

PMG510

Risk Management

Prepared by Dr. Ayman Elmaasarawy

جامعة الجميع الذكية

تسعى لتكون الكيان الأول الذي يتبنى مبدأ المجتمع التعليمي
التعاوني ويقدم العلم مقابل العمل لتنمية وبناء المجتمعات.

Risk analysis and evaluation Lecture 6



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Lecture 6 Organization

1. Application of a risk matrix
2. Inherent and current level of risk
3. Control confidence
4. 4T's of hazard risk response
5. Risk capacity
6. Risk likelihood
7. Risk Magnitude
8. Loss prevention, Limit damage, and cost containment

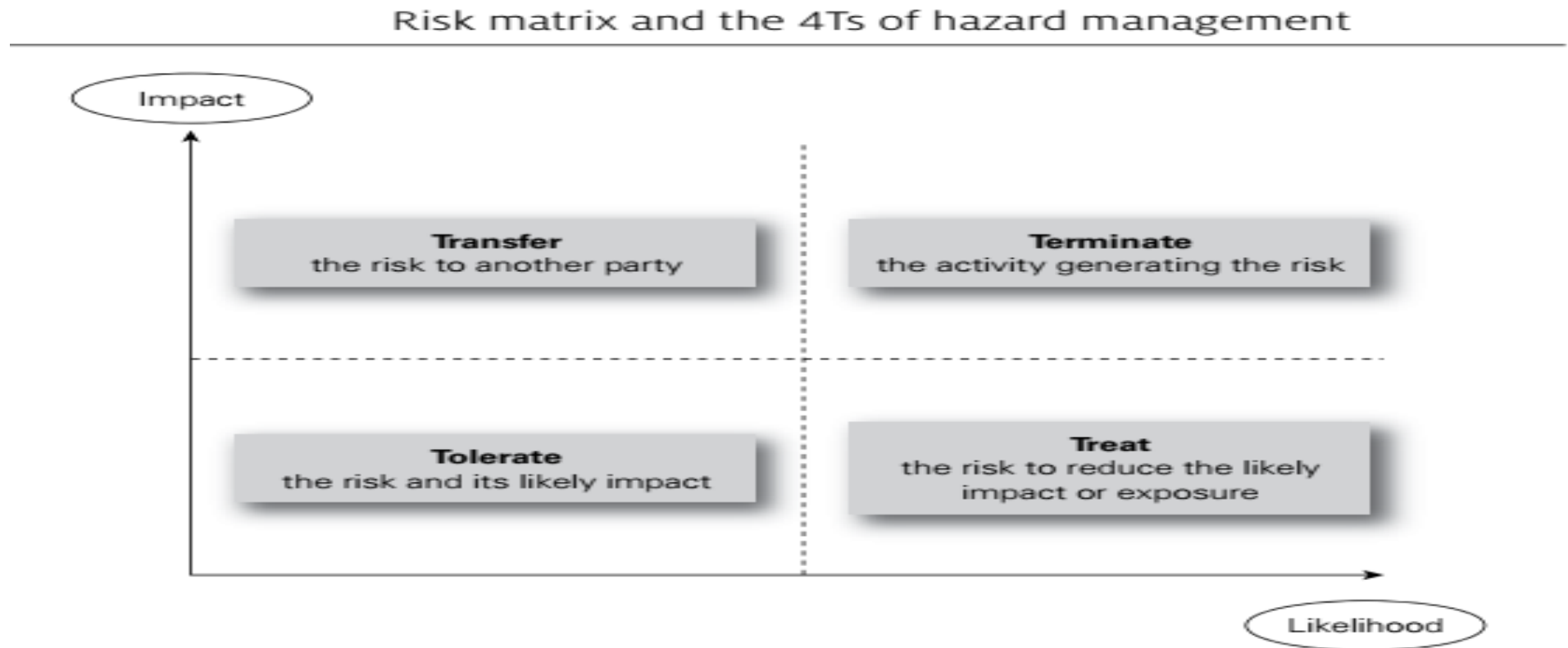
4T's of hazard risk response:

- **Tolerate** will be the dominant response for the **low-likelihood/low-impact** risks.
- **Treat** will be the dominant response for **high-likelihood/low-impact** risks.
- **Transfer** will be the dominant response for **high-impact/low-likelihood** risks.
- **Terminate** will be the dominant response for **high-impact/high-likelihood** risks.

