ However, the effective way to travel in many large cities is by means of the metro or underground system.

Strategic risk response

Strategic risk response

- The overall approach to the management **of control and opportunity risks** is similar to the approach adopted for the management of hazard risks.
- However, there are **sufficient differences** in the range of options available for these to be **presented separately**.
- It is worth remembering that projects normally **reflect and implement the tactics** that are being **employed to implement strategy**

Strategic risk response

Strategic risk response

- The 4Ts of hazard risk management and the type of controls that are most likely to be associated with each type of hazard risk response.
- The next figure suggests that there are a range of responses available for the management of opportunity risks.
- Developing and implementing effective and efficient strategy will require the evaluation of the level of risk associated with each available strategy and the level of reward that the strategy will deliver.

Strategic risk response

Strategic risk response

- The 4E's of opportunity management are set out as exist, explore, expand, exploit or exit.
- There is a close relationship between the 4Es and the status of the organization, as illustrated in next figure.
- A start-up operation will face a higher level of risk and low potential rewards.

Strategic risk response

Strategic risk response

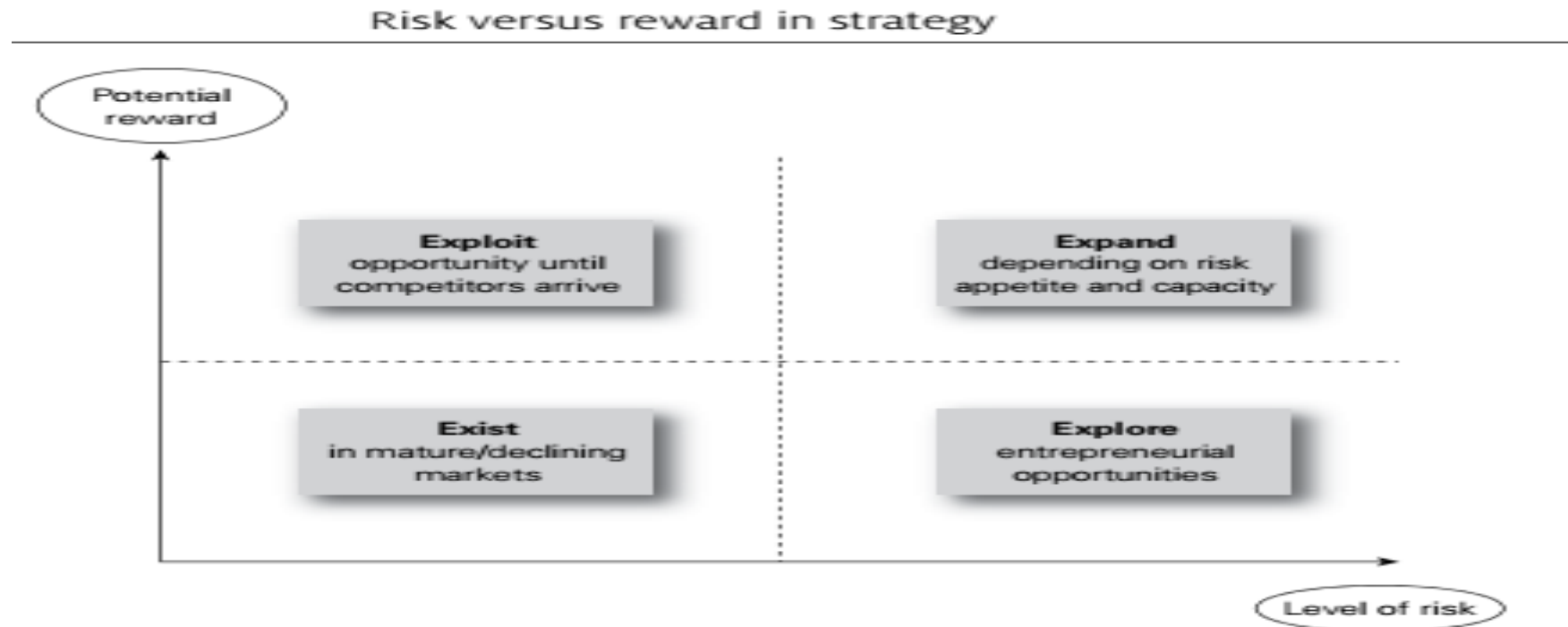
- Entrepreneurial opportunities will be explored at this time. As the organization grows, potential rewards will increase while the level of risk will remain high.
- The organization will seek to achieve growth, but may feel that growth is too slow or the level of risk remains too high, and if so it will exit from those operations.

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Strategic risk response

Strategic risk response



Strategic risk response

Strategic risk response

- After a period of growth, the organization should be achieving a high reward for a reduced risk.
- This represents the phase where the organization will exploit opportunities until competitors arrive. This is a mature operation.
- All mature operations are exposed to the possibility of decline, although many organizations choose to exist in a mature, declining market, where risk exposure is low and so are potential rewards.

Strategic risk response

Strategic risk response

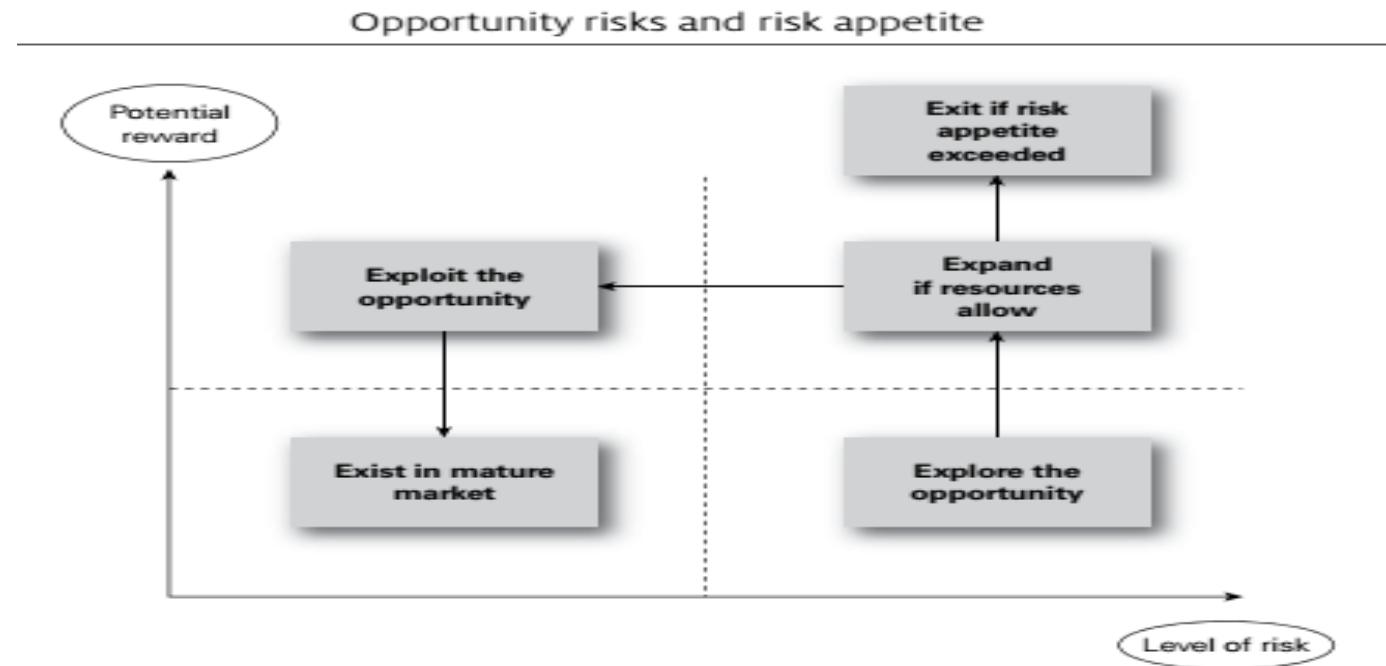
- The application of the 4Es to the management of strategic, opportunity or speculative risks is consistent with the description of risk and reward offered
- However, pursuing opportunity risks and the development of strategic objectives are the most important issues for many organizations.
- Risk management input into strategic decision making may not always be as robust and well structured as the risk management input into operations and projects.

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Strategic risk response

Strategic risk response



Strategic risk response

Strategic risk response

- An organization may find that it has a **viable business opportunity** but does not have the resources to exploit it on its own.
- In these circumstances, the organization has three main choices:
 1. It may exit the opportunity because it does not have the risk appetite or risk capacity to pursue that opportunity.
 2. It may sell the opportunity on to an organization that does have the appetite, capacity and resources to exploit the opportunity
 3. or it may seek to share that opportunity.

