



Everyone's Smart
University

Types of risks

Lecture 3

PMG510

Project Risk Management



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Timescale of risk impact

Timescale of risk impact



- This part considers the value of classifying risks according to the timeframe for the impact of the risk.
- The classification of risks as long-, medium- and short-term impact is a very useful means of analyzing the risk exposure of an organization.
- These risks will be related to the strategy, tactics and operations of the organization.

Timescale of risk impact

- In general terms, long-term risks will impact several years, perhaps up to five years, after the event occurs or the decision is taken. Long-term risks therefore relate to **strategic decisions**.
- Medium-term risks have their impact some time after the event occurs or the decision is taken, and typically this will be about **a year later**.
- Medium-term risks are often associated with projects or programmes of work.

Timescale of risk impact

- Short-term risks have their impact **immediately after the event occurs**.
- Accidents at work, traffic accidents, fire and theft are all short-term risks that have an immediate impact and immediate consequences as soon as the event has occurred.
- These short-term risks cause immediate disruption to normal efficient operations and are probably the easiest types of risks to identify and manage or mitigate.

Timescale of risk impact

- By way of example, consider the operation of a new computer software system in more detail. The organization will install the new software in anticipation of gaining efficiency and greater functionality. The decision to install new software and the choice of the software involves opportunity risks. The installation will require a project, and certain risks will be involved in that. The risks associated with the project are control risks. After the new software has been installed, it will be exposed to hazard risks. It may not deliver all of the functionality required and the software may be exposed to various risks and virus infection. These are the hazard risks associated with this new software system.

Timescale of risk impact



- An increasingly important consideration for organizations is what will be the trigger mechanism that causes a risk to materialize.
- The challenge for management is then based on recognition of the circumstances in which one or more of the significant risk events may be triggered.

Four types of risk



- There are four types of risk:
 - Compliance risks;
 - Hazard risks;
 - Control risks;
 - Opportunity risks.

Four types of risk

- The table below considers the risks associated with owning a car. In this case, the compliance risks relate to the legal obligations associated with owning and driving a car. The hazard risks relate to events that the owner does not want to occur. Uncertainties are the costs that are known to be involved, but these may vary. Finally, the opportunities are the benefits that car ownership offers.

Four types of risk

TABLE 3.1 Risks associated with owning a car

Opportunities of owning a car (events you hope will happen, but could fail to occur)

- 1 You can travel more easily than depending on others
- 2 Enhanced job opportunities because you will be more mobile
- 3 Save money on other forms of public transport

Four types of risk



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Uncertainties of owning a car(events that you know will happen, but impacts are variable)

- 1 Cost of borrowing money to buy the car could change
- 2 Price of fuel (petrol or diesel) could go up or down
- 3 Maintenance, breakdown and repair costs will vary

Four types of risk



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Hazards of owning a car

(events that you do not want to happen and that can only be negative)

- 1 You pay too much for the car or it is in poor condition
- 2 You are involved in a collision or road accident
- 3 The car gets stolen or vindictively damaged

Four types of risk



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Compliance requirements of owning a car (events that could result in regulatory enforcement)

- 1 Insufficient and/or inadequate third-party car insurance
- 2 Inattentive or aggressive driving results in traffic offence(s)
- 3 Tyres in poor condition and other maintenance obligations

Hazard risks

- **Hazard risks** are the risks that can only inhibit achievement of the corporate mission. Typically, these are insurable-type risks or perils, and will include fire, storm, flood, injury and so on. The discipline of risk management has strong origins in the control and mitigation of hazard risks. Normal efficient operations may be disrupted by loss, damage, breakdown, theft and other threats associated with a wide range of dependencies.

Hazard risks



- The table below gives examples of disruption caused by people, premises, processes and products (4Ps). These dependencies can also be sources of risk and the 4Ps can be considered to be an example of a risk classification system.

Hazard risks



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Category	Examples of disruption
People	Lack of people skills and/or resources Inappropriate behaviour by a senior manager Unexpected absence of key personnel Ill-health, accident or injury to people
Premises	Inadequate, insufficient or denial of access to premises Damage to or contamination of premises Damage to and breakdown of physical assets Theft or loss of physical assets
Processes	Failure of IT hardware or software systems Disruption by hacker or computer virus Inadequate management of information Failure of communication or transport systems
Products	Poor product or service quality Disruption caused by failure of supplier Delivery of defective goods or components Failure of outsourced services and facilities

Control risks



- **Control risks** are risks that cause doubt about the ability to achieve the organization's mission.

Opportunity risks



- Opportunity risks arise because the organization is seeking to enhance the achievement of the mission, although they might inhibit the organization if the outcome is adverse.
- This is the most important type of risk for the future long-term success of any organization.

