PMI Risk Management Professional (PMI-RMP®) Exam Preparation

Student Courseware Book

The PM Instructors™

EXAM DOMAINS COVERED INCLUDE:

- ✓ Risk Communication
- ✓ Risk Analysis
- ✓ Risk Response Planning
- ✓ Risk Governance

Based on the PMBOK® Guide 4th edition.

The PM Instructors™
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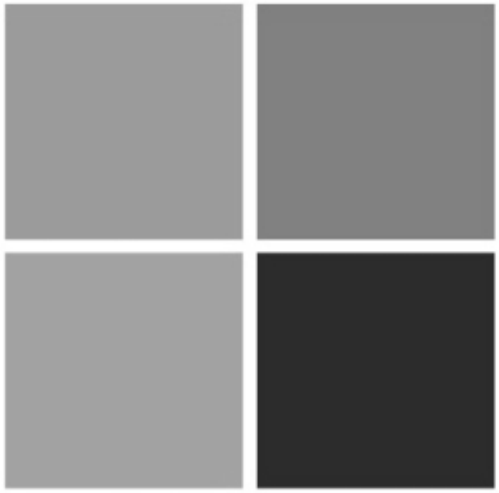
Module 1

Introduction to Risk Management



Topics:

- ✓ Course Introduction
- ✓ PMI-RMP® Credential Overview
- ✓ Introduction to Project Risk

Module 1.1: Course Introduction

Course Objectives:

- ✓ Develop a solid framework of risk management
- ✓ Understand the risk-related concepts from the Project Management Institute's perspective
- ✓ Prepare for the PMI Risk Management Professional (PMI-RMP®) Examination

Utilizing Course Materials


Handout


Process Input


Process Tool and Technique


Process Output


Record to memory!


Lab work

Module 1.2: PMI-RMP® Credential Overview

Objectives:

- ✓ Be familiar with the Project Management Institute
- ✓ Understand exam application requirements

The Project Management Institute

PMI Background

Snapshot of background

- Founded in 1969
- Not-for-Profit member based organization
- Over 260,000+ members worldwide, in 170+ countries
- www.PMI.org

PMBOK® Guide

- *A Guide to the Project Management Body of Knowledge* (*PMBOK® Guide*)
- The “de facto global standard” for the project management profession
- Updated every 4 years
- Certification exams largely based on its contents
  - The Program Management Professional (PgMP®)
  - The Project Management Professional (PMP®)
  - The Certified Associate in Project Management (CAPM®)
  - **PMI Risk Management Professional (PMI-RMP®)**
  - PMI Scheduling Professional (PMI-SP®)

Credential Overview

Qualification

Educational Background	Risk Management Experience	Project Risk Management Education
• High School Diploma or • Associate's Degree or • Global Equivalent	4,500+ hours within the past 5 consecutive years	40 contact hours
• Bachelor's Degree or • Global Equivalent	3,000+ hours within the past 5 consecutive years	30 contact hours

Credential Overview

Exam Blueprint

Exam Domain	Percentage Of Questions
Risk Communication	27%
Risk Analysis	30%
Risk Response Planning	26%
Risk Governance	17%

Credential Overview

Exam Overview

- 170 multiple-choice questions
- Computer-based testing or paper-based testing
- 3.5 hour exam time
- Pass / Fail exam
  - Proficient
  - Moderately Proficient
  - Below Proficient

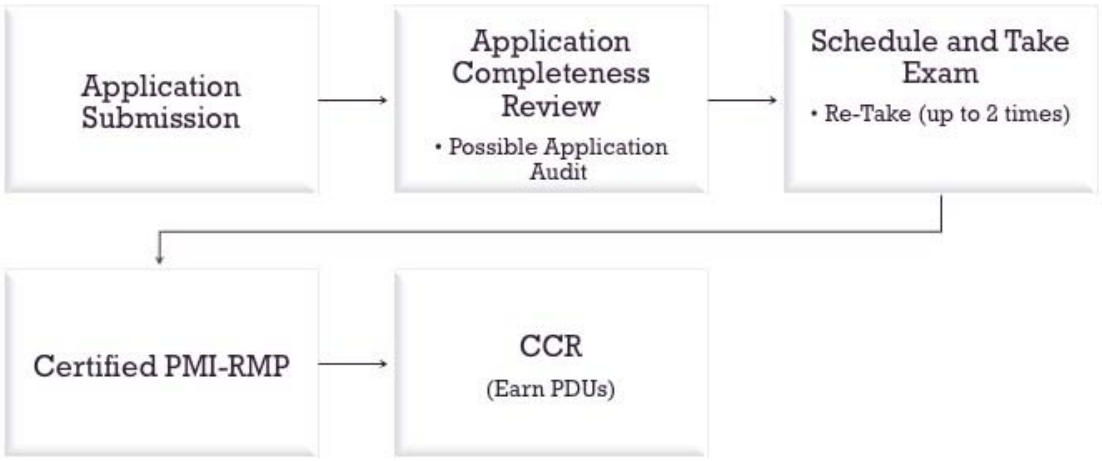
Credential Overview

Exam Pricing

Exam Type	Member	Non-Member
Computer-based testing	$520	$670
Paper-based testing	$415	$565
Computer-based re-examination	$335	$435
Paper-based re-examination	$270	$370
CCR credential requirement	$60	$150

Credential Overview

Application Process



Individual Assessment

Self-Assessment

1. A project manager working for a mid-level software company is in the process of executing the project work. During risk management planning, the team had discovered 42 risks that require some form of action or response. Over the coming weeks, the time to implement these actions would take place. During which stage of this project would the impact of risk be at its highest?
    A. Initiating
    B. Planning
    C. Executing
    D. Closing

2. The area where your project is taking place has experienced a high level of theft over the past month. The facility houses over $500,000 worth of equipment that is important to the project, and moving the equipment to a new location is not an option. Aside from a high-level alarm system, you also decide to purchase additional insurance to cover the equipment, should it get stolen. What type of risk is this?
    A. Pure Risk
    B. Business Risk
    C. Organizational Risk
    D. Running Risk

3. All of the following are organizational structures EXCEPT:
    A. Projectized
    B. Functional Matrix
    C. Strong Matrix
    D. Balanced Matrix

4. Planning meetings and analysis is a tool and technique of which process?
    A. Perform Qualitative Risk Analysis
    B. Perform Quantitative Risk Analysis
    C. Plan Risk Management
    D. Monitor and Control Risks

5. During the creation of the risk management plan, you decide to start by analyzing the risk tolerance levels of the organization and of stakeholders. What information are you most likely to utilize?
    A. Project management plan
    B. Risk management plan
    C. Organizational process assets
    D. Enterprise environmental factors

6. A risk manager had just been hired to take over risk management responsibilities for a company producing a new pharmaceutical drug for diabetics. During the first cycle of risk identification, it was determined that the project had a high level of risk, and an expert was needed. The risk manager's first order of business is to look over the risk management plan. All of the following are most likely to be addressed within the plan EXCEPT:
    A. Stakeholder risk tolerances
    B. Budget for risk activities
    C. Definitions of risk probability and impact
    D. Risk owners

7. You have just finished updating the risk register with the prioritized list of risks. What risk management process are you currently in?
    A. Identify Risks
    B. Perform Qualitative Risk Analysis
    C. Perform Quantitative Risk Analysis
    D. Plan Risk Responses

8. A project manager has just received news that symptoms were discovered signaling that a high rating risk is about to occur. This risk had the potential of bringing failure to the entire project. Due to the level of impact this risk would have on the project, all stakeholders needed to be informed. What should the project manager do?
    A. Hold a meeting with all of the stakeholders
    B. Call each stakeholder individually
    C. Meet with each stakeholder one-on-one
    D. Send an email to all stakeholders with the news

9. A project manager liked to hold meetings on a weekly basis with his team members. These meetings resembled brainstorming sessions, where ideas were generated regarding existing risks and project issues. The project manager never struck down any idea, and instead, attempted to foster an environment where creativity and sharing of ideas was encouraged. What type of leadership style does this project manager use?
    A. Facilitating
    B. Directing
    C. Consultative
    D. Co-Managing

10. During a status meeting, two project team members began a heated argument that escalated to the point that half the room was involved. The project manager had her hands full in keeping the room under control. What are the team members most likely arguing about?
    A. Resources
    B. Schedule
    C. Cost
    D. Priorities

11. Who developed the Expectancy Theory?
    A. Douglas McGregor
    B. Victor Vroom
    C. Frederick Herzberg
    D. Abraham Maslow

12. All of the following are tools and techniques of the Identify Risks process EXCEPT:
    A. Risk urgency assessment
    B. Root cause identification
    C. Delphi technique
    D. Assumptions analysis

13. Ishikawa diagrams are also known as:
    A. Influence diagrams
    B. Process flow diagrams
    C. Kaizen diagrams
    D. Cause and effect diagrams

14. Which of the following BEST describes a watchlist?
    A. Contains a list of low priority risks
    B. Contains a list of high priority risks
    C. Contains a list of risk for further analysis
    D. Contains risks with high impact

15. You are a project manager for Strong Tech Solutions, a company that markets products using the latest in technology. You have just finished performing risk urgency assessment. What process are you currently in?
    A. Identify Risks
    B. Perform Qualitative Risk Analysis
    C. Perform Quantitative Risk Analysis
    D. Plan Risk Responses

16. What is the three-point estimate of an activity with a pessimistic estimate of 14, an optimistic estimate of 8 and a most likely estimate of 11?
    A. 11
    B. 8
    C. 1
    D. 3

17. What is the standard deviation of an activity with a pessimistic estimate of 14, an optimistic estimate of 8 and a most likely estimate of 11?
    A. 11
    B. 8
    C. 1
    D. 3

18. You are a project manager for Strong Tech Solutions, a company that markets products using the latest in technology. You've identified risks, prioritized them, and have just finished numerically evaluating the risks. What should you do next?
    A. Perform qualitative risk analysis
    B. Perform quantitative risk analysis
    C. Begin planning risk responses
    D. Perform a risk audit

19. What is the expected monetary value of a project with an impact of $42,000 and a probability of 85%?
    A. $77,700
    B. 35,700
    C. $6,300
    D. Insufficient information

20. All of the following are tools and techniques of the Perform Quantitative Risk Analysis process EXCEPT:
    A. Interviewing
    B. Monte Carlo Technique
    C. Sensitivity Analysis
    D. Risk data quality assessment

21. You are a project manager for Strong Tech Solutions, a company that markets products using the latest in technology. You've just discovered a risk that could have negative consequences on the project. To date, the risk management team has been unable to mitigate the risk or eliminate it. What response strategy should be taken to deal with this risk?
    A. Avoid
    B. Transfer
    C. Mitigate
    D. Accept

22. All of the following are risk response strategies for dealing with opportunities EXCEPT:
    A. Accept
    B. Mitigate
    C. Exploit
    D. Share

23. Which of the following BEST describes secondary risks?
    A. Risks that emerge as a direct result of implementing a risk response
    B. Risks that are expected to remain after risk responses have been executed
    C. Risks that are identified during the monitoring and controlling stage of the project
    D. Low priority risks that should not receive too much effort, but should be monitored

24. All of the following are tools and techniques of the Monitor and Control Risks process EXCEPT:
    A. Risk audits
    B. Risk reassessments
    C. Risk assumptions analysis
    D. Status meetings

25. To date, 13 of the 42 identified risks have occurred. 5 of those risks were considered to have held a high-risk rating. At this point, it is unclear whether there are enough funds remaining to deal with the other 29 risks that remain. What should the project manager do?
    A. Perform quantitative risk analysis on the remaining 29 risks
    B. Perform reserve analysis as soon as possible
    C. Hold a status meeting to inform stakeholders of the concern
    D. Perform technical performance measurement

Module 1.3: Introduction to Project Risk

Exam Essentials:

- ✓ Be able to define risk and risk management
- ✓ Understand the project environment
- ✓ Know how to classify risks
- ✓ Be familiar with the six risk management processes

What is Risk?

Defining Risk

Risk: an uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives (*PMBOK® Guide*).

Risk Management*:* managing project risk to increase the probability and impact of positive events, and decrease the probability and impact of adverse events.

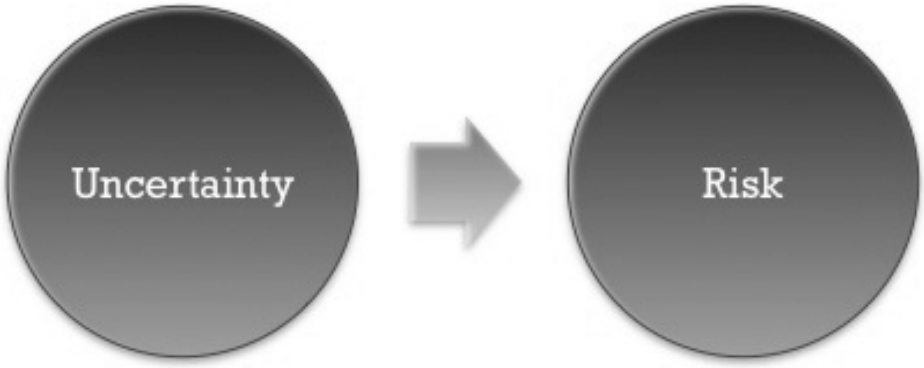
Issue: something occurring in the present, which is being dealt with.

Risk Event: a description of a scenario that may occur if a risk were to be realized.

STUDENT NOTES:

What is Risk?

Uncertainty



Uncertainty*: refers to the lack of knowledge of future events*

STUDENT NOTES:

What is Risk?

Reasons to Take Risk

To pursue a benefit to the project, i.e.:

- Reduce costs
- Meet the schedule
- Achieve company status
- Release cutting edge technology

When the benefit exceeds the potential cost

STUDENT NOTES:

Classifying Risk

Risk Types

- Known Risk
- Known-Unknown Risk
- Unknown-Unknown Risk

} Varying levels of uncertainty

- Pure Risk
- Business Risk
- Impact by Objectives
  - Scope Risks
  - Quality Risks
  - Schedule Risks
  - Cost Risks

STUDENT NOTES:

Classifying Risk

Risk Categories

PMBOK® Guide definition: *a group of potential causes of risk.*

Resources:

- Corporate Knowledge Base
- Commercial industry templates
- Other project managers

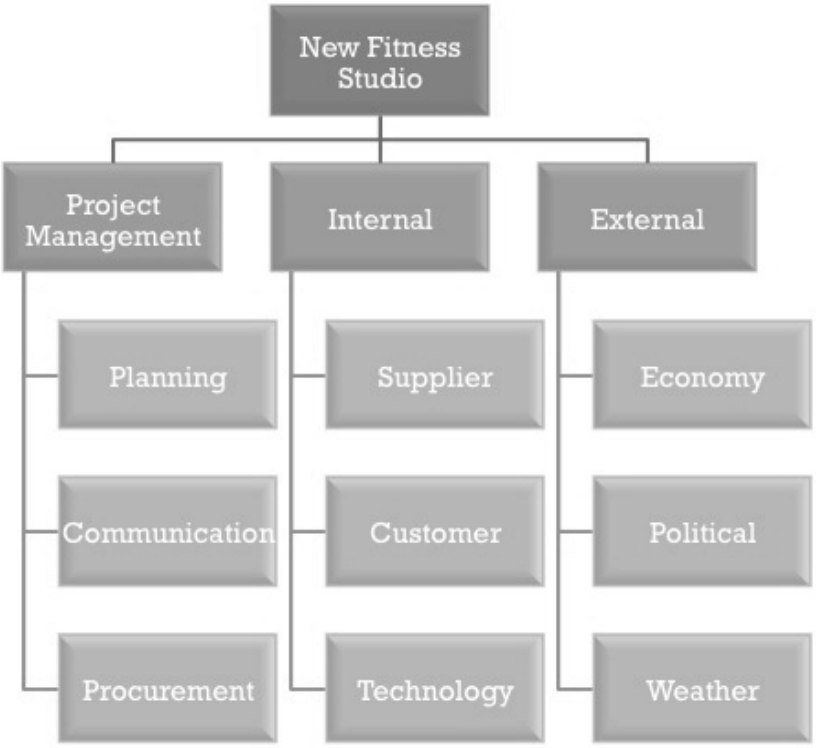
Ways of Displaying Risk Categories:

- Risk Breakdown Structure (RBS)
- Risk Category List

STUDENT NOTES:

Classifying Risk

Risk Categories – Sample RBS



STUDENT NOTES:

Classifying Risk

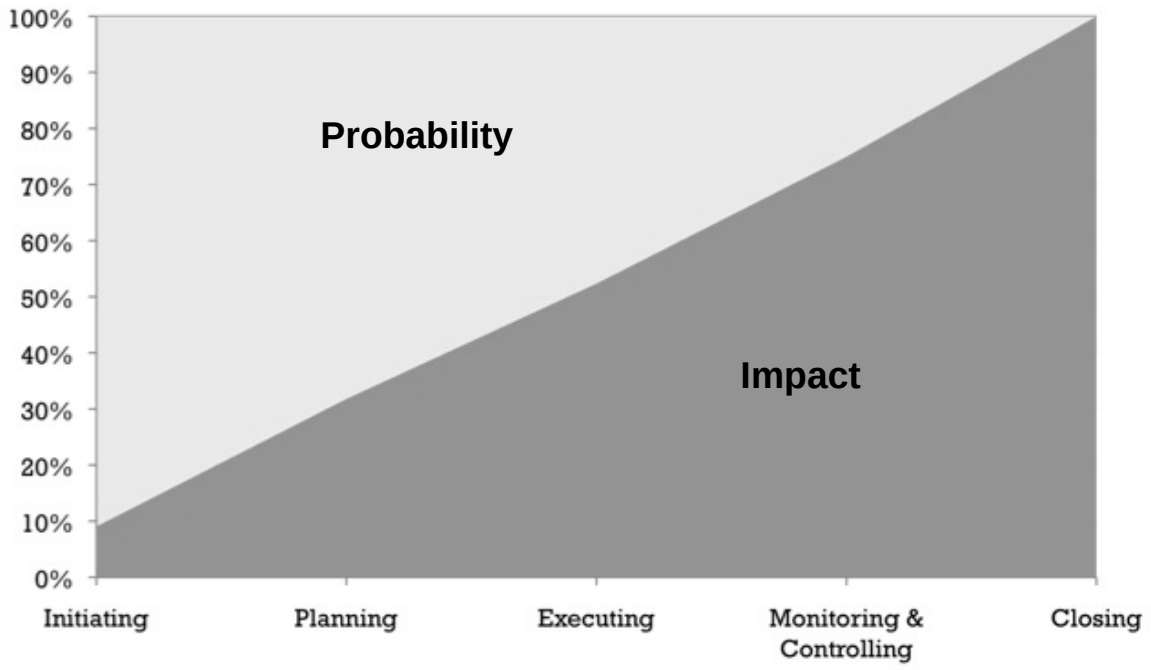
Risk Categories – Sample Risk Category List

- Internal
- External
- Business
- Strategic
- Project Management
- Infrastructure
- Management
- Etc…

STUDENT NOTES:

Classifying Risk

Risk Impact



STUDENT NOTES:

Project Environment

External Factors

- Environment
- Industry
- Economic Situation
- Human & Health Safety
- Legal

STUDENT NOTES:

Project Environment

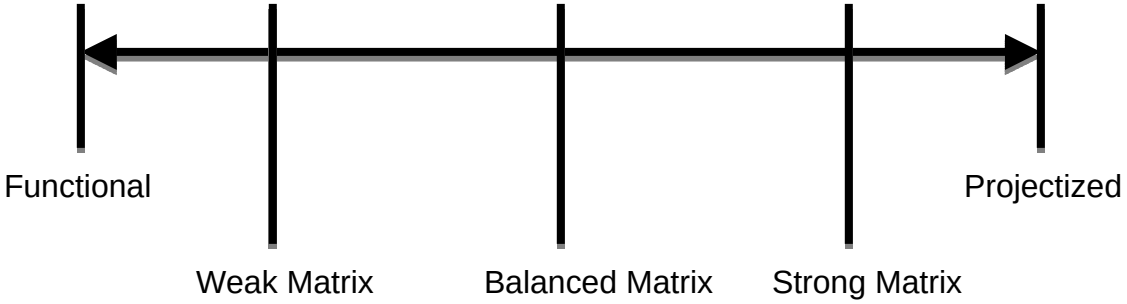
Internal Factors

- Technology
- Consumers
- Competition
- Project Stakeholders
- Organization’s Structure & Culture

STUDENT NOTES:

Project Environment

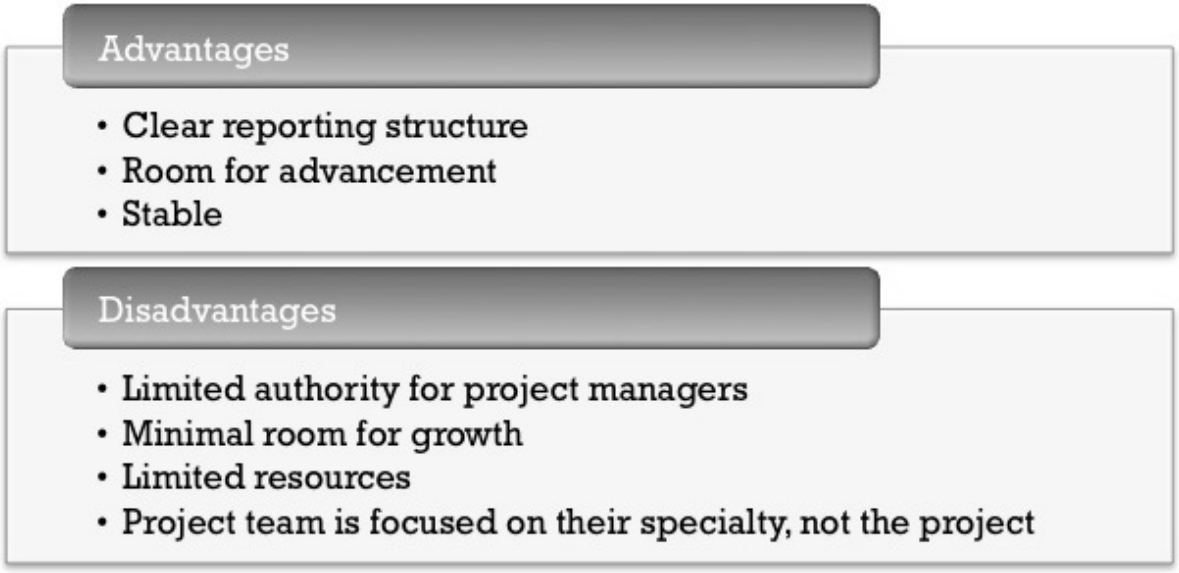
Introduction to Organizational Structures



STUDENT NOTES:

Project Environment

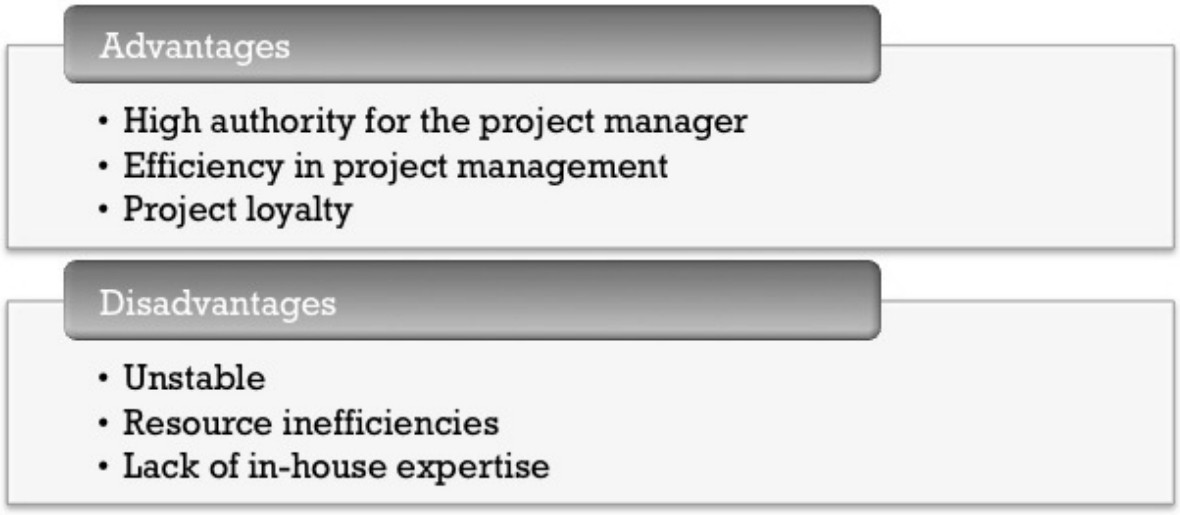
Organizational Structures: Functional



STUDENT NOTES:

Project Environment

Organizational Structures: Projectized



STUDENT NOTES:

Project Environment

Organizational Structure: Matrix

Approach to Risk Management

STUDENT NOTES:

Project Risk Management Knowledge Area

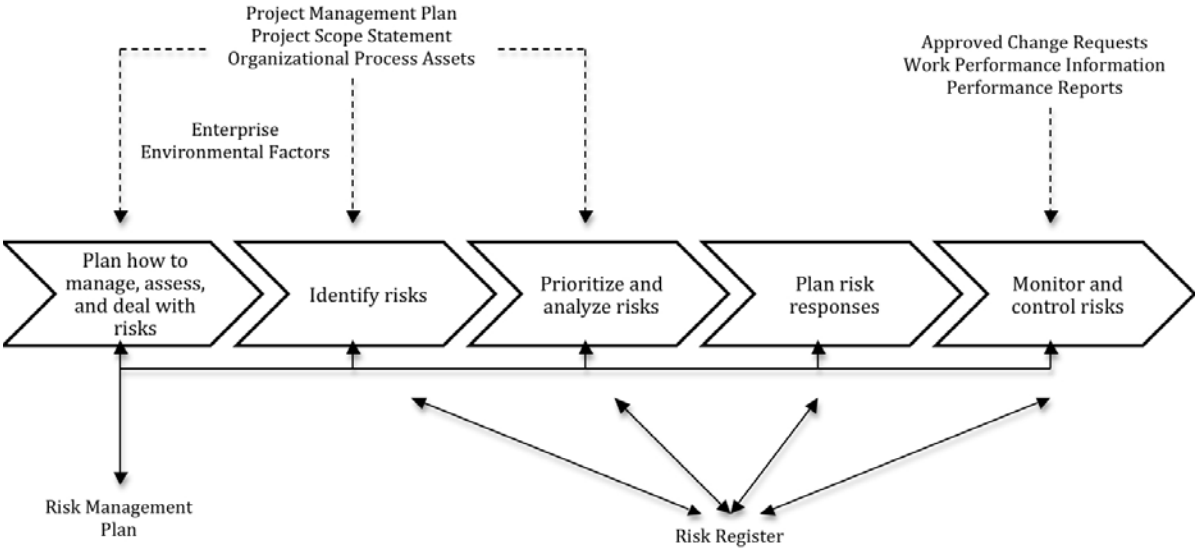
PMBOK® Guide Risk Management Processes

Planning	• Plan Risk Management
Planning	• Identify Risks
Planning	• Perform Qualitative Risk Analysis
Planning	• Perform Quantitative Risk Analysis
Planning	• Plan Risk Responses
Monitor & Control	• Monitor and Control Risks

STUDENT NOTES:

Project Risk Management Knowledge Area

PMBOK® Guide Risk Management Processes



STUDENT NOTES:

Review

Terms to Know

- Risk
- Risk Management
- Issue
- Risk Event
- Uncertainty
- Known Risk
- Known-Unknown Risk
- Unknown-Unknown Risk
- Pure Risk
- Business Risk
- Risk Categories
- Risk Breakdown Structure (RBS)
- Probability
- Impact
- Project Environment
- Functional Organization
- Projectized Organization
- Matrix Organization
- Project Risk Management Knowledge Area

EXERCISE:
Each of the terms above represents a flashcard. Using plain colored flashcards, manually write in the *highlights* of each term definition using the notes provided within this module. Use only one flashcard per term.

Flashcards should be used as a study aid.

Labs

- 10 practice exam questions
- *Test Your Knowledge* exercises
- *PMBOK® Guide* review

1.3 Practice Exam Questions

For answers to the following exam practice questions, refer to Appendix A.

1. A project manager of a retail chain of hardware stores is in the process of conducting risk identification activities. In considering the potential risks, he and his team identified 55 risks total. During a planning meeting, a discussion was held on a particular risk identified, which involves potential lawsuits if a customer or employee were to get injured from the display of chainsaws. What type of risk is this?

A. Business Risk
B. Pure Risk
C. Partial Risk
D. Organizational Risk

2. While planning an end-user feedback event, the project manager became concerned that too many of the end-users invited to the event would show. More RSVPs were received than actual seats available. This was strategically planned, since a statistical percentage of individuals that RSVP do not show, but the project manager recognized that a risk did exist. While more end-user participants would be a benefit to the project, the project management team would need to be prepared to deal with the extra number of participants. What type of risk is this?

A. Business Risk
B. Pure Risk
C. Partial Risk
D. Organizational Risk

3. Risk categories can BEST be described as:

A. A group of project risks.
B. A group of negative risks.
C. A group of potential root causes of risk.
D. A group of potential causes of risk.

4. While conducting risk management planning, the project manager led the meeting participants, which included project team members and stakeholders, in a collaborative effort to break down the risk categories into subcategories. The end result was displayed as a hierarchical structure, containing the risk categories and subcategories. The project manager and meeting participants are utilizing which of the following?

A. Work breakdown structure
B. Risk category structure
C. Risk breakdown structure
D. Resource breakdown structure

5. The probability of risk occurring is highest during which stage of project management?

A. Initiating
B. Planning
C. Executing
D. Closing

6. The impact of risk occurring is lowest during which stage of project management?

A. Initiating
B. Planning
C. Executing
D. Closing

7. A project manager working on a mid-level pharmaceutical project was in the process of developing risk responses. A project team member approached her to let her know that a new risk was identified that had been missed during the initial process of risk identification. After documenting the risk, the project manager had to get approval from her manager before moving further. This was the standard practice for any changes or additions made within the process. What organizational type does the project manager most likely work in?

A. Functional Organization
B. Projectized Organization
C. Matrix Organization
D. Strong Matrix Organization

8. All of the following statements are true, EXCEPT:

A. Risk management is a proactive approach to project management.
B. Risk management should begin with a thorough and realistic review of the project.
C. Risk management begins early on in the project, when information is minimal.
D. Risk management begins early on in the project, as soon as the project scope is defined.

9. All of the following are processes within the Project Risk Management Knowledge Area EXCEPT:

A. Plan Risk Management
B. Identify Risks
C. Risk Analysis
D. Plan Risk Responses

10. Which of the following risk management processes numerically analyzes the effects of identified risks on the project objectives?

A. Identify Risks
B. Perform Qualitative Risk Analysis
C. Perform Quantitative Risk Analysis
D. Plan Risk Responses

Test Your Knowledge

Module 1.3: Introduction to Project Risk

Exercise 1: Term Recognition

For exam purposes, it is important that you grasp the *concept* of the material and be familiar with several key terms. For each of the terms listed, write in the definition as you recall it. Then, go back and write in the actual definition. Go through this exercise multiple times, until the concept behind the term is realized.

TERM	MY DEFINITION	ACTUAL DEFINITION
Business Risk		
Functional Organization		
Impact		
Issue		
Known Risk		
Known-Unknown Risk		

Matrix Organization		
Probability		
Project Environment		
Project Risk Management Knowledge Area		
Projectized Organization		
Pure Risk		
Risk		
Risk Breakdown Structure (RBS)		

Risk Categories		
Risk Event		
Risk Management		
Uncertainty		
Unknown-Unknown Risk		

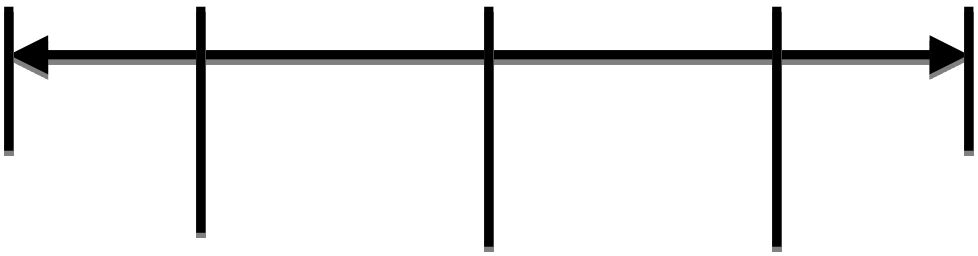
Exercise 2: Recognizing and Understanding the Risk Management processes
Being familiar with the 6 risk management processes listed in the *PMBOK® Guide* is important. Note the following information: process name, primary purpose of the process, process group that the process belongs to.

PROCESS NAME	PURPOSE	PROCESS GROUP

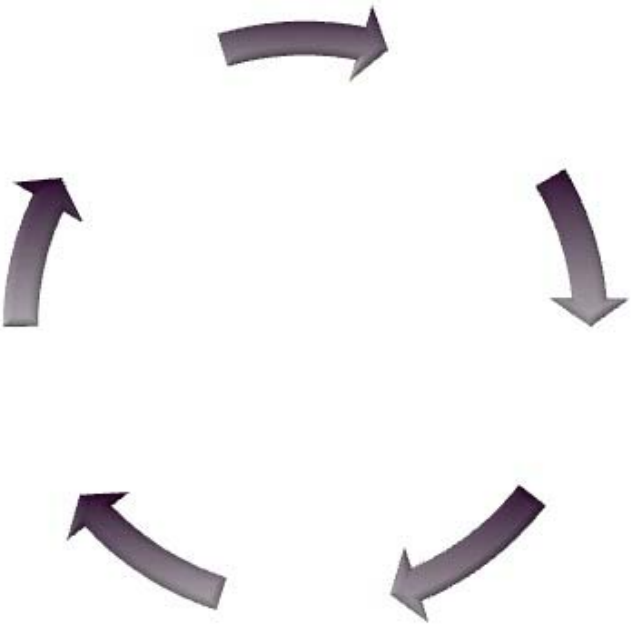
Exercise 3: Organizational Types
Answer each of the questions as it corresponds to the organizational structure listed. “PM” refers to the project manager.

	What is the PM’s level of authority?	What is the level of availability for resources?	Who has budget control?	Is PM part-time or full-time?	Is project staff part-time or full-time?	Who does the PM report to?
Projectized						
Functional						
Weak Matrix						
Balanced Matrix						
Strong Matrix						

Next, fill in the name of the organizational structure within the grid to reflect how each of the organizational structures compare with one another. The spectrum may start on either end (least project-centric to highest project-centric or the reverse):



Exercise 4: Standard Approach to Risk Management
Within the image below, write in the five steps of the standard approach to risk management:



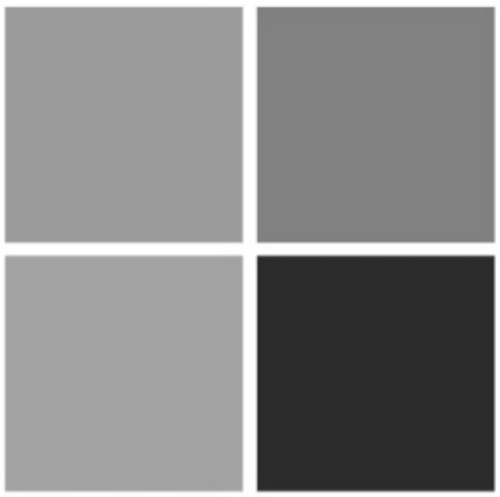
PMBOK® Guide Review

Read the indicated chapters of the PMBOK® Guide, 4th edition, following completion of this module.

- ✓ Chapter 1, *Introduction.*
  - o All
- ✓ Chapter 2, *Project Life Cycle and Organization*
  - o 2.1 Characteristics of the Project Life Cycle
  - o 2.4 Organizational Influences on Project Management
- ✓ Chapter 3, *Project Management Processes for a Project*
  - o All
- ✓ Chapter 11, *Project Risk Management*
  - o Introduction

Module 4

Identify Risks



Exam Objectives:

- ✓ Identify Risks

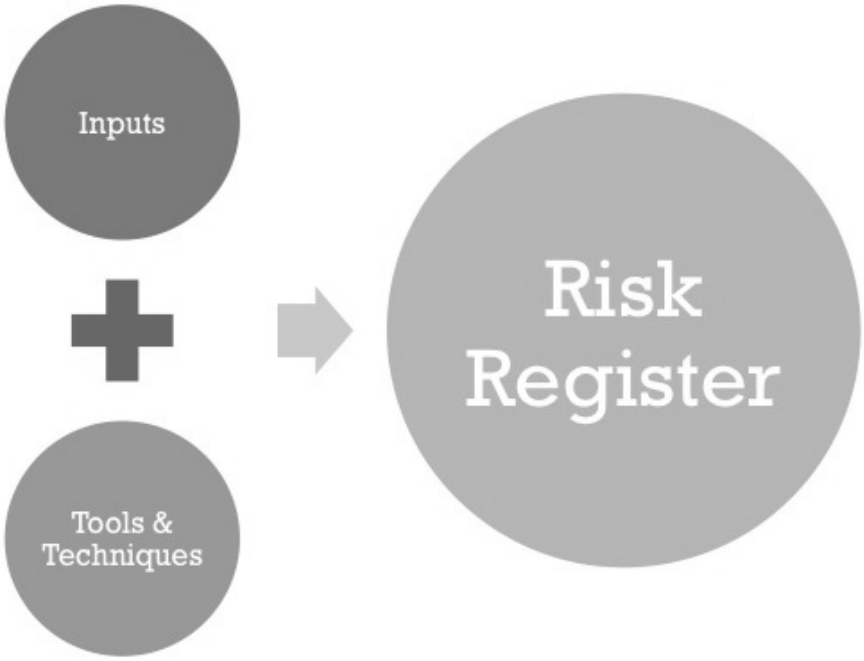
Module 4.1: Gathering and Identifying Risks

Exam Essentials:

- ✓ Know the common sources of risk
- ✓ Be familiar with the information utilized to identify risks
- ✓ Know the tools and techniques of the Identify Risks process
- ✓ Understand how to utilize the tools and techniques of the Identify Risks process

Gathering Project Risks

Introduction to the Identify Risks Process



STUDENT NOTES:

Identify Risks

Inputs

- Enterprise environmental factors
- Organizational process assets
- Risk management plan
- Schedule management plan
- Quality management plan
- Cost management plan
- Project documents
- Activity cost estimates
- Activity duration estimates
- Scope baseline

STUDENT NOTES:

Identify Risks

Tools and Techniques

- Documentation Reviews
- Information Gathering Techniques
- Checklist Analysis
- Assumptions Analysis
- Diagramming Techniques
- SWOT Analysis
- Expert Judgment

STUDENT NOTES:

Identify Risks: T & T

Documentation Reviews

- Reviews project plans, documents, and other information to determine:
  - ✓ Do the plans / documents exist?
  - ✓ Level of quality
  - ✓ Consistency with the project requirements

STUDENT NOTES:

Identify Risks: T & T

Information Gathering Techniques

- Brainstorming
- Delphi Technique
- Interviewing
- Root Cause Identification

STUDENT NOTES:

Identify Risks: T & T

Information Gathering Techniques
Brainstorming

- Group session that gets together to generate ideas and develop a comprehensive list of project risks.
- Notes:
  - ✓ Led by a facilitator
  - ✓ Project manager / multi-disciplinary set of experts
  - ✓ Large group *or* nominal group
  - ✓ Utilize RBS

- Brainstorming
- Delphi Technique
- Interviewing
- Root Cause Identification

STUDENT NOTES:

Identify Risks: T & T

Information Gathering Techniques
Delphi Technique

- Experts participate by completing a questionnaire on important risks; facilitator collects and summarizes responses, then redistributes.
- Notes:
  - Risk experts
  - Anonymous participation
  - Questionnaire is redistributed multiple rounds until consensus is reached
  - Technique reduces bias in data

Brainstorming

Delphi Technique

Interviewing

Root Cause Identification

STUDENT NOTES:

Identify Risks: T & T

Information Gathering Techniques
Interviewing

- Notes:
  - ✓ Primary source of risk identification data gathering
  - ✓ Includes: SMEs, stakeholders, experienced project participants

Brainstorming

Delphi Technique

Interviewing

Root Cause Identification

STUDENT NOTES:

Identify Risks: T & T

Information Gathering Techniques
Root Cause Identification

- Steps to root cause identification:
  1. Identify issue
  2. Determine underlying causes
  3. Develop preventive actions

Brainstorming

Delphi Technique

Interviewing

Root Cause Identification

STUDENT NOTES:

Identify Risks: T & T

SWOT Analysis

- Stands for:
  - S: Strengths
  - W: Weaknesses
  - O: Opportunities
  - T: Threats
- Steps to conducting SWOT Analysis:
  - Identify strengths and weaknesses
  - Identify existing opportunities and threats resulting from organization's strengths and weaknesses
  - Examine how strengths can offset weaknesses

STUDENT NOTES:

Identify Risks: T & T

Checklist Analysis

- Creation of risks checklists
- Utilize:
- Historical information and knowledge from previous projects
- RBS

STUDENT NOTES:

Identify Risks: T & T

Assumptions Analysis

- Examines project assumptions
- Are assumptions…
  - Valid?
  - Consistent?
  - Complete?
- Utilizes the project scope statement

STUDENT NOTES:

Identify Risks: T & T

Diagramming Techniques

- Cause and Effect Diagrams
- Flow Charts
- Influence Diagrams

STUDENT NOTES:

Identify Risks: T & T

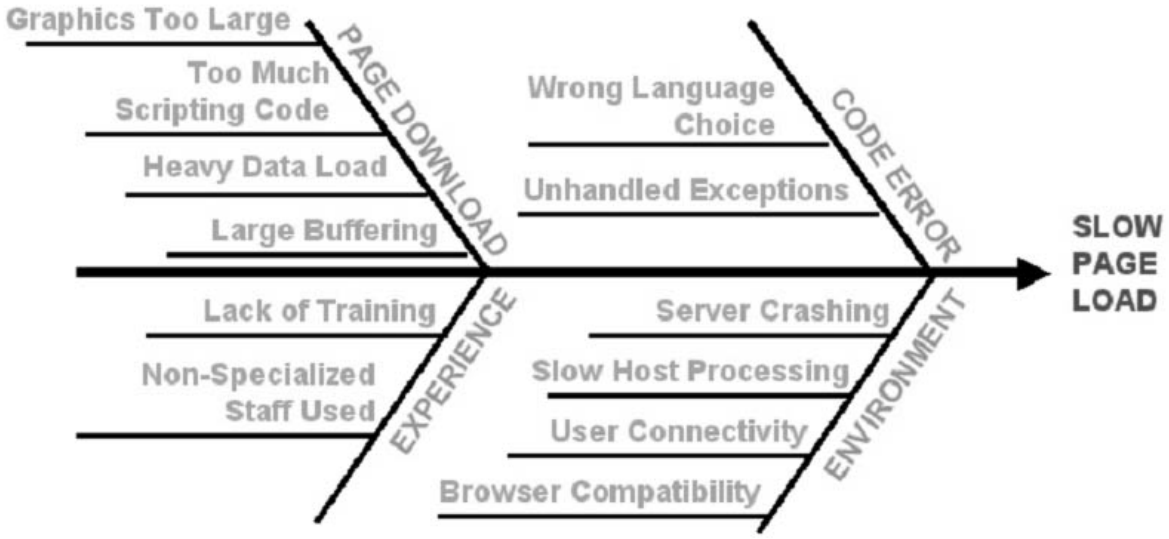
Diagramming Techniques
Cause and Effect Diagrams

- Identifies causes of risk
- Shows how various factors may be connected to potential problems or issues
- AKA: Ishikawa Diagrams and Fishbone Diagrams

Cause and effect diagrams

System / process flow charts

Influence diagrams



STUDENT NOTES:

Identify Risks: T & T

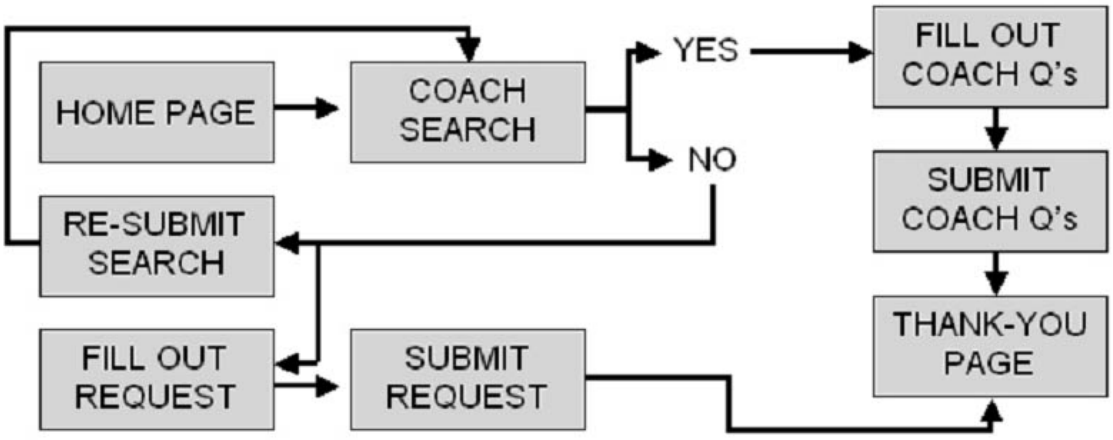
Diagramming Techniques
System / Process Flow Charts

- Shows how various elements of a system interrelate
- Shows a process from beginning to end

Cause and effect diagrams

System / process flow charts

Influence diagrams



STUDENT NOTES:

Identify Risks: T & T

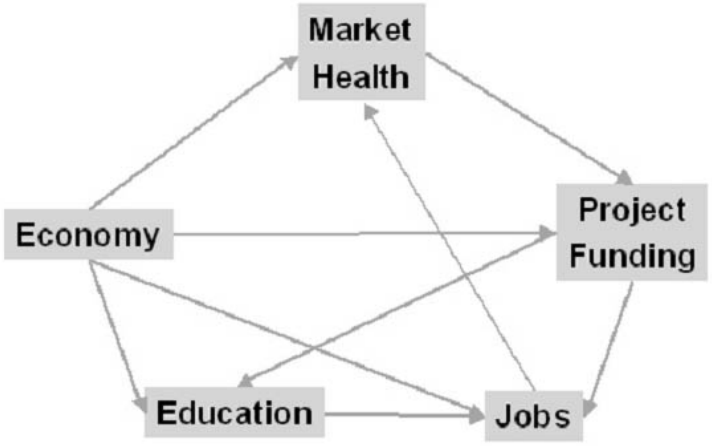
Diagramming Techniques
Influence Diagrams

- Show causal influences, time ordering of event and other relationships among variables and outcomes
- Reflect uncertainty within potential paths
- Elements within a diagram influence one another

Cause and effect diagrams

System / process flow charts

Influence diagrams

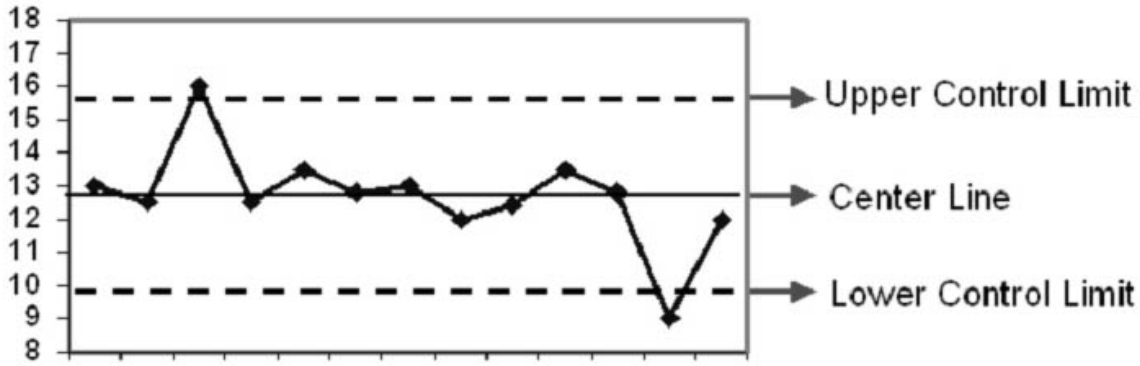


STUDENT NOTES:

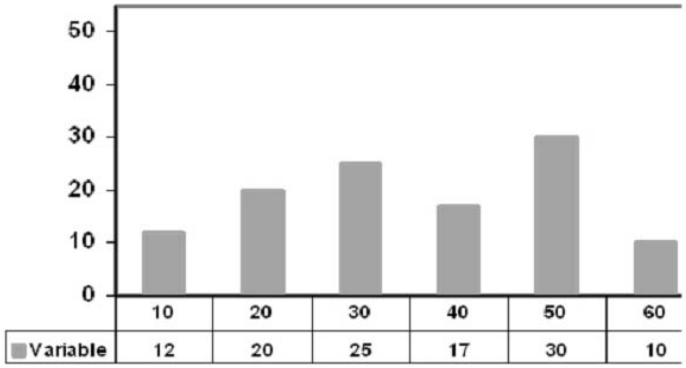
Identify Risks

7 Basic Tools of Quality

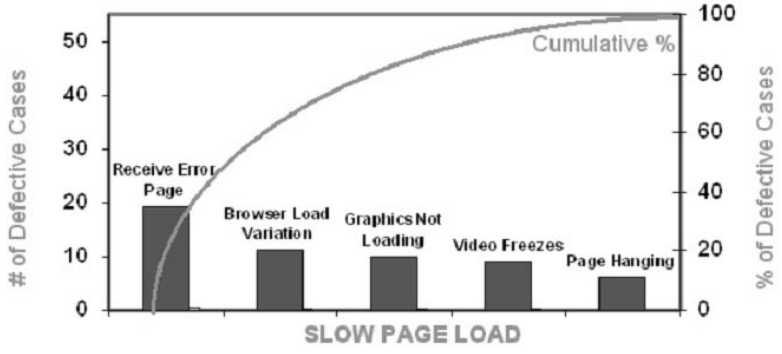
1. Cause and Effect Diagram
2. Control Charts



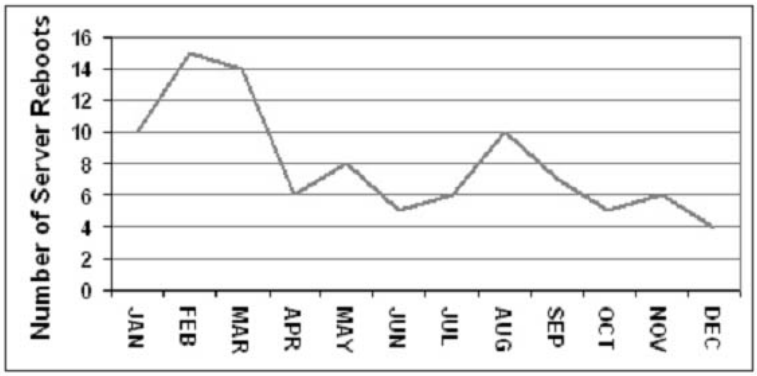
3. Flowcharting
4. Histogram



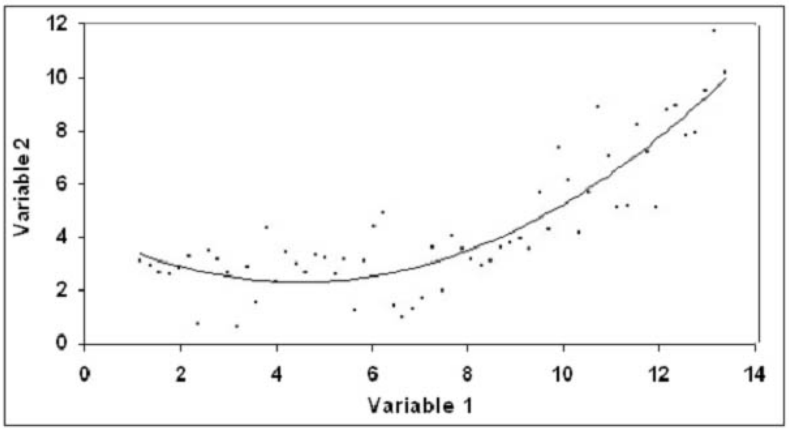
5. Pareto Chart



6. Run Chart



7. Scatter Diagram



STUDENT NOTES:

Review

Terms and Concepts to Know

- Documentation Reviews
- Information Gathering Techniques
- Checklist Analysis
- Assumptions Analysis
- Diagramming Techniques
- Brainstorming
- Delphi Technique
- Interviewing
- Root Cause Identification
- SWOT Analysis
- Cause and Effect Diagrams
- Flow Charts
- Influence Diagrams

EXERCISE:

Each of the terms above represents a flashcard. Using plain colored flashcards, manually write in the *highlights* of each term definition using the notes provided within this module. Use only one flashcard per term.

Flashcards should be used as a study aid.

Labs

- 10 practice exam questions
- *Test Your Knowledge* exercises
- *PMBOK® Guide* review

4.1 Practice Exam Questions

For answers to the following exam practice questions, refer to Appendix A.

1. All of the following are inputs of the Identify Risks process EXCEPT:
   A. Organizational process assets
   B. Enterprise environmental factors
   C. Project charter
   D. Project documents

2. A project manager of a retail chain of hardware stores is in the process of conducting risk identification activities. Along with the risk management team, the project manager examined the existing project plans to determine whether they were consistent with the project requirements. What technique is the project manager currently using?
   A. Process flow chart
   B. Checklist analysis
   C. Brainstorming
   D. Documentation reviews

3. A project manager currently working on a mid-level pharmaceutical project was in the process of developing the list of identified risks. Risk experts were brought into the process, who provided feedback anonymously. The project manager utilized this technique to avoid bias in the responses and feedback provided by the risk experts. Which of the following techniques is the project manager utilizing?
   A. Brainstorming
   B. SWOT Analysis
   C. Delphi Technique
   D. Interviewing

4. A project manager reviewing a control chart noticed that three of the processes were climbing up towards the upper control limit. What should the project manager do?
   A. Investigate what is causing the processes to move in this direction.
   B. Nothing, since the processes are within the control limits.
   C. Do everything possible to prevent the future processes from following the trend.
   D. Follow up with the quality department to see what they are doing about it, since this shows potential risks.

5. All of the following are tools and techniques of the Identify Risks process EXCEPT:
   A. Risk urgency assessment
   B. Documentation reviews
   C. Assumptions analysis
   D. Cause and effect diagrams

6. Which of the following is a primary source of risk identification gathering?
   A. Interviewing
   B. Delphi Technique
   C. Brainstorming
   D. Documentation Reviews

7. A project manager of Cyber Channels Inc. is in the process of identifying project risks. While reviewing how the elements of a particular system interrelate, she discovers two risks relating to the cause of another risk that were both initially overlooked. Which of the following techniques is the project manager using?
   A. Influence diagram
   B. Flow chart
   C. Cause and effect diagram
   D. Control chart

8. All of the following statements are true EXCEPT:
   A. Influence diagrams are a diagramming technique used within risk identification.
   B. Stakeholders can participate in brainstorming and interviewing sessions.
   C. The Delphi Technique utilizes anonymous participation from stakeholders to evaluate important risk information.
   D. Cause and effect diagrams are also known as Ishikawa diagrams and fishbone diagrams.

9. Which of the following statements BEST describes Checklist Analysis?
   A. Involves identifying an issue, determining what the cause is for the issue, and resolving it.
   B. Involve the participation of subject matter experts, stakeholders and other participants to identify risks.
   C. Evaluates whether the assumptions used to identify risks are valid, accurate, and consistent.
   D. Makes sure that all items within the project have been considered for risk.

10. All of the following are diagramming techniques, used within the Identify Risks process, EXCEPT:

A. Herzberg Diagram
B. Ishikawa Diagram
C. Fishbone Diagram
D. Influence Diagram

Test Your Knowledge

Module 4.1: Gathering and Identifying Risks

Exercise 1: Term Recognition

For exam purposes, it is important that you grasp the *concept* of the material and be familiar with several key terms. For each of the terms listed, write in the definition as you recall it. Then, go back and write in the actual definition. Go through this exercise multiple times, until the concept behind the term is realized.

TERM	MY DEFINITION	ACTUAL DEFINITION
Assumptions Analysis		
Brainstorming		
Cause and Effect Diagrams		
Checklist Analysis		
Delphi Technique		

Diagramming Techniques		
Documentation Reviews		
Flow Charts		
Influence Diagrams		
Information Gathering Techniques		
Interviewing		
Root Cause Identification		

SWOT Analysis		

Exercise 2: Process Inputs / Tools & Techniques / Outputs Part 1
For the exam, you may need to recognize the process inputs, tools and techniques, and outputs. Fill in the corresponding information for the **Identify Risks** process.

	Note down the corresponding information within this column	**INFORMATION CHECK(!) Go back and note any corrections within this column**
		
		
		

Exercise 3: Process Inputs / Tools & Techniques / Outputs Part 2
For each of the inputs, tools and techniques and outputs listed in exercise 2, briefly explain using the blank sheets of paper that follow.

INPUTS

TOOLS & TECHNIQUES

OUTPUTS

PMBOK® Guide Review

Read the indicated chapters of the PMBOK® Guide, 4th edition, following completion of this module.

- ✓ Chapter 8, *Project Quality Management*
  - o 8.3.2.1 *Perform Quality Control: Tools and Techniques (focus on .1 through .7)*

- ✓ Chapter 11, *Project Risk Management*
  - o 11.1 *Identify Risks*