Strategic risk response

Strategic risk response

Opportunity evaluation and response

The purpose of the evaluation and response is to decide which opportunities require a response and what the recommended response will be. The following are the key terms and concepts when deciding how to respond to an opportunity and they can be used in combination:

Strategic risk response

Strategic risk response

Opportunity evaluation and response

- **Enhance**: the opportunity equivalent of ‘mitigating’ a risk is to enhance the opportunity by increasing the probability and/or the impact.
- **Exploit**: equivalent to the ‘avoid’ response, but the ‘exploit’ strategy seeks to make the opportunity definitely happen.
- **Ignore**: the ‘acceptance’ strategy takes no measures to deal with a hazard risk, and opportunities can be ignored, with a reactive approach but no explicit actions.
- **Sharing** (transfer) opportunity: ‘share’ strategy for opportunities seeks a partner able to manage the opportunity who can maximize the chance of it happening

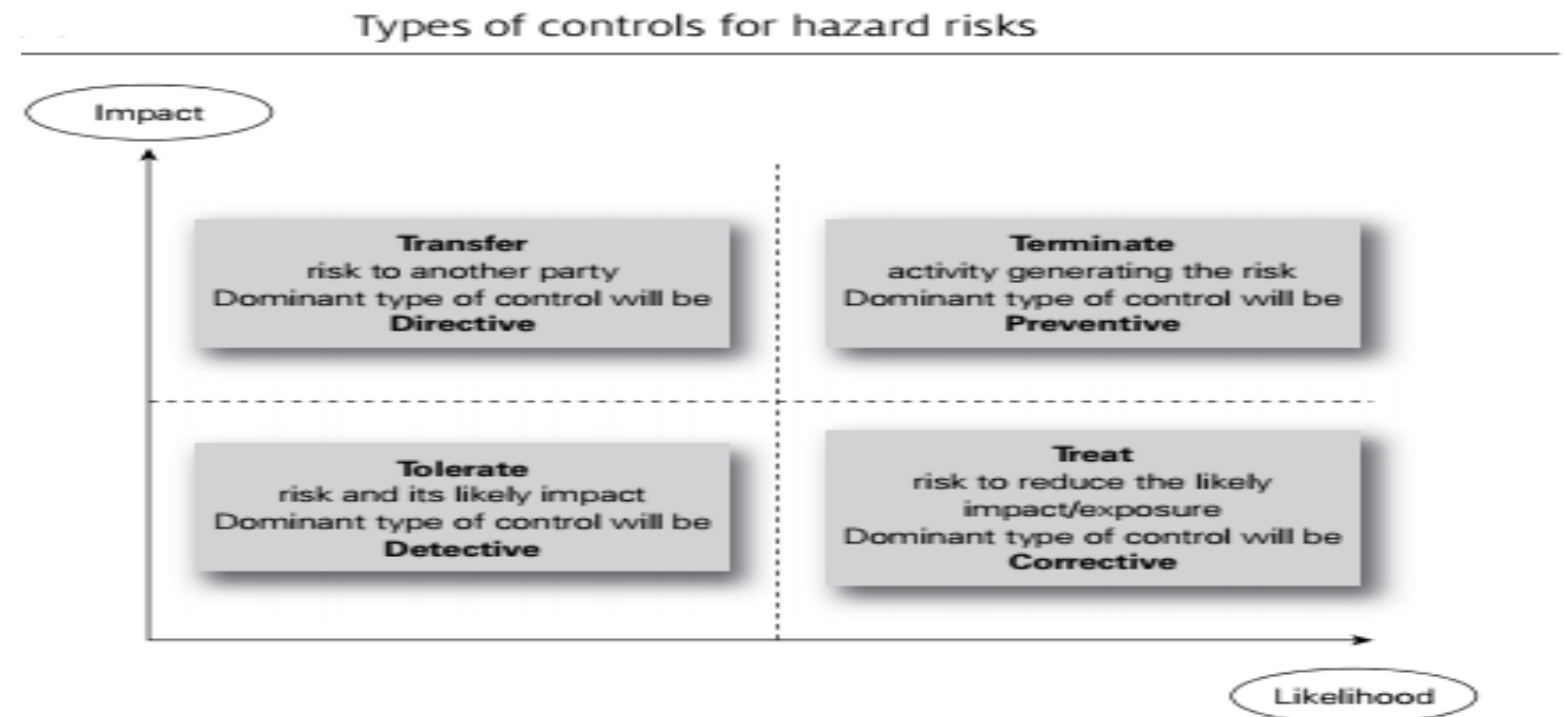
Risk control techniques

Types of controls:

- There are a range of controls that can be applied to hazard risks. The most convenient classification system is to describe these controls as preventive, corrective, directive and detective.
- In relation to hazard risks, the control options of preventive, corrective, directive and detective (PCDD) represent a clear hierarchy of controls.

Risk control techniques

Types of controls:



Risk control techniques

Types of controls:

1. Preventive (terminate):

- These controls are designed **to limit the possibility** of an undesirable outcome being realized. The more important it is to stop an undesirable outcome, then the more important it is to implement appropriate preventive controls

2 Corrective (treat):

- These controls are designed **to limit the scope for loss** and reduce any undesirable outcomes that have been realized. They may also provide a route of recourse to achieve some recovery against loss or damage.

Risk control techniques

Types of controls:

3 Directive (transfer)

- These controls are designed to **ensure that a particular outcome is achieved**. They are based on giving directions to people on how to ensure that losses do not occur. They are important, but depend on people following established safe systems of work.

4 Detective (tolerate)

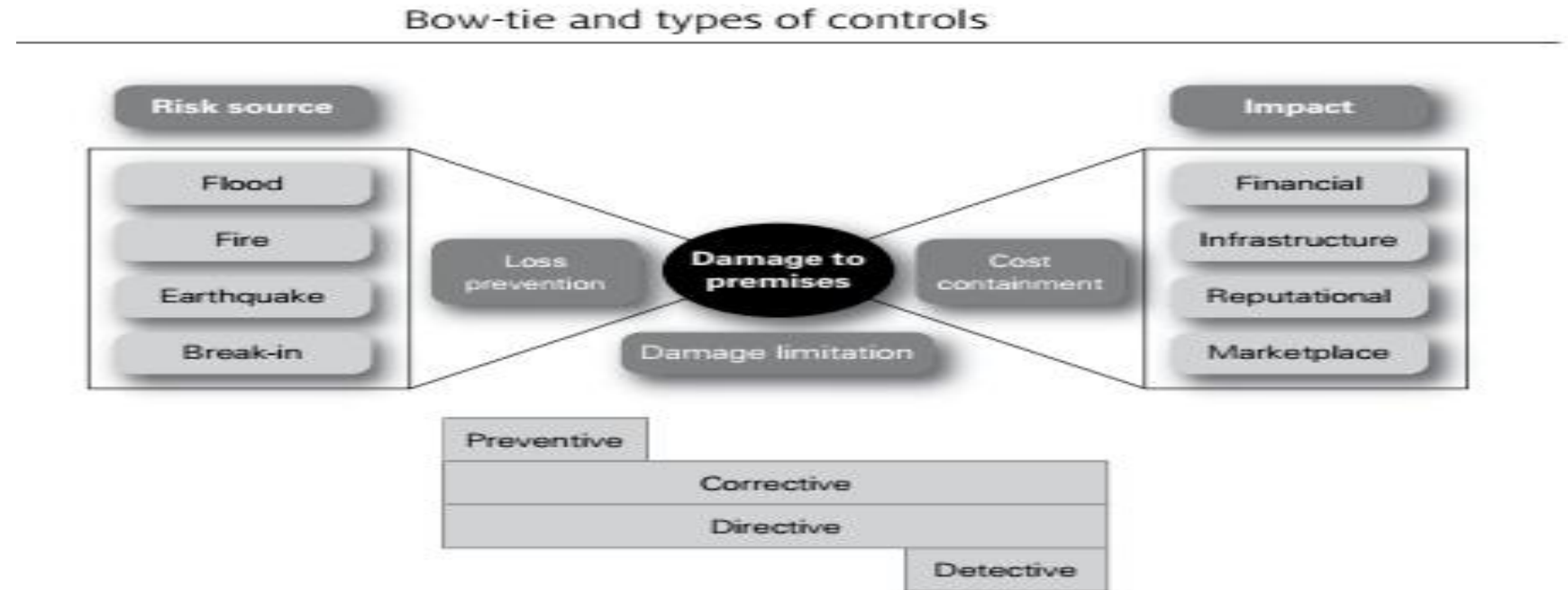
- These controls are designed to **identify occasions when undesirable outcomes have been realized**. Their effect is, by definition, **'after the event'** so they are only appropriate when it is possible to accept that the loss or damage has occurred.

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Risk control techniques

Types of controls:



Risk control techniques

Types of controls:

Financial controls for charities

- The main reason for having financial controls is to reduce the risk of error and fraud. Errors are likely to result in a loss of money, because donors are more likely to give money to charities that they can trust.
- Once you have established your financial controls, they should be discussed and approved by the trustees. You need to ensure that you have the support of all trustees before implementing any new controls.
- Then, implement the financial controls noting who is responsible for each control. By making someone accountable for a financial control, it is more likely to be effective.

Risk control techniques

Types of controls:

Financial controls for charities

- Controls are only good if they are relevant; therefore, you need to ensure that you routinely review your controls to see if they are still effective.
- As things change, you need to think about making changes to your controls as your organization evolves.
- It can be hard to make changes to existing controls, but assessing why the controls are no longer valid and how new controls can help the organization will help you in putting the changes into place.



Thank You