JKR Performance Based Standardized Project Management Training Workshop (Basic)

PROJECT RISK MANAGEMENT

Content

- ☑ Introduction
- ☑ Objective
- ☑ Definition of Risk Management
- ☑ Benefits of Risk Management
- ☑ Risk Management in Project Life Cycle
- ☑ Risk Management Process
- ☑ Risk Matrix
- ☑ Roles and Responsibilities

Introduction

- ✓ Risk management (RM) is a major managerial tool and many organisations concerned with standardisation have adopted risk management as a key process in their work.

- ✓ Also can be used as a planning tool that provides information in advance about what and when events can cause damage to the project outcomes.

Objective

- ✓ To ensure levels of risk and uncertainty are effectively managed, so that the project is completed successfully.

Definition of Risk Management

- The culture, processes and structures that are directed towards the effective management of potential opportunities and adverse affects.. *(According to AS/NZS 4360 : 204)*

- **What is Risk?**
  - Risk is the likelihood (or probability) of an adverse event occurring.

- **What is Risk Management?**
  - Risk management is identifying, analyzing and responding to risk factors and events throughout the life of a project.

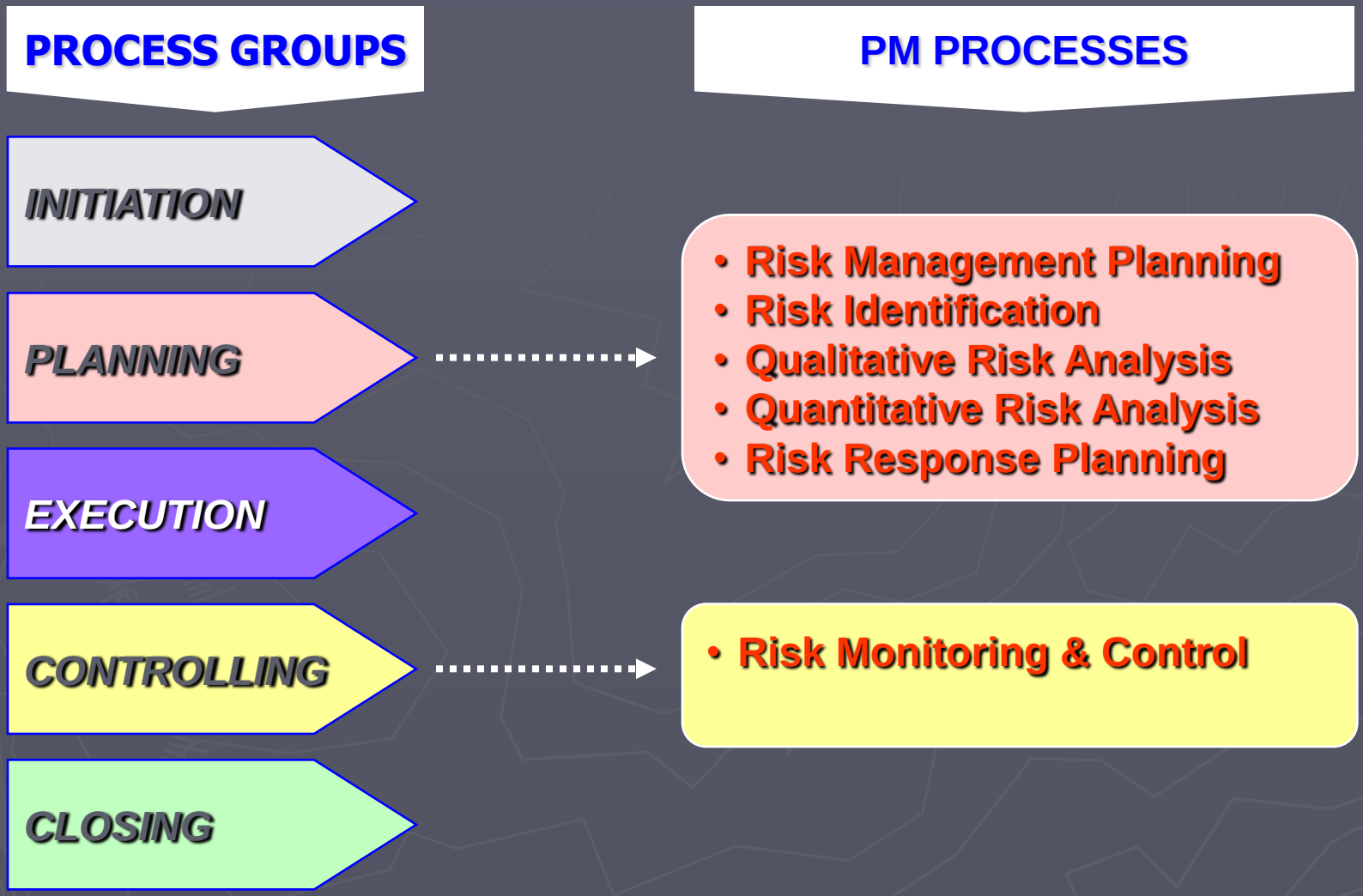
Definition (Cont^{n})

- ✓ Risk management is a core discipline that assists managers at all levels to make correct and informed decisions and provides a process for organized assessment and control of risks.

Benefits of Risk Management

- Improve predictability and max. potential to meet deadlines.
- Prevents additional costs and potential for budget overruns due to unforeseen and planned for events.
- Ensure projects and operations deliver promised functions.
- Achieve higher quality by increased conformance to defined requirements.
- Achieve better stakeholder satisfaction by avoiding damaging events of direct interest to them.
- Identify the requirement to prepare contingency plans where necessary.
- Ability for earlier problem resolution. Early detection makes risks less expensive to manage.

Risk Management (PMBOK®)

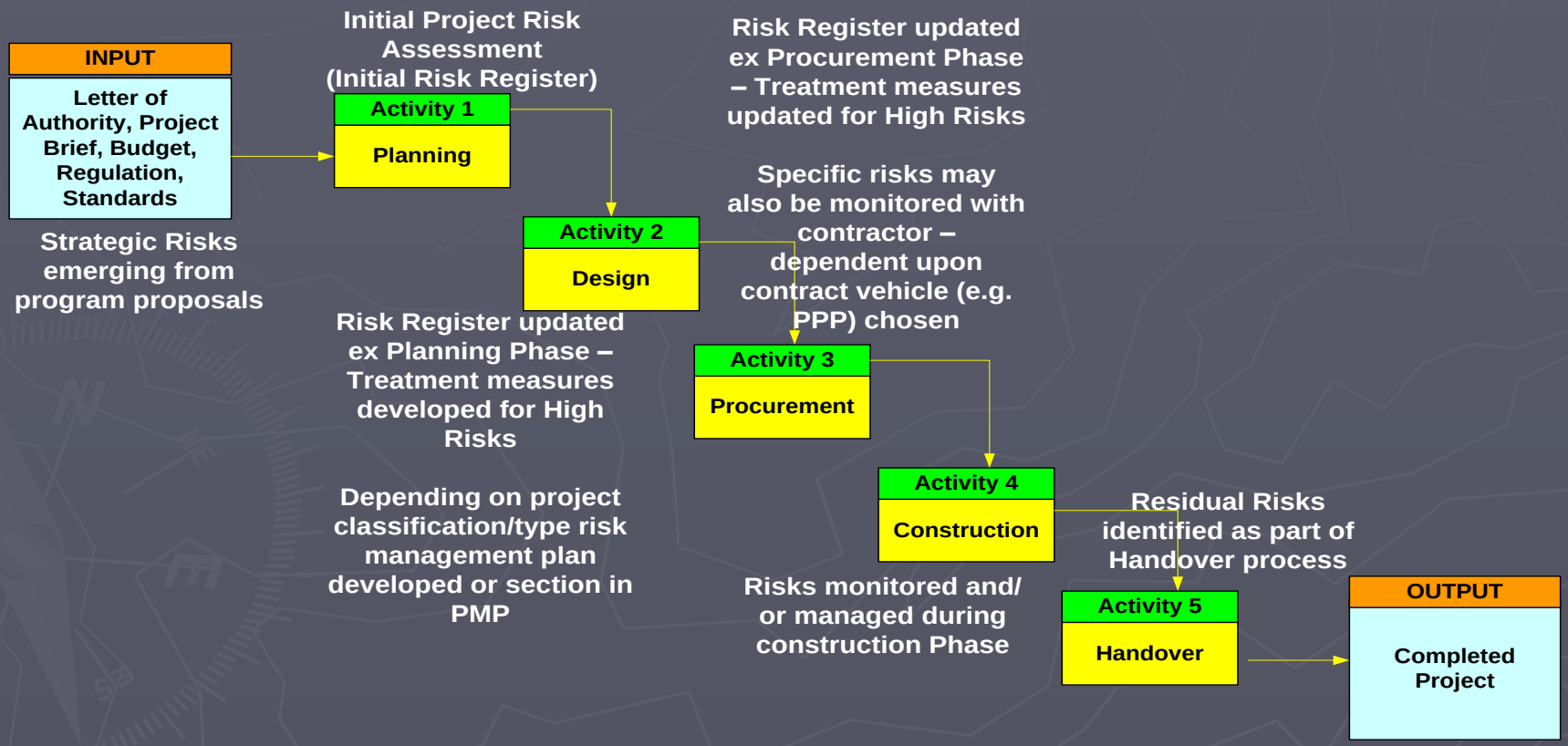


Risk Management In Project Life Cycle

- ✓ Risk management is recognised as a vital integrated project management tool that cuts across the entire project, addressing and interrelating cost, schedule and performance risks.

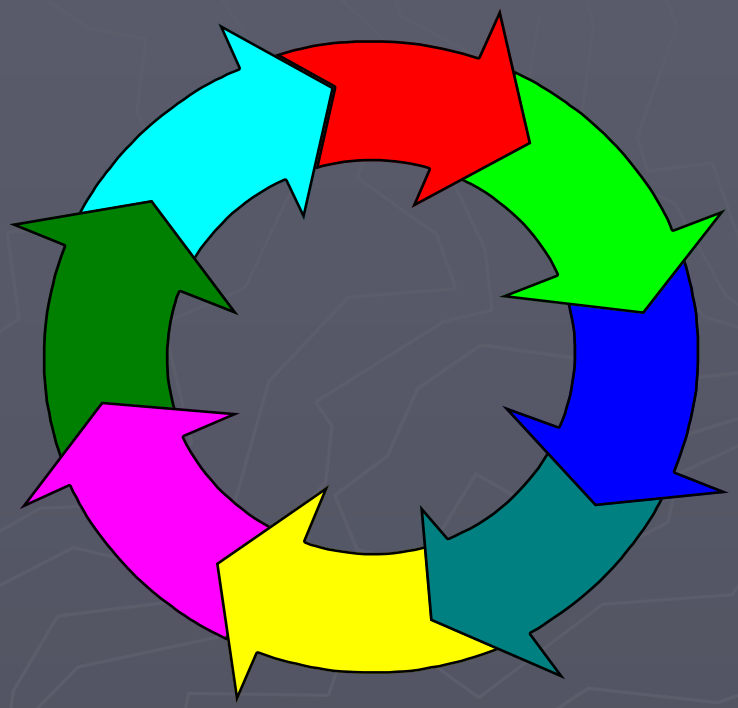
- ✓ The goal is to make everyone involved in a project aware that risk should be a consideration in the design, development and implementation of a system

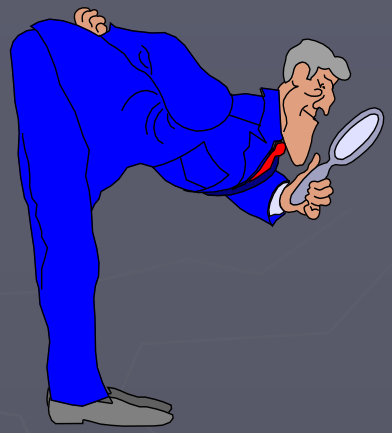
Risk Management Stages In Project Life Cycle



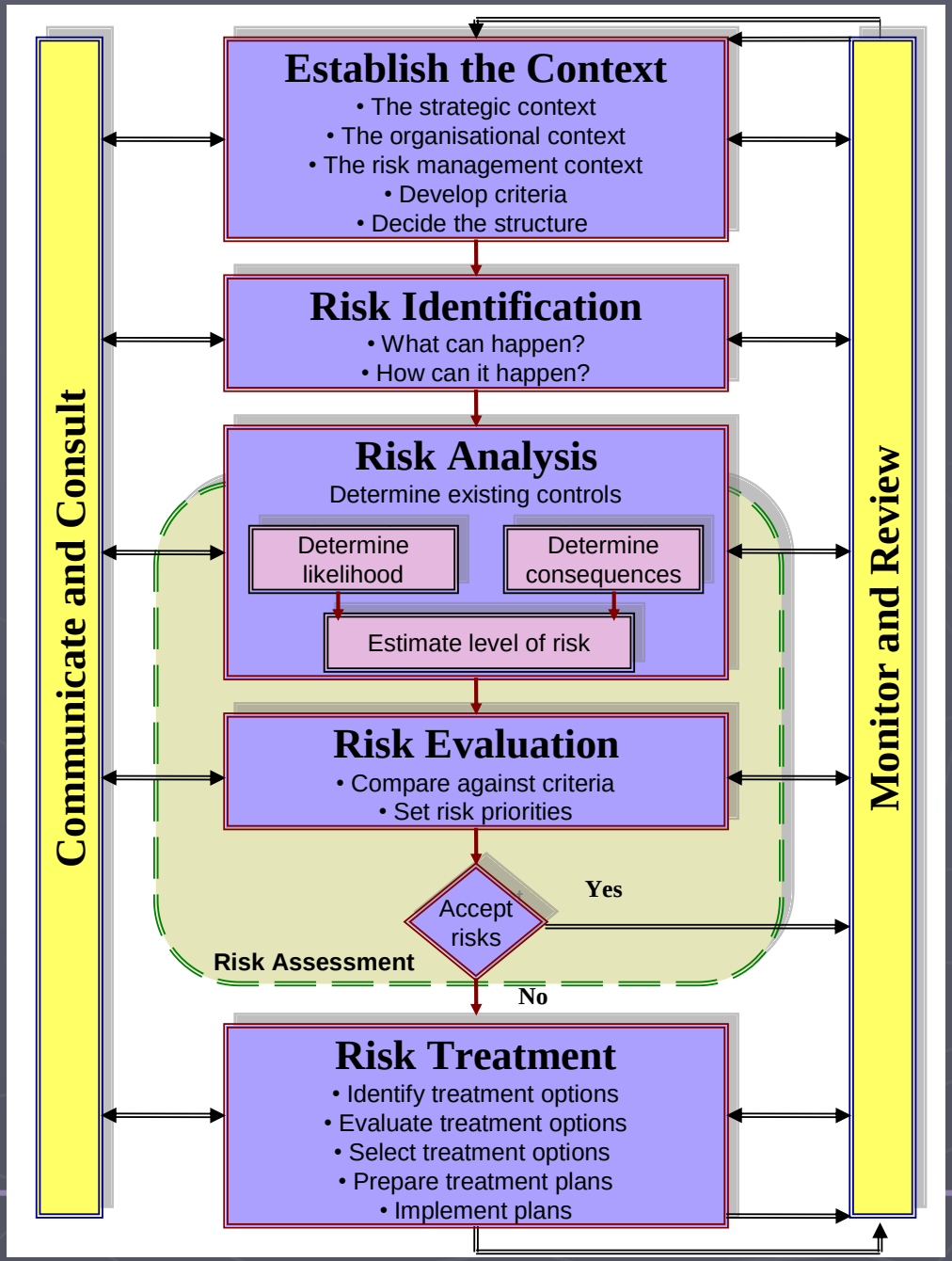
Risk Management Process

- Establishing The Context
- Risk Identification
- Risk Analysis
- Risk Evaluation
- Risk Treatment/Mitigation
- Risk Monitoring & Control
- Communicate & Consult





Risk Management Process



Risk Management Process

1) ESTABLISHING THE CONTEXT

It is a critical step to determine the environment in which the risks will be managed where the project operate. Prepares for the procedures needed to manage risks and the structure for escalation of business risks to Senior Management.

Risk Management Process

2) RISK IDENTIFICATION

Identify the various risks and categorise them according to a suitable and controllable structure. The result of this is a list of risky events or conditions grouped under a suitable classification.

Categories of Project Risk.

1. Political	2. Scope	3. Schedule
4. Financial	5. Human Resources	6. Quality
7. Communications	8. Other resources	9. Contractual
10. Technical	11. Environmental	12. Suppliers
13. Industrial Relations	14. Organisational	15. OH & S
16. Cultural		

Risk Management Process

- For description,

  Risks need to be given a structured description using the following so that it is fully understood;

Source of risk has a ***likelihood*** of causing an ***event*** which depending on the ***context*** will have an ***impact.***

Source	Likelihood & event	Impact
Loss of funding	Will cause a reduction in available resources	Leading to project delays or reduction in agreed deliverables

Risk Management Process

3) RISK ANALYSIS

Analyses all events by assessing each against two major parameters, the likelihood that an event might take place and the impact of the event. Results in risk rating.
(*refer to table of risk matrix and recommended actions*)

Risk Management Process

Risk Analysis

Likelihood is classified as;	The Impact is classified as;
➢ Rare ➢ Unlikely ➢ Possible ➢ Likely or ➢ Almost Certain	➢ Insignificant ➢ Minor ➢ Moderate ➢ Major or ➢ Severe

Risk Matrix for Rating Risk

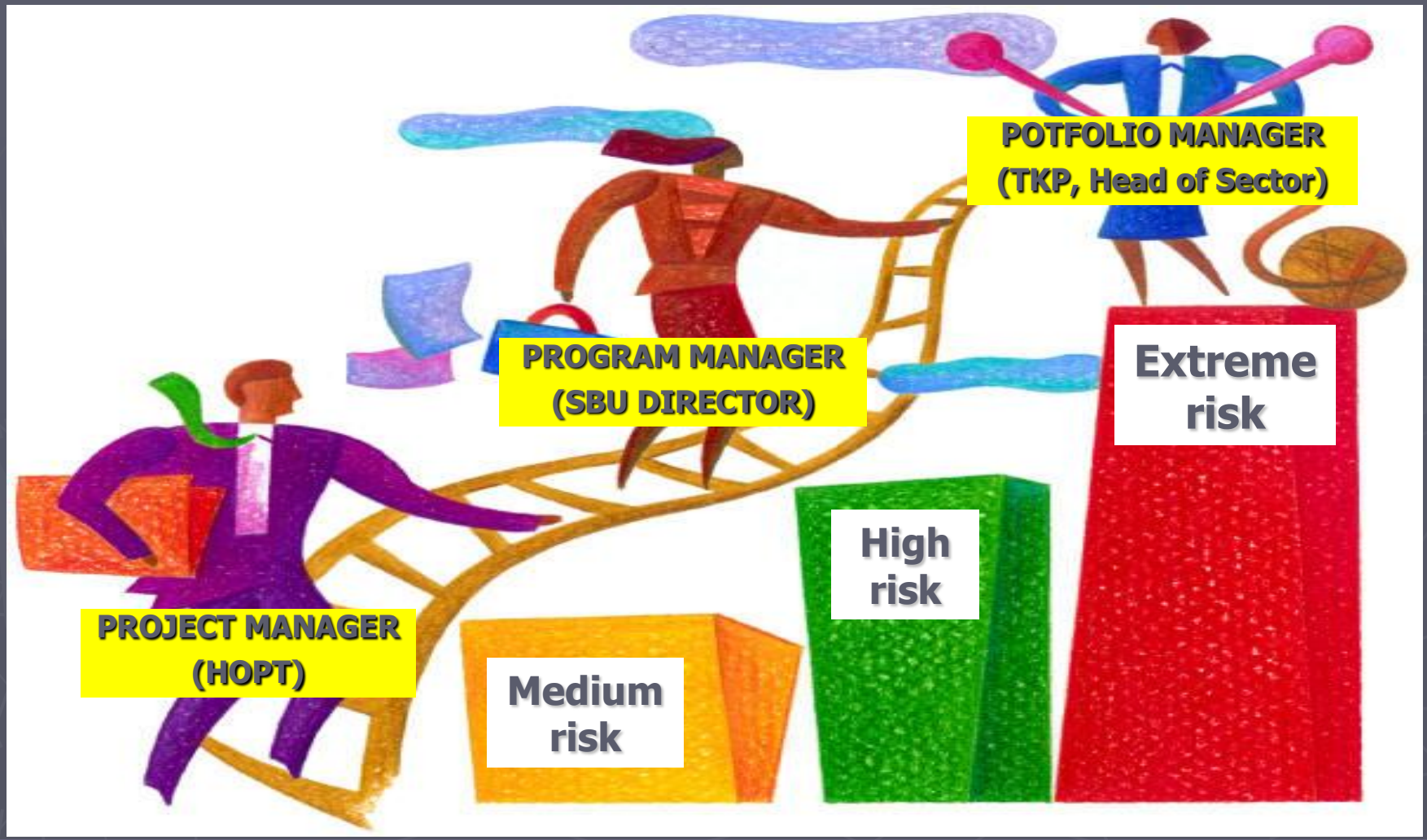
LIKELIHOOD		IMPACT				
		Insignificant I	Minor II	Moderate III	Major IV	Severe V
Almost Certain	5	H	H	H	E	E
Likely	4	M	M	H	E	E
Possible	3	L	M	M	H	E
Unlikely	2	L	L	M	H	H
Rare	1	L	L	M	M	H

Tolerances:

- Preferred
- Acceptable
- Undesirable
- Unacceptable

LOW Risk (L)	MEDIUM Risk (M)	**HIGH Risk (H)**	EXTREME Risk (E)

Example of Risk Level for Typical Project



Recommended Actions

Risk Ratings	Risk Mitigation Actions	Who
E Extreme	Mitigation actions, to reduce the likelihood and impact, to be identified, costed and prioritized for implementation before the project commences or immediately as they arise during project execution.	Steering Committee/ Project Sponsor
H High	Mitigation actions, to reduce the likelihood and impact, to be identified, costed and prioritized. Appropriate actions implemented during project execution	Steering Committee/ Project Manager
M Medium	Mitigation actions, to reduce the likelihood and impact, to be identified and costed for possible action if funds permit	Project Manager
L Low	To be noted; no action is needed unless grading increases over time	Project Manager

Risk Management Process

4) RISK EVALUATION

Considering the best method of handling the risks – reduce, accept, avoid or transfer. If risks are to be accepted, develop contingency plans

5) RISK TREATMENT / MITIGATION

Identification, evaluation and selection of the appropriate treatment options and the development and implementation of the required plans.

Risk Management Process

6) MONITORING & CONTROL

Presents the procedures needed to monitor and track risky events, revising the Risk Register and learning from the various results.

7) COMMUNICATE AND CONSULT

Stakeholders have significant impact on decisions pertaining to risks undertaken and should be continuously communicated over the risk process. Risk status must be reported to key stakeholders

Roles and Responsibilities

- ✓ The key to effective risk management is ownership. Each risk must be owned so that there is clear responsibility and accountability for that risk. People need to take responsibility for different risks at different level.

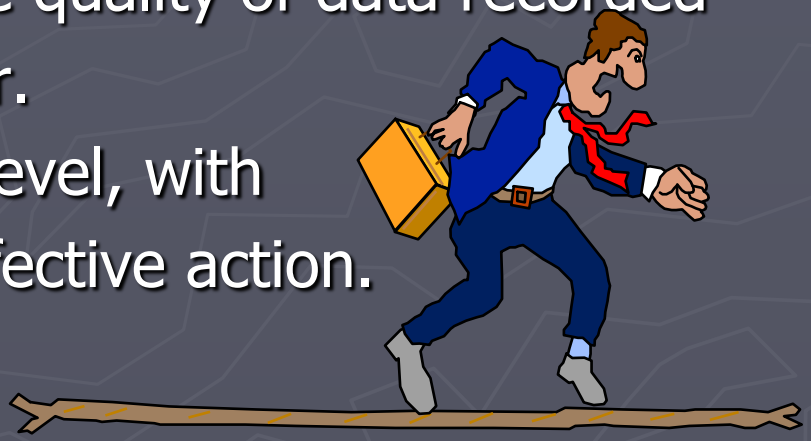
Risk Manager

- Responsible for operating the project's risk management process and custodian of the Risk Management Plan and Risk Register.
- Implementing the counter measures and evaluating the effectiveness.
- Reporting to the risk owner and others.

Roles and Responsibilities

Risk Owner

- One whoever is best placed to manage the specific risk
- Agrees to own the risk
- Be aware of the responsibility of managing the risk
- Responsible for ensuring the quality of data recorded about the risk in the register.
- Must sit at the appropriate level, with the person who can take effective action.



Conclusion

- Risk management is not a one-off activity. Risk should be monitored throughout the project life cycle.

- Successful risk management requires senior management commitment, ownership and understanding of the process and an active risk management ≈ need to review regularly

Thank You