

# DLE 2083: INTRODUCTION TO SECURITY MANAGEMENT

## CHAPTER 3: RISK

# Chapter 3: Learning Outcomes

- At the end of the topic, students should be able to:
  - Defines risk in general.
  - Defines and explain risk management.
  - Explains how risks are categorized.
  - Describe on how to analyze and assess risks.

# What is Risk?



# Definitions of Risk

- Risk is **the possibility of losing or gaining something of value**
- Values - physical health, social status, emotional well-being, or financial wealth
- Action or inaction, foreseen or unforeseen, planned or not planned



# Definitions of Risk...cont.

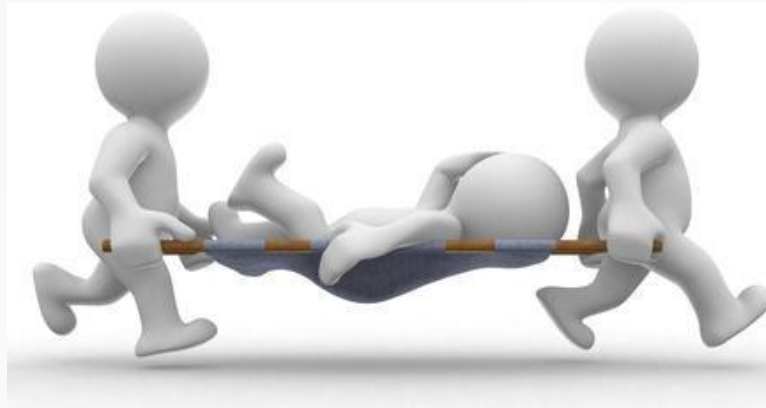
- Risk can also be defined as the intentional interaction with **uncertainty**.
- Uncertainty is a potential, unpredictable, and uncontrollable outcome; risk is a consequence of action taken in spite of uncertainty.



# Types of risk

- **1. Risk to people including:**

- ❖ Death
- ❖ Injury
- ❖ Disease
- ❖ Stress



# Types of risk

- **2. Risks to organization including:**

- ❖ Property damage
- ❖ Loss of property
- ❖ Loss in profit
- ❖ Economic loss



# Types of risk

- **3. Risks to environment including:**
  - ❖ Loss of flora and fauna
  - ❖ Pollution
  - ❖ Loss of amenity



# Sources of Risk

- Natural → Floods, earthquakes
- Technological → Power failure
- Human → Theft, negligence
- Organizational → Poor planning
- Political/Economic → Instability

# Categorizing Risks

- Risks are usually categorized by type.
- Categories help to communicate the scope of the risk, to assign the responsible authority to handle the risk, to understand the causes of the risk, and to suggest strategies for controlling the risk.

# Categorizing Risks

- Risks can be categorized as:
  - negative and positive risks
  - pure and speculative risks
  - standard and nonstandard risks

# Negative and Positive Risks

- Negative risks → uncertain harm/loss/damage
- Positive risks → uncertain benefit/opportunities



# Pure and Speculative Risks

- Pure risks are always negative and often unavoidable - natural risks, war and terrorism.
- Speculative risks include both positive and negative risks and are voluntary or avoidable - financial investments.



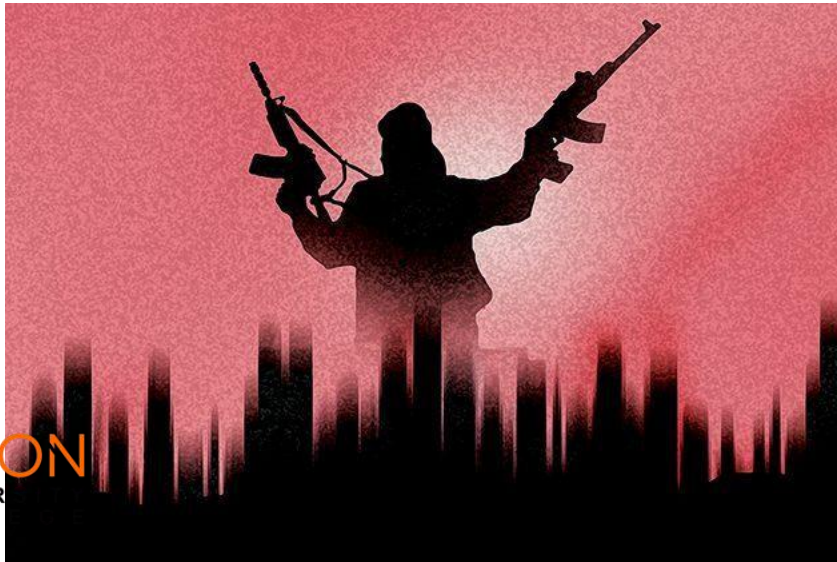
# Standard and Nonstandard Risks

- Standard risks are risks against which insurers offer insurance at standard rates.
- Most standard risks derive from predictable causes, such as unhealthy behaviours, or frequent events, such as road traffic accidents, that give the insurer confidence in their assessments of the risks.



# Standard and Nonstandard Risks

- Nonstandard risks tend to be risks with great uncertainty or great potential for negative returns, like those associated with war, terrorism, and natural catastrophes.
- To insure against a nonstandard risk, the consumer could negotiate a particular policy but might fail to find any insurer, in which case the consumer is left to retain or avoid the risk.

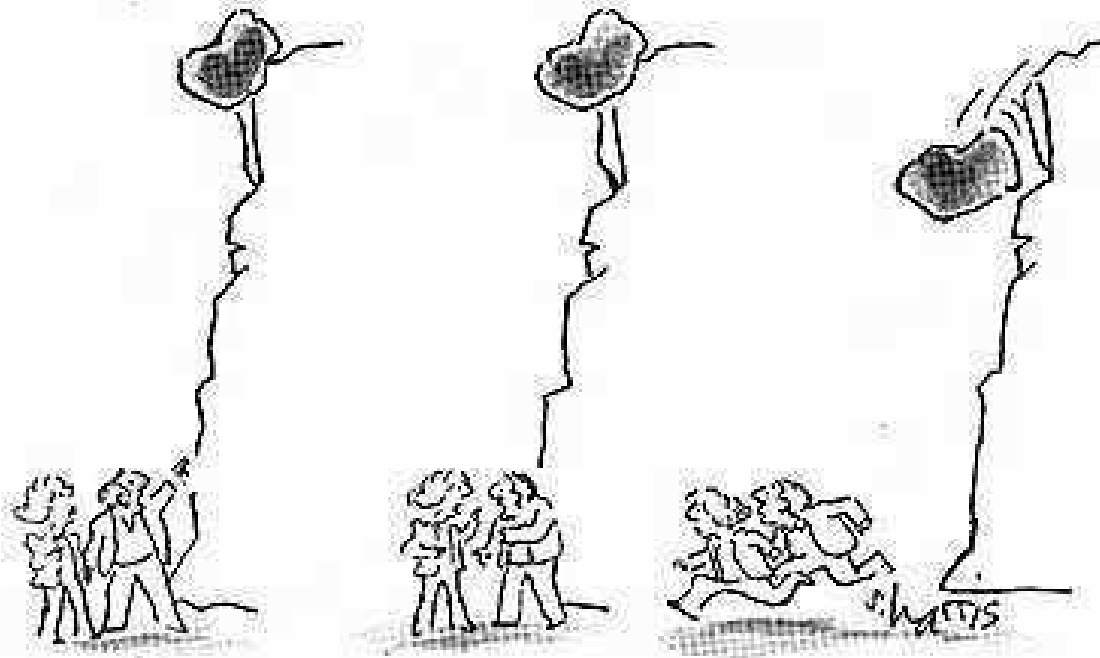


# What is Risk Management?

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ASSESSMENT

RISK  
MANAGEMENT



Risk  
Perception

Risk  
Assessment

Risk  
Management

# Overview of Risk Management



# Overview of Risk Management

- Businesses need to take risks to retain their competitive edge.
- As a result, risk management must be done as part of managing any project.
- To succeed, one needs to manage risks better.
- Risk management is both a skill and a task.
- Depending on the size of the project and the amount of risk involved, risk management can be simple or complex.

# Overview of Risk Management

- Risk management can be described as a decision-making process.
- Industry best practices state that effective risk management involves treating it as an ongoing process.

# Risk Matrix – level of risk

- Risk matrix is a matrix that is used during risk assessment to define the level of risk by considering the category of probability or likelihood against the category of consequence severity.
- This is a simple mechanism to increase visibility of risks and assist management decision making.