Lecture 6

Risk analysis and evaluation

4T's of hazard risk response:



4T's of hazard risk response:

- **Assessment** of each of the risks will enable the organization to place the risk on a **risk matrix**.
- The **position** of the risk on **the risk matrix** will then indicate the most likely response to that risk.
- If **the risk assessment** is undertaken at **the current level of risk**, the effect of the **existing controls** will already have been evaluated as part of the risk assessment exercise.

4T's of hazard risk response:

Example:

- Consider the case of a theatre that needs to respond to the increasing use of agents who require payment at the time of the booking, rather than after the performance.
- Also, a recent failure of an actor to arrive on the night of the performance caused the theatre considerable financial loss.
- This has resulted in the theatre reviewing the booking and appearance arrangements for actors and deciding responses that are appropriate in relation to all 4Ts.

4T's of hazard risk response:

- Example :
 - The theatre might decide that it has to tolerate the new booking fee arrangements.
 - It has also decided that in order to treat/reduce the risk, it will only deal with established agents in future and terminate existing arrangements with an agency that has proved unreliable in the past.
 - The theatre might also investigate the possibility of buying insurance, so that the theatre can transfer the cost of a performance cancelled because the actor fails to arrive on the night.

Risk capacity:

- Different approaches will be taken for different types of risks. Hazard risks will give rise to a hazard tolerance, control risks will give rise to a control acceptance and opportunity risks will give rise to an investment appetite.
- Overall, the organization will have a total risk exposure. This is the sum of the total risk that the organization has taken in these three categories.
- There will also be compliance risks, but most organizations seek to minimize compliance risks and have the necessary compliance controls embedded into core processes.

Risk capacity:

- Risk exposure is the actual risk that the organization is taking and this may not be the same as the risk appetite that the board believes is appropriate for the organization.
- There is also another important measure of risk, and that is the risk capacity of the organization. This is a measure of how much risk the organization should take or can afford to take.
- All of these ways of analyzing risk should be compatible with the attitude of the organization to risk.

Risk capacity:

- **The risk appetite** of the board should be **within the risk capacity** of the organization and **greater than or equal to the actual risk exposure** that the organization faces.
- **Example:** *A contributing factor to the global financial crisis was that certain financial institutions were exposed to a level of risk beyond the risk-bearing capacity of those organizations.*

Risk capacity:

- It would be **inappropriate** for an **organization to embark** on a project that could **exhaust all of its resources**.
- **The capacity of the organization** to accept risk will depend on **its financial strength, the robustness of its infrastructure, the strength of its reputation and brands and the competitive nature** of the marketplace in which it operates.
- The more **rapidly the marketplace** is changing, **the greater capacity for risk the organization is required to have available**.

Risk capacity:

▪ **Example,**

- *If an organization is facing a significant change in technology, the strategic options may be limited. Consider an organization that is involved in the manufacture of DVD players when it becomes obvious that streaming technology is taking over.*
- *The organization will be faced with a significant risk related to the change in technology and will need to develop a new business model.*
- *It will have to acquire new production equipment, new skills and new distribution patterns. It may be that the transfer to the new technology and the risks that it involves are outside the resources and risk capacity of the organization.*

Risk capacity:

Risk Capacity of a bank

- Risk capacity is the level of risk the bank considers itself capable of absorbing, based on its earnings power, without damage to its dividend paying ability, its strategic plans and, ultimately, its reputation and ongoing business viability. It is based on a combination of budgeted, forecast and historical revenues and costs, adjusted for variable compensation, dividends and related taxes.
- Risk exposure is an estimate of potential loss based on current and prospective risk positions across major risk categories – primary risks, operational risk and business risk.
- It builds as far as possible on the statistical loss measures used in the day-to-day operating controls. Correlations are taken into account when aggregating potential losses from risk positions in various risk categories to obtain an overall estimate of the risk exposure.

Risk capacity:

Risk Capacity of a bank

- The bank recorded a large net loss, showing that the risk exposures remained greater than its risk capacity.
- Risk exposure remained high as a result of a lack of liquidity in the markets for securitized assets and due to significantly increased volatility levels in global markets.
- The reduction in risk exposure that was achieved through sales in addition to the significant write-downs incurred on risk positions was offset by a simultaneous decrease of risk capacity due to downward revisions of earnings expectations as a consequence of the deteriorating economic outlook

Thanks



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY