Chapter-1

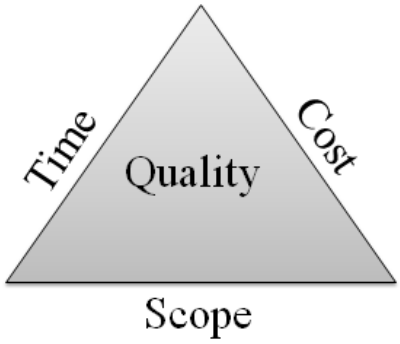
1. What are the advantages of using formal project management?

   Answer: Using project management provides advantages, such as:

   a) Better control of financial, physical, and human resources
   b) Improved customer relations
   c) Shorter development times
   d) Lower costs
   e) Higher quality and increased reliability
   f) Higher profit margins
   g) Improved productivity
   h) Better internal coordination
   i) Higher worker morale

2. What are the triple constraints of project management?

   Answer: The three constraints of project management are **Scope, Time, Cost.**



   Scope: What work will be done?

   Time: How long should it take to complete? [Schedule]

   Cost: What should it cost? [Budget]

   In order to meet the high **Quality,** the project manager should balance these three often-competing goals.

3. What is Project Management?

   Answer: Project management is "the application of knowledge, skills, tools and techniques to project activities to meet project requirement."

4. Define Project stakeholders?

   Answer:

   Stakeholders are the people involved in or affected by project activities.

   Stakeholders include:

- Project sponsor
- Project manager
- Project team
- Support staff
- Customers
- Users
- Suppliers
- Opponents to the project

5. Explain the Nine Project Management Knowledge Areas?

Answer:

- **Project scope management** to identify and manage the successful completion of the project have to do all the work。
- **Project Time Management** includes estimates of the total time required for the project, write an acceptable schedule of the project schedule and ensure that the project completed on time.
- **Project cost management**, including project budget formulation and management.
- **Project quality management** is to ensure that the project to meet the project needs from those expressed or implied.
- **Project Human Resource Management** are concerned about how the effective use of personnel involved in the project。
- **Project Communication Management** including the creation, collection, dissemination and preservation of project information.
- **Project Risk Management** includes project-related risks identification, analysis and response.
- **Project Procurement Management** is defined as the need for the project, from the implementation of the project outside the organization to access and buy products and services.
- **Project integration management** is an overarching function that affects and is affected by all of the other knowledge are.

6. Define Project portfolio management(项目组合管理)?

Answer: Organization group and manage projects as a portfolio of investments that contribute to the entire enterprise's success. Many

organizations collect and control an entire suite of projects or investments as one set of interrelated activities in a portfolio. The project portfolio management in general is divided into five levels, from the simple to the complex are:

1) Put all the items into a database
2) Setting priorities for the items in the database
3) According to the different type of investment, these items were divided into 2 ~ 3 Budget
4) Run Knowledge Base automatically
5) Apply the modern Portfolio Theory

7. What are the skills required for Project Managers?

Answer: Project managers need a wide variety of skills. They need both "hard" and "soft" skills.

- **Hard skills** include product knowledge and knowing how to use various project management tools and techniques.
- **Soft skills** include being able to work with various types of people.
    1) **Communication skills**: Listens, persuades.
    2) **Organizational skills**: Plans, sets goals, analyzes.
    3) **Team-building skills**: Shows empathy（同感，共鸣）, motivates, promotes esprit de corps
    4) **Leadership skills**: Sets examples, provides vision (big picture), delegates, positive, energetic
    5) **Coping skills**: Flexible, creative, patient, persistent
    6) **Technology skills**: Experience, project knowledge

8. Expand PMI and PMP?

Answer:

PMI: Project Management Institute

PMP: Project Management Professiona

Chapter-2

1. Explain System Approach of Project management?

Answers:

Systems approach describes a holistic(整体的) and analytical approach to

solving complex problems.

Three parts include:

- **Systems philosophy**: View things as systems, which are interacting （相互作用）components that work within an environment to fulfill some purpose.
- **Systems analysis** is a problem-solving approach.
  1) Define the scope of the system
  2) Divide into components
  3) Identify and evaluating system problems, opportunities, constraints and needs
  4) Examine alternative solution for improving the current situation
  5) Identify（支持） an solution or action plan and examine that plan against the entire system
- **Systems management**: Address business, technological, and organizational issues associated with creating, maintaining , and making changes to systems.
  1) Identify and satisfy the key stakeholders.
  2) Doing the best for the organization.

2. What are the three basic organizational structures?

   Answer: Three general classifications of organizational structures are **functional, project, and matrix.**

   A functional organizational structure is the hierarchy. Functional managers or vice presidents in specialties report to the CEO. The staffs have specialized skills.

   A project organizational structure also has a hierarchical structure, but their program managers report to the CEO.

   A matrix organizational structure represents the middle ground between functional and project structures.

3. Draw and explain the phases of the traditional Project Life Cycle?

   Answer:

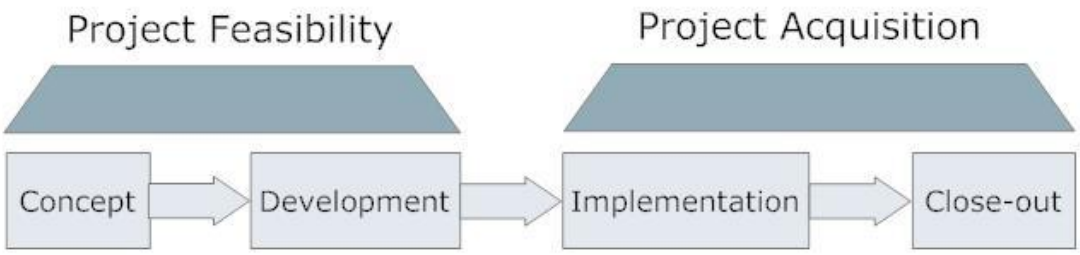


Figure. Phases of the Traditional Project Life Cycle

In the concept phase of a project, managers usually briefly describe the project—they develop a very high-level or summary plan for the project, which describes the need for project and basic underlying concept.

In the development phase, the project team creates more detailed project plans, a more accurate cost estimate, and a more thorough WBS.

In the Implementation phase, the project team creates a definitive or very accurate cost estimate, delivers the required work, and provides performance reports to stakeholders.

In the close-out phase, all of the work is completed, and there should be some sort of customer acceptance of the entire project.

4. What are phase exits?

   Answer: **phase exits** are the phase-end review of key deliverables that allow the organization to evaluate the project's performance and to take immediate action to correct any errors or problems.

5. How can top management help project managers?

Answer: Top management can help project managers in the following ways:

- The project manager needs adequate(足够的) resources。

  The best way to kill a project is to withhold(保留) the required money, human resources, and visibility for the project. If the project managers have top management commitment, they will also have adequate resources and not be distracted by events that do not affect their specific projects.

- Project managers often require approval for unique project needs in a timely manner.

- Project managers must have cooperation from people in other parts of the

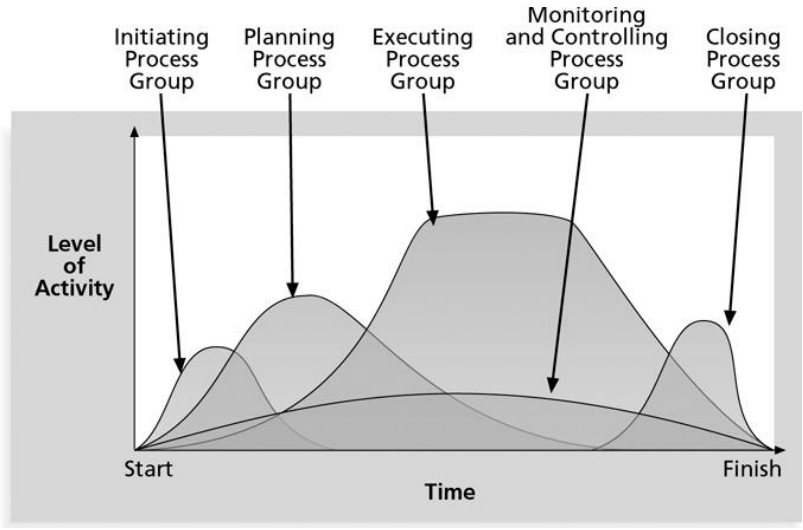
organization.

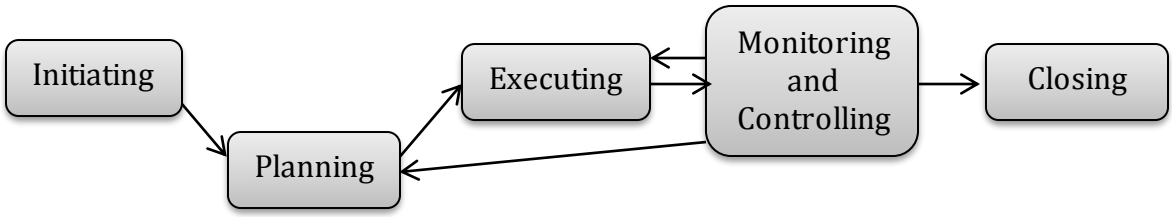
- Project managers often need someone to mentor and coach them on leadership issues。

Chapter-3

1. Explain Project management process groups?

Answer:





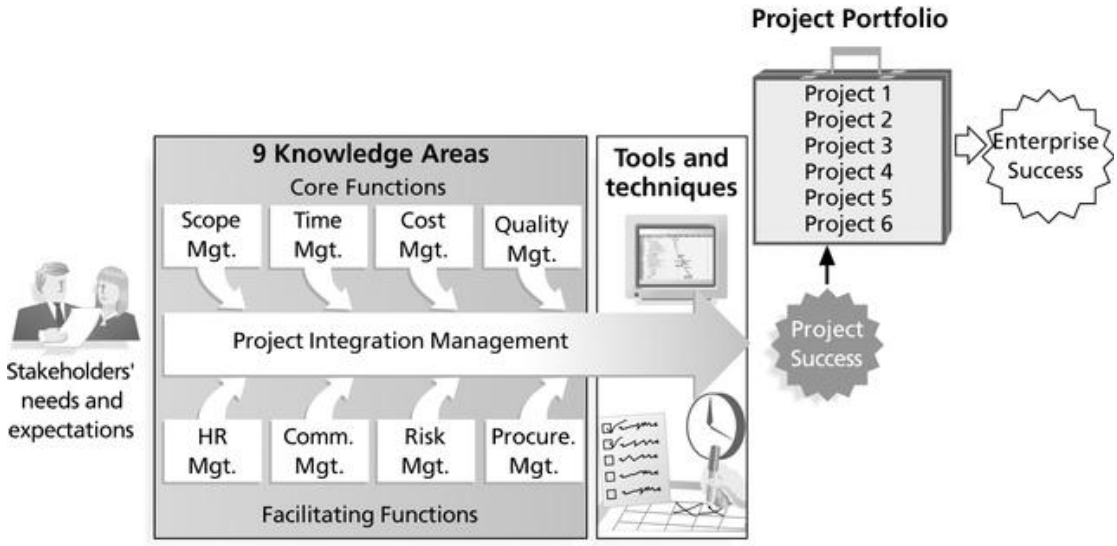
Project management process groups progress from initiation activities to planning activities , executing activities, monitoring and controlling activities, and closing activities.

Initiating processes include defining and authorizing a project or project phase. **Planning processes** include devising and maintaining a workable scheme. **Executing processes** include coordinating people and other resources. **Monitoring and controlling processes** include regularly measuring and monitoring progress to ensure that the project team meets the project objectives. **Closing processes** include formalizing acceptance of the project or project phase and ending it efficiently.

Chapter-4

1. Draw Project Management Framework?

Answer: The Project Management Framework is:



2. List the various Project Integration Management Processes?

Answer:

1) **Develop the project charter**, which involves working with stakeholders to create the document that formally authorizes a project—the charter.
2) **Develop the preliminary project scope statement**, which involves further work with stakeholders, especially users of the project's products, services, or results, to develop the high-level scope requirements. The output of this process is the process is the preliminary project scope statement.
3) **Develop the project management plan**, which involves coordinating all planning efforts to create a consistent, coherent document—the project management plan.
4) **Direct and manage project execution**, which involves carrying out the project management plan by performing the activities included in it. The outputs of this process are deliverables, requested changes, work performance information, implemented change request, corrective actions, preventive actions, and defect repair.
5) **Monitor and control the project work**, which involves overseeing

project work to meet the performance objective of the project. The outputs of this process are recommended defect repair, and requested changes.

6) **Perform integrated change control**, which involves coordinating changes that affect the project's deliverables and organizational process assets. The outputs of this process include approved and rejected change requests, approved corrective and preventive actions, approved and validated defect repair, deliverables, and updates to the project management plan and project scope statement.
7) **Close the project**, which involves finalizing all project activities to formally close the project. Outputs of this process include final products, services, or results, administrative and contract closure procedures, and updates to organizational process assets.

3. What is SWOT analysis?

   Answer: **SWOT Analysis** is a strategic planning method used to evaluate the **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats involved in a project or in a business venture. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective.

4. What is a Project charter document?

   Answer: A **project charter** is a document that formally recognizes the existence of a project and provides direction on the project's objectives and management

5. What is scope statement document?

   Answer: Scope Statement is a document for the right to reach a common understanding of project scope as well as the confirmation. It describes in detail what work should be accomplished in the project, and is an important tool to prevent the spread of the scope. Scope statement should include the overall project objectives and description, product description, all project deliverables, as well as a synthesis of the determinants of success of the project descriptions.

6. What is scope creeps?

   Answer: Scope creep is the tendency of a project to include more tasks or to implement more systems than originally specified, which often leads to

higher than planned project costs and an extension of the initial implementation date. In other words it basically means a feature that was initially thought to be simple that's exploding in scale.

7. What are the common elements of a project management plan?

Answer:

- Introduction or overview of the project
  1) Project name
  2) Project description & its need
  3) Sponsor's name
  4) Names of the PM & Project Team
  5) Deliverables
  6) List of reference materials
  7) List of definitions and acronyms
- Description of how the project is organized
  1) Organizational charts
  2) Project Responsibilities
  3) Other organizational or process-related information.
- Management and technical processes used on the project
  1) Management objectives
  2) Project Controls
  3) Risk Management
  4) Project staffing
  5) Technical Processes
- Work to be done, schedule, and budget information
  1) Major work packages
  2) Key deliverables
  3) Other work-related information
  4) Summary schedule
  5) Detailed schedule
  6) Other schedule-related information
  7) Summary budgets
  8) Detailed budget
  9) Other budget related information

8. What is stakeholder analysis?

   Answer: Stakeholder Analysis is an important technique for stakeholder identification & analyzing their needs. It is used to identify all key stakeholders who have vested interest in the issues with which the project is concerned. The aim of stakeholder analysis process is to develop a strategic view of the human and institutional landscape, and the relationships between the different stakeholders and the issues they care about most.

9. Explain CCBs?

   Answer: CCB is a Change Control Board for short. CCBs provide guidelines for preparing change requests, evaluate change requests, and manage the implementation of approved changes.

10. Explain 48-hours policy?

    Answer: A "48-hour policy" can help task leaders on a large information technology project reach agreements on key decisions or changes within their expertise and authority. It allows project team members to make a decision and have 48 hours to seek approval from top management. If the team decision cannot be implemented, management has 48 hours to reverse a decision; otherwise, the team's decision is approved.

Chapter-5

1. What is Project Scope Management?

   Answer: **Project Scope Management** is the definition about what is included and what is not included in the project and the process of controlling. This process ensures that the project team and stakeholders have a common understanding of the project products as the project result and the processes used in producing these products .The main processes are: **Scope plan; Scope definition; Create WBS; Scope confirm; Scope control**.

2. List the various Project scope management Processes?

   Answer:

   - **Scope planning**: Deciding how the scope will be defined, verified, and controlled and how the WBS will be created.

- **Scope definition**: Reviewing the project charter and preliminary scope statement and adding more information as requirements are developed and change requests are approved（批准）.
- **Creating the WBS**: Subdividing（分成小块） the major project deliverables into smaller, more manageable components.
- **Scope verification**: Formalizing（正式化） acceptance（接受） of the project scope.
- **Scope control**: Controlling changes to project scope

3. Explain Work Break Down Structure?

Answer: A work breakdown structure (WBS) is a deliverable-oriented grouping of the work involved in a project that defines the total scope of the project. WBS is an outline of the project with different levels of details, it defines the relationship of the final deliverable to its subdeliverable, and in return, their work packages. WBS helps to assume project managers that all the work are identified and established.

4. What are the various approaches to developing WBS?

Answer:

a) Using guidelines
Some organizations, such as the DOD (U.S Department Of Defense), provide guidelines for preparing WBSs
b) The analogy approach
Review WBSs of similar projects and tailor（使适应）to your project.
c) The top-down approach
Start with the largest items of the project and break them down
d) The bottom-up approach
Start with the specific tasks and roll them up.
e) The mind-mapping approach

Write tasks in a non-linear, branching format（分支格式） and then create the WBS structure

Chapter-6

1. What is Project time Management?

Answer: The simple definition of the project time management is to ensure that the process of the project completed on time. And its main work includes **Activity definition**, **Activity sequencing**, **Activity resource estimating,**

Activity duration（时长） estimating, Schedule development, Schedule control.

2. What are milestones?

Answer: Within the framework of project management, a milestone is the end of a stage that marks the completion of a work package or phase, typically marked by a high level event such as completion, endorsement (认可) or signing of a deliverable, document or a high level review meeting. It often takes several activities and a lot of work to complete a milestone. Milestones are useful tools for setting schedule goals and monitoring progress.

3. What are network diagrams?

Answer: Network diagrams are the preferred technique for showing activity sequencing. A **network diagram** is a schematic(扼要的)display of the logical relationships among, or sequencing of, project activities.

4. What are Gantt charts?

Answer: A Gantt chart is a type of bar chart that illustrates a project schedule. Gantt charts illustrate the start and finish dates of the terminal elements and summary elements of a project. Terminal elements and summary elements comprise the work breakdown structure of the project. Some Gantt charts also show the dependency relationships between activities.

5. How to use critical path to shorten a project schedule?

Answer: Three main techniques for shortening schedules:

1) **Shortening** the duration of critical activities or tasks by adding more resources or changing their scope
2) **Crashing（赶工）** activities by obtaining the greatest amount of schedule compression（压缩） for the least incremental（增加的） cost
3) **Fast tracking** activities by doing them in parallel or overlapping them

6. Explain Critical chain scheduling?

Answer: Critical chain scheduling is a way of progress, when you create the project schedule to take into account the limited resources of, and it will include a buffer to protect the project completion date of. Critical chain

scheduling is a fairly complicated yet powerful tool that involves critical path analysis, resource constraints, and changes in how task estimates are made in terms of buffers.

Chapter-7

1. What is Project cost Management?

   Answer: **Project cost management** includes the processes required to ensure that the project is completed within an approved（同意的）budget. There are three project cost management processes:

   1) **Cost estimating**: Developing an approximation or estimate of the costs of the resources needed to complete a project
   2) **Cost budgeting**: Allocating the overall cost estimate to individual work items to establish a baseline for measuring performance
   3) **Cost control**: Controlling changes to the project budget

2. Explain Earned Value Management?

   Answer: Earned Value Management is a project performance measurement technique that integrates resource planning, schedule target, technical costs and project risks .As a result, all activities are scheduled according to the plan, budget and the increment of the planned values. So project managers and their teams can determine how well the project is meeting scope, time and cost goals by entering actual information and then comparing it to the baseline.

3. Explain basic tools and techniques for cost estimates?

   Answer: Four commonly used tools and techniques are:

   1) **Analogous estimates (Top-