

# **DIPLOMA IN LAW ENFORCEMENT**

## **DLE 2163: SECURITY RISK MANAGEMENT**

### **Chapter 10**

## **Assessment of Vulnerabilities**



security

# LEARNING OUTCOMES

Upon completion of the syllabus topics, students should be able to:

1. Identify the importance of risk management.
2. Demonstrate comprehension of various aspects of risk management.
3. Apply risk management techniques to risk management issues.
4. Demonstrate risk management skills in work.

# TOPIC 10

# Assessment of Vulnerabilities

# Concept of vulnerability

The concept of vulnerability has emerged across various disciplines, ranging from engineering to psychology, and its definition varies accordingly.

However, most of the literature characterizes vulnerability according to the basic formula:

Risk + Response = Vulnerability,      OR

Baseline + Hazard + Response = Outcome

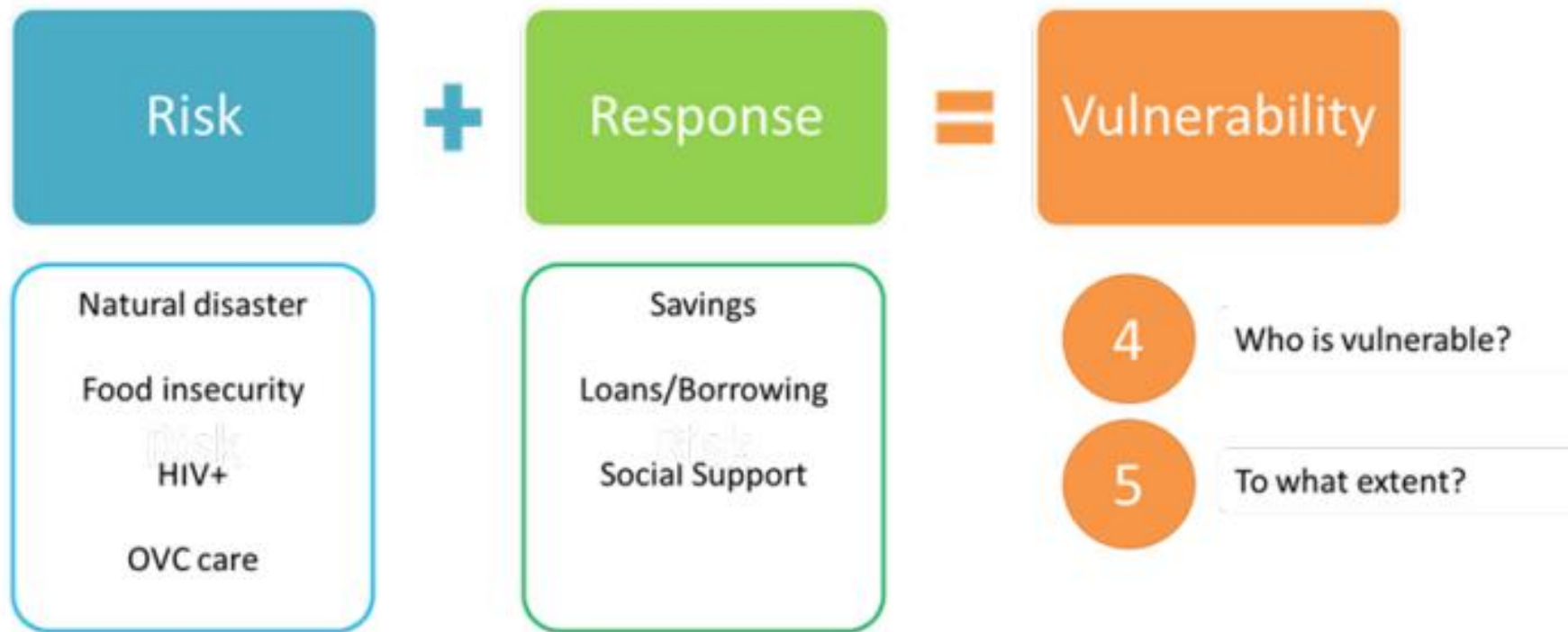
Holzmann et al.'s guidelines on the Household Economy Approach (2008)

# Vulnerability Assessment – question

Hoddinott and Quisumbing (2003) pose five questions that a vulnerability assessment should ultimately answer :

- 1) What is the extent of vulnerability?
- 2) Who is vulnerable?
- 3) What are the sources of vulnerability?
- 4) How do households respond to shocks?
- 5) What gaps exist between risks and risk management mechanisms?

# Vulnerability Assessment



# Vulnerability Assessment – Techniques

**-Baseline Reporting** - comparison of present state of system to its baseline

**Programming Vulnerabilities** - List potential threats from threat agents

# What is 'Business Risk'?

- Business risk is the possibility a company will have lower than anticipated profits or experience a loss rather than taking a profit.





# What is 'Business Risk'? ...cont.

- Business risk is influenced by numerous factors, including sales volume, per-unit price, input costs, competition, the overall economic climate and government regulations.



# What is 'Business Risk'? ...cont.

- Businesses face all kinds of risks, some of which can cause serious loss of profits or even bankruptcy. But while all large companies have extensive "risk management" departments, smaller businesses tend not to look at the issue in such a systematic way.



# Specific Types of Business Risk

- Business risk usually occurs in one of FIVE (5) ways:
  1. Strategic risk
  2. Compliance risk
  3. Operational risk
  4. Reputational risk
  5. Financial risk



# 1. Strategic Risk

- Strategic risk arises when the implementation of a business does not go according to the business model or plan.
- A company's strategy becomes less effective over time, and it struggles to reach its goals as a result.



# 1. Strategic Risk...cont.

- It could be due to the following factors:
  - 1) Technological changes
  - 2) A powerful new competitor entering the market
  - 3) Shifts in customer demand
  - 4) Spikes in the costs of raw materials
  - 5) Or any number of other large-scale changes.

# 1. Strategic Risk...cont.

- A classic example is Kodak, which had such a dominant position in the film photography market that when one of its own engineers invented a digital camera in 1975, it saw the innovation as a threat to its core business model, and failed to develop it.
- Failure to adapt to a strategic risk led to bankruptcy for Kodak. It's now emerged from bankruptcy as a much smaller company focusing on corporate imaging solutions, but if it had made that shift sooner, it could have preserved its dominance.

## 2. Compliance Risk

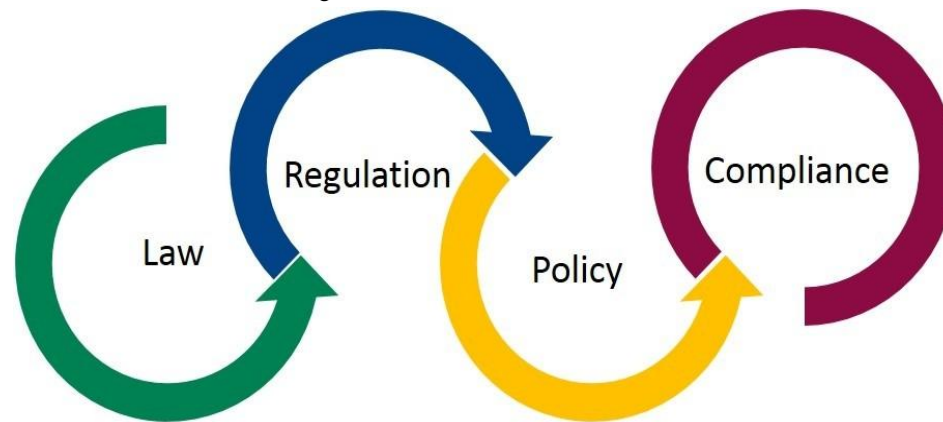
- These are risks associated with the need to comply with the rules and regulations of the government.
- This type of risk arises in industries and sectors highly regulated with laws.
- Example, regulations to selling ‘halal’ foods or alcohol in the Muslims country.

COMPLIANCE



## 2. Compliance Risk...cont.

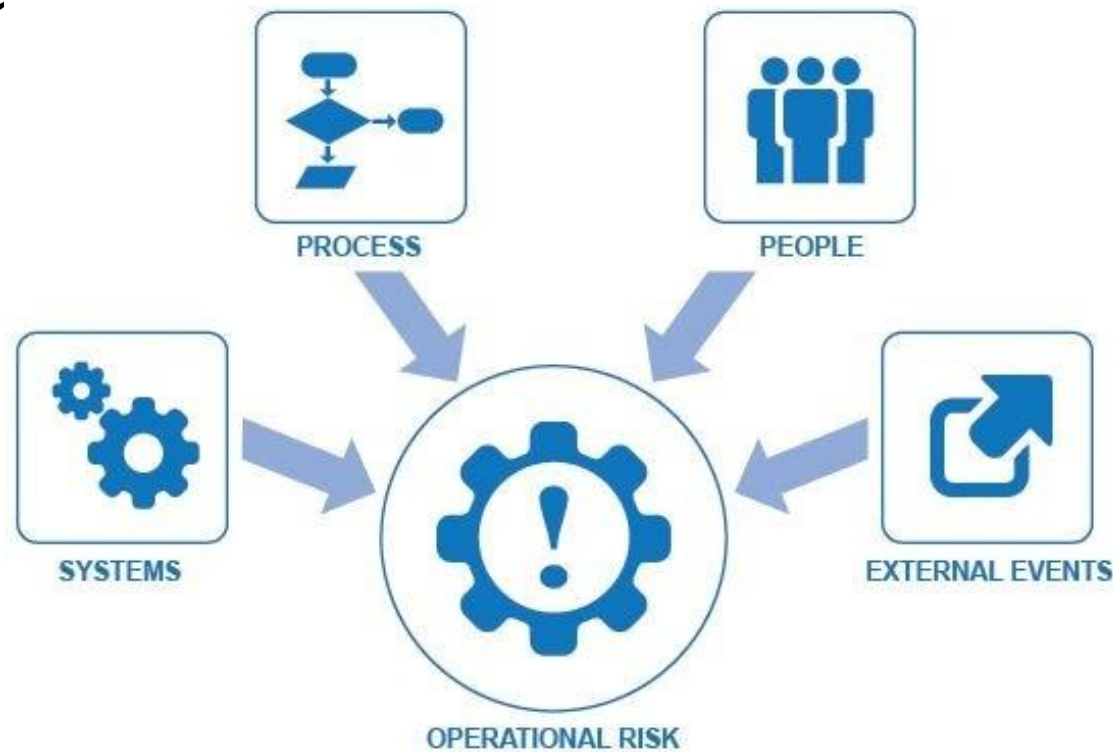
- In extreme cases, a compliance risk can also affect your business's future, becoming a strategic risk too. For example, the tobacco companies facing new advertising restrictions, or the late-1990s online music-sharing services that were sued for copyright infringement and were unable to stay in business.





# 3. Operational risk

- These are the risks associated with the operational and administrative procedures of the partic



### 3. Operational risk...cont.

- Operational risk refers to an unexpected failure in the company's day-to-day operations. It could be a technical failure, like a server outage, or it could be caused by employee or processes.
- In some cases, operational risk can also stem from events outside your control, such as a natural disaster, or a power cut, or a problem with your website host. Anything that interrupts your company's core operations comes under the category of operational risk.

### 3. Operational risk..cont.

- Sometime operational risk has more than one cause. For example, consider the risk that one of your employees writes the wrong amount on a check, paying out \$100,000 instead of \$10,000 from your account.
- That's a “people” failure, but also a “process” failure. It could have been prevented by having a more secure payment process, for example having a second member of staff authorize every major payment, or using an electronic system that would flag unusual amounts for review.

## 4. Reputational risk

- Reputational risk can take the form of a major lawsuit, an embarrassing product recall, negative publicity about the organization, or high-profile criticism of company products or services.



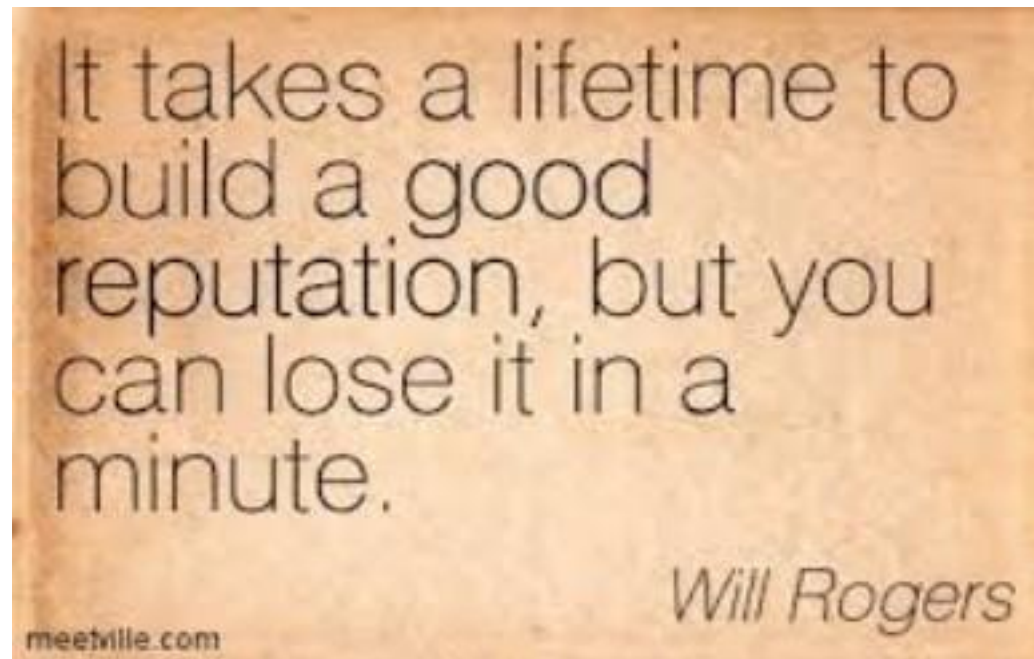
## 4. Reputational risk..cont.

- And these days, it doesn't even take a major event to cause reputational damage; it could be a slow death by a thousand negative tweets and online product reviews through social media.



## 4. Reputational risk...cont.

- If the organization reputation is damaged, you'll see an immediate loss of revenue, as customers become wary of doing business with you.



## 4. Reputational risk..cont.

- There are many different kinds of business, but they all have one thing in common: no matter which industry you're in, **the organization reputation is everything.**



A good  
reputation is  
more valuable  
than money.

– *Publilius Syrus*



*Double Quotes*  
doublequotes.net



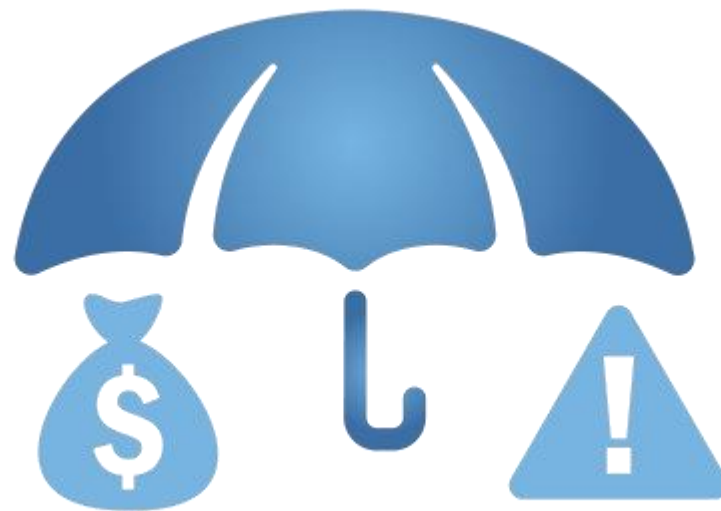
# 5. Financial risk

- These are the risks associated with the financial structure and transactions of the particular industry



## 5. Financial risk..cont.

- Most categories of risk have a financial impact, in terms of extra costs or lost revenue. But the category of financial risk refers specifically to the money flowing in and out of your business, and the possibility of a sudden financial loss.



## 5. Financial risk...cont.

- For example, let's say that a large proportion of your revenue comes from a single large client, and you extend 60 days credit to that client. In that case, you have a significant financial risk. If that customer is unable to pay, or delays payment for whatever reason, then your business is in big trouble (financial risk).

## 5. Financial risk...cont.

- Having a lot of debt also increases your financial risk, particularly if a lot of it is short-term debt that's due in the near future. And what if interest rates suddenly go up, and instead of paying 8% on the loan, you're now paying 15%? That's a big extra cost for your business, and so it's counted as a financial risk.