

### **PROJECT RISK MANAGEMENT**

### Chapter 3: Risk Types (Types)

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### **Chapter Description**

- Expected Outcomes
  - Understand different type of risks
  - Understand project related risks



- References
  - Basel Committee on Banking Supervision 2006, footnote 97
  - PMBOK 5th Edition

### Content #1

3.2 Risk Types
3.2.1 Scope Creep
3.2.2 Cost
3.2.3 Schedule
3.2.4 Legal
3.2.5 Technology
3.2.6 Human Resource
3.2.7 Environmental Factors
3.2.8 Procurement





# Risk Types





### **RISK TYPES**



### **Risk Types – Scope**

Project scope: Project objectives and goals in achieving project success

Scope Risk Categories

# Changes

# Defects



### **Risk Types – Categories of Scope Risk**

### Scope Creep

 Requirements which develop and change during progress of project

### Gaps

 Activities and specification included late in project

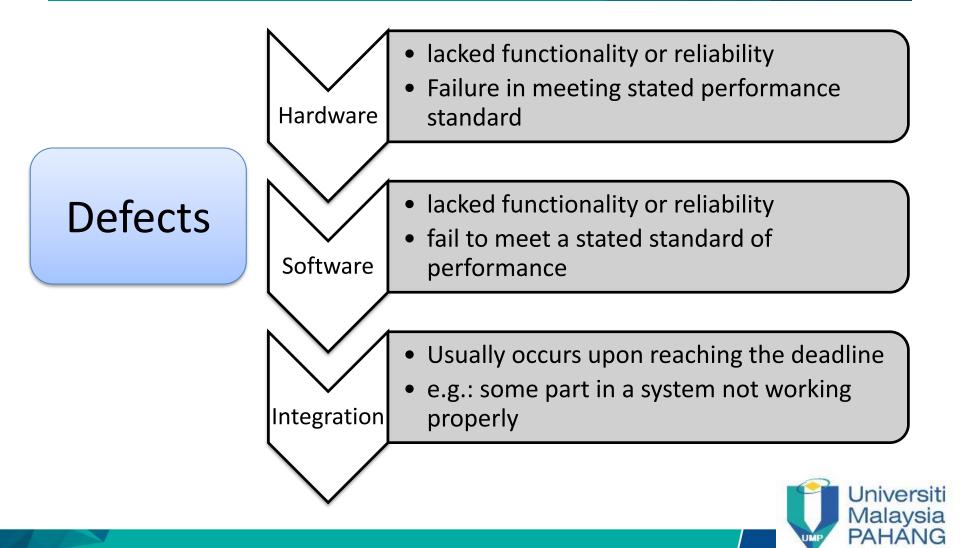
### Scope dependencies

 Other project inputs and requirements that are not expected during the beginning of project



Change

### **Risk Types – Categories of Scope Risk**



### **Risk Types – Technology Risk**

The potential for losses due to technology failures.

For example:

- -Working in unsafe condition
- -Unacceptable maintenance and operational safety
- -Inappropriate or unsuitable solution design
- -Obsolete technology
- -Technology incompetence

### Risk Types – Legal Risk

"Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements"

Source: (Basel Committee on Banking Supervision 2006, footnote 97).



### Types of Legal Risk

• Litigation Risk

Litigation risk in construction is lawsuits related to multiple issues which happened during project life cycle.

For example: accidents, employee wrongdoing, liability of product, budget and cost overruns, and miscommunication.

Contract Risk

Focused on contract breach from one of the party and extracontractual liabilities which may occur.

For example: Client refused to pay the contractor for the work done in a project.

### Types of Legal Risk

#### Regulatory Risk

Uncertainty in the consequences of organization's action.

For example: A logistics company applied for a license for a new hub to develop its business. The uncertainty relating to the decision of the company including the decision scope will result in risk. ISO 31000 outlines that the decision of the company will have a positive outcome, however the uncertainty generates risk.

#### • Structural Risk

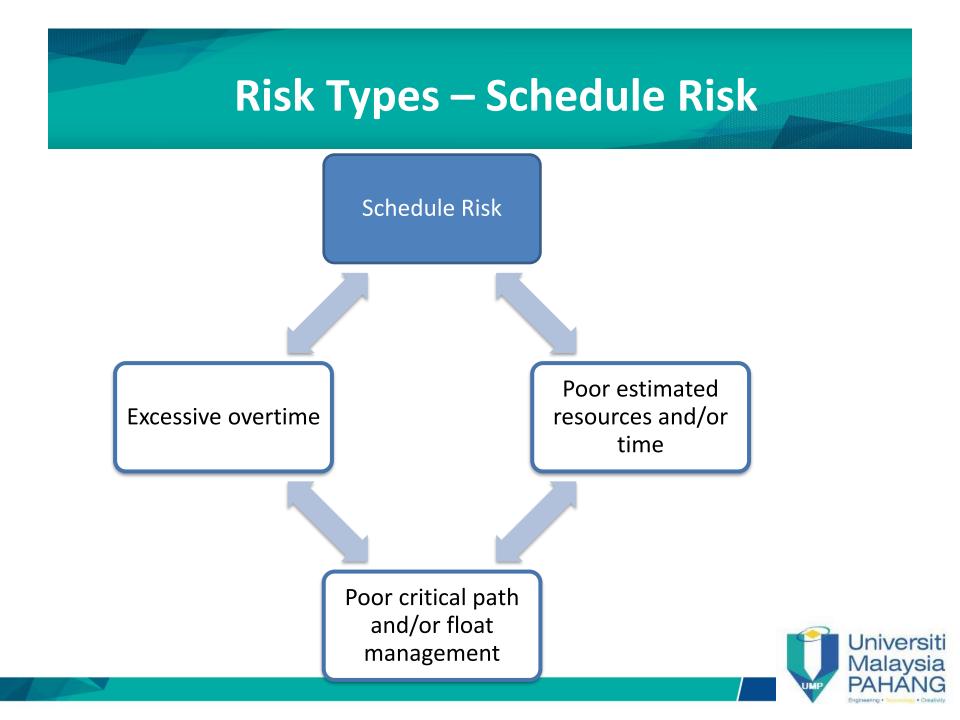
It is due to the uncertain industry's future, either the method of conducting business, or the technology.

For example: A video rental business makes profit by distributing videos in tapes, however due to change in technology, it disappeared as customers prefer to watch the movie in the cinema or online.

### **Risk Types – Schedule Risk**

# Schedule risk: Risks which cause the project to delay





### **Procurement Risk**

### PROCUREMENT MANAGEMENT knowledge area involved in purchasing or acquiring products, services, or results from outside the project team, including developing and administering the contract or purchase order needed to obtain them

### **Procurement Risk**

# Uncompetitive purchasing

# Unenforceable contract clauses

Financial weakness of contracting parties

Inappropriate contractual assignment of risks



### Human Resources Risk

### Definition

Human Resources Management

 is the process of organize, managing and lead the project team who are assigned and responsibilities for completing the project

### HR In Risk Management

 Often defined as a bad outcome in the future in the organization. example of human resources in risk management is violating laws, abusing employees, harming the environment, loss of key talent

### Human Resources Risk





### **Environmental Risk**

"actual or potential threat of adverse effects on living organisms and the **environment** by effluents, emissions, wastes, resource depletion, etc., arising out of an organization's activities."

### **TYPES OF ENVIRONMENT RISK**

### • 1. Natural

 Natural disasters such as floods, earthquakes, tsunami and blizzards

### • 2. Mankind

Pollutants which cause pollution of air, water, land and noise.

### TYPES OF ENVIRONMENT RISK (CONTS)

### 3. Working Environment

 Project location, physical environment, employee wellbeing, motivation working conditions and health and safety requirements.



# • Potential cost and budget that will influence or lead a loss on the actual outcomes.



### Type of cost/budget risk

### Currency Risk

- Come into play in money need to be converted to different currency purchases or sell an investment
- Market risk
- Example: Import stock from the outside where the our country currency is low



# Type of cost/budget risk

### Financial risk

- The shareholder lost money due to investing in a company with debts.
- The cash flow of the company is proven inadequate in meeting the financial obligation.
- Example : Credit risk

### Inflation Risk

- Loss due to foreign exchange rates that fluctuated.
- Usually when investor is exposed to foreign currency or foreign currency traded investments.
- Example: When the value of RM is affected due to fluctuation of exchange rate.



# Type of cost/budget risk

### **\*** Risk in Capital Budgeting

- Risk relating to investments.
- Variability or uncertainty on the future profit gained from the investment.

Example: Three broad category of the events influencing the investment forecast which is general economic condition, industry factor and company factors.

Example : Risk in investment decisions.

#### Cost Overrun

- Unexpected cost incurred from actual cost during budgeting
- Example of real project/ situation : (IT project)

### **Conclusion of The Chapter**

- Conclusion #1
  - Risk associated with a project must receive careful examination

- Conclusion #2
  - With careful planning and good management, some inherent project risks can be substantially reduced