Opportunity risks



- Many organizations are willing to invest in high-risk business strategies in anticipation of a high profit or return. These organizations may be considered to have a large appetite for opportunity investment. Often, the same organization will have the opposite approach to hazard risks and have a small hazard tolerance.

Opportunity risks



- This may be appropriate, because the attitude of the organization may be that it does not want hazard-related risks consuming the resources of the organization when it is putting so much value at risk investing in opportunities.

Compliance risks



- For highly regulated industries, such as energy, finance, gambling and transportation, compliance issues are very important.
- Because of the particular nature of compliance risks, they are often considered a separate category of risk and they are often managed or minimized differently.
- Many organizations will wish to ensure full compliance with all rules and regulations and run zero risk in this category. This may be possible for compliance risks, but is almost certainly not going to be the case for hazard, control and opportunity risks.

Embrace opportunity risks



- All organizations have some appetite for seizing opportunities and are willing to **invest** in them.
- Opportunity risks are normally associated with the development of new or amended strategies, although opportunities can also arise from enhancing the efficiency of operations and implementing change initiatives.

Embrace opportunity risks



- Every organization will need to decide what appetite it has for seizing new opportunities, and the level of investment that is appropriate. For example, an organization may realize that there is a requirement in the market for a new product that its expertise would allow it to develop and supply. However, if the organization does not have the resources to develop the new product, it may be unable to implement that strategy and it would be unwise for it to embark on such a potentially high-risk course of action.

Embrace opportunity risks



- It will be for the **management of the company** to decide whether they have an appetite for seizing the perceived opportunity. Just because the organization has that appetite, it does not mean that it is the correct thing to do.
- The **board of the company** should therefore be aware of the fact that, although they may have an appetite for seizing the opportunity, the organization **might not have the risk capacity** to support that course of action.
- Consideration of whether business risks are within the control of the organization or not is an important component of successful business risk management.

Embrace opportunity risks



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Heart disease risk factors

Controllable risk factors for heart disease and stroke are those that can be changed through diet, physical activity and no tobacco use. These risk factors are in contrast to those that are uncontrolled, such as age, gender, race or genetic traits. Having one or more uncontrollable risk factors does not mean a person will have a heart attack or stroke; however, with proper attention to those risk factors that are controllable, one may reduce the impact of those risk factors that cannot be controlled or changed.

Manage uncertainty risks



- When undertaking projects and implementing change, an organization has to accept a level of uncertainty. **Uncertainty or control risks are an inevitable part of undertaking a project.** A contingency fund to allow for the unexpected will need to be part of a project budget, as well as contingent time built into project schedules. When looking to develop appropriate responses to control risks, the organization must make the necessary resources available to identify the controls, implement the controls and respond to the consequences of any control risk materializing.

Manage uncertainty risks



- Uncertainty represents a **deviation** from the required or expected outcome.
- When an organization is undertaking a project, such as a process enhancement, the project has to be delivered on time, within budget and to specification. Also, the enhancement has to deliver the benefits that were required. Deviation from the anticipated benefits of a project represents uncertainties that can only be accepted **within a certain range**.

Manage uncertainty risks



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- There are dangers if the organization becomes too concerned with control management. The organization should not become obsessed with control risks, because it is sometimes suggested that over-focus on internal control and control management **suppresses the entrepreneurial effort.**

Mitigate hazard risks



- Organizations need to tolerate a hazard risk exposure, accept exposure to control risks and invest in opportunity risks.
- In the case of health and safety risks, it is generally accepted that organizations **should be intolerant of these and should take all appropriate actions to eliminate them**. In practice, this is not possible and organizations will minimize safety risks to the lowest level that is cost-effective and in compliance with the law.

Mitigate hazard risks



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Examples



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Shop security standards

An example can be seen in the operation of a security-conscious jewellery shop. Customers are allowed into the shop one at a time. They are recorded on CCTV as they wait to enter. Items are held securely, and customers are invited to ask to see specific items under the suspicious gaze of the shop assistants. Of course, some customers are put off, but equally the shops suffer negligible rates of shoplifting.

Contrast this with a supermarket, where there are no barriers on entry and customers are allowed to handle all of the items. There is CCTV monitoring the shops, and there are likely to be store detectives patrolling – but the object of the security is to deter rather than to prevent shoplifting. Shoplifting does occur, but at rates that are acceptable to the shop owners. Conversely, few potential customers are put off visiting the shop because of the measures.

Examples



- Refer to pages 99 & 100 in the reference book:
- Read the section: (Minimize compliance risks)
- Get an idea on how different organizations from diverse sectors set policies to avoid compliance risks.