# Risk Matrix – Risk Assessment

Rating	Probability/Likelihood	Impact
1	Very low	Insignificant
2	Low	Minor
3	Medium	Moderate
4	High	Major
5	Very high	Catastrophic

# Strategies to Control Risk

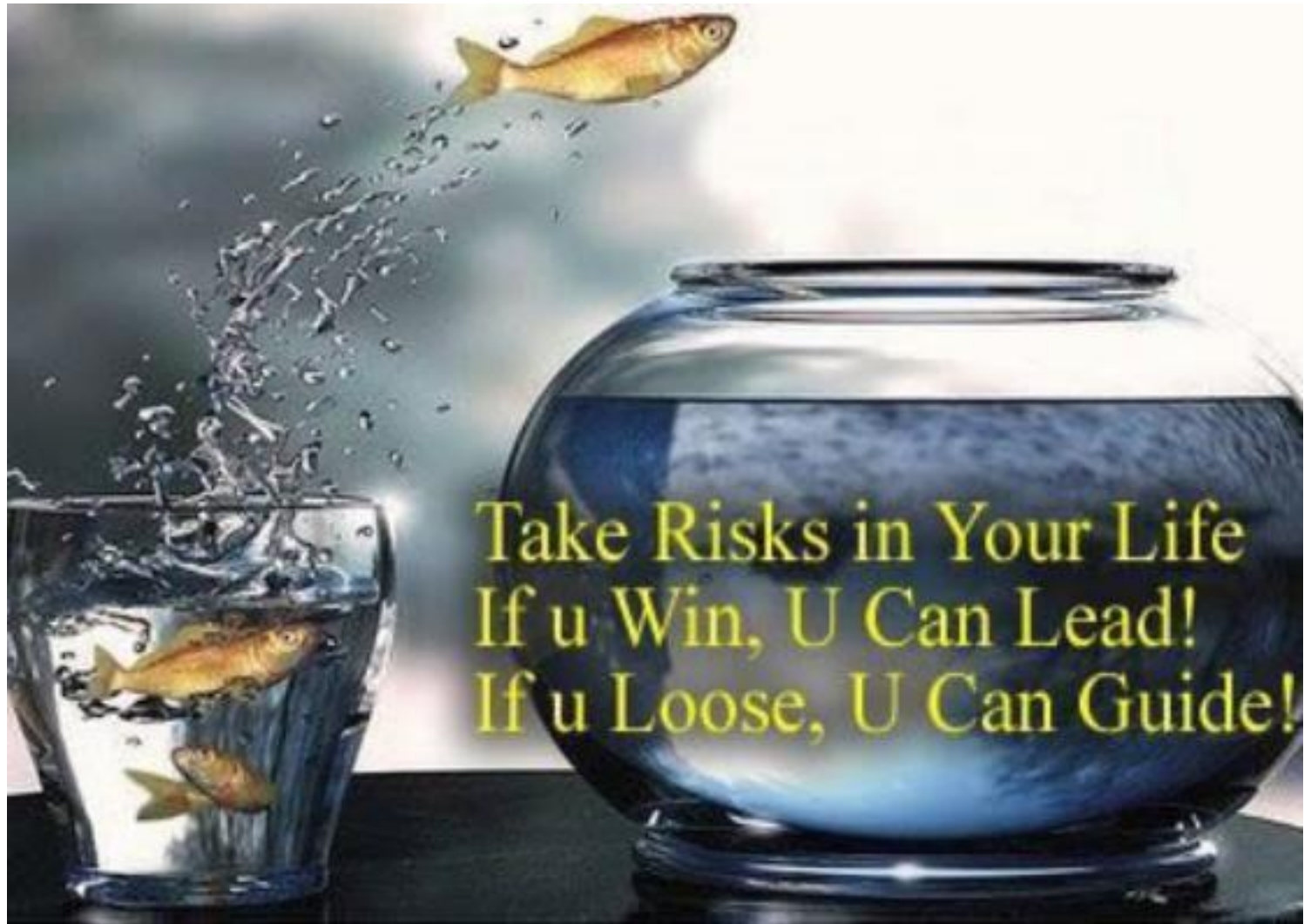
1. Reduction (optimize – mitigate)
2. Redistribution (establish several branches)
3. Transfer (sharing – insurance or outsource)
4. Avoidance (eliminate, withdraw from or not become involved)
5. Acceptance (residual risk)

# Security Risk Management

- Security risk management involves protection of assets from harm caused by deliberate acts.
- A security risk is any event that could result in the compromise of organizational assets.

# Security Risk Management...cont.

- Compromise of organizational assets may adversely affect the company, its business units and their clients.
- As such, consideration of security risk is a vital component of risk management.



# Thank you