

# **Project Management**

## Risk Management

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## Risk Management

#### Aims

- To understand the project risk.
- To understand quantitative and qualitative value of project risk and prioritize them.

#### Expected Outcomes

- Students are able to identify the project risk.
- Students are able to determine quantitative and qualitative value of project risk and prioritize them.

#### References

- William, R.T. 2013. Project Management. Random Exports
- Heagney, J. 2012. Fundamentals of Project Management. American Management Association.
- Richardson and Gary, L. 2010. Project Management theory and practice.
   Taylor and Francis.

## Content

- Risk management
- Risk assessment

## Risk Management

Definition: A process which stabilizing the operational and economic costs to achieve project goal.

#### **Risk Identification**

Risk tolerance of project managers can be viewed as one of the following:

1. Risk-averse decision maker

Example: If offered either \$50 or 50% chance of receiving \$100, a risk-averse person will take \$50 or even something less than \$50 rather than taking the gamble and possibly receiving nothing.

2. Risk-seeking decision maker

Example: A risk-seeking person will take the 50% chance of receiving \$100 and possibly winning \$100.

3. Risk-neutral decision maker

Example: A risk-neutral person would have no preference between the two options.



# Risk classification

#### **Internal**

- 1. Able to control by project managers and stakeholders.
- 2. Example: cost, scope, recourse requirement, management decision and organizational politics.

#### External

- 1. Disable to control by project managers and stakeholders.
- 2. Example: computer viruses.

### Risk Assessment

Definition: The determination quantitatively / qualitatively the risk value in a project.

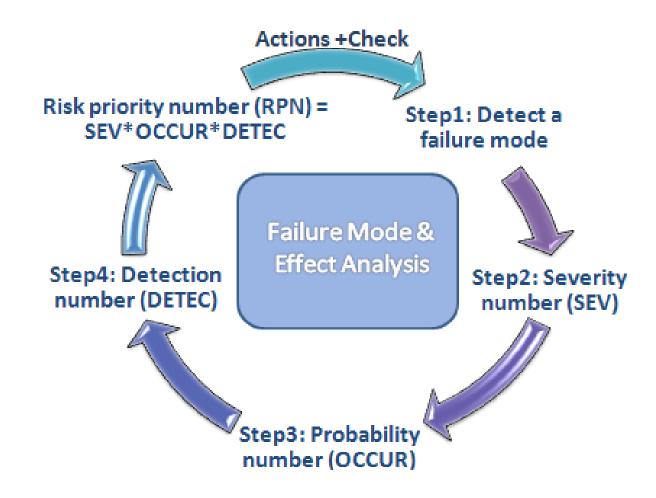
#### Quantitative

- 1. Quantitative risk analysis
- 2. Data gathering and representation technique
- 3. Simulation and modelling technique
- 4. Expert judgment

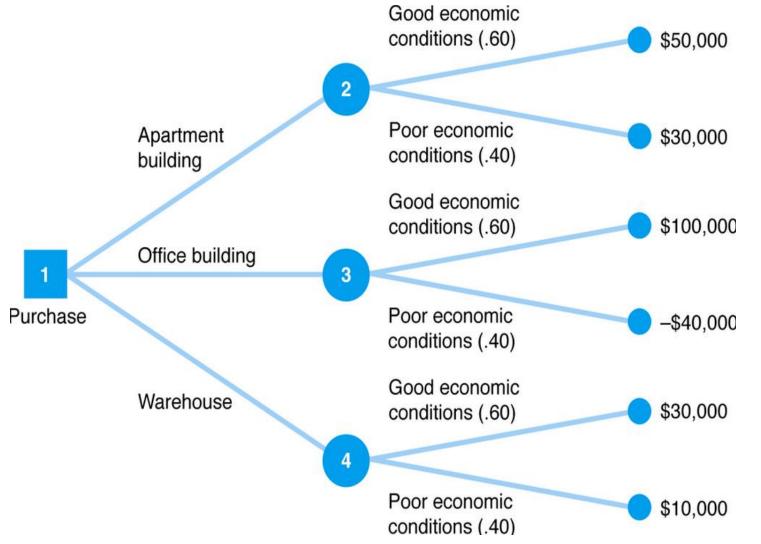
#### Qualitative

- 1. Risk probability and impact assessment
- 2. Probability and impact matrix
- 3. Risk data quality assessment
- 4. Risk categorization
- 5. Risk urgency assessment
- 6. Expert judgment









## Conclusion of The Chapter

- Conclusion #1
  - Students are able to identify the project risk.

- Conclusion #2
  - Students are able to determine quantitative and qualitative value of project risk and prioritize them.





Lecture 5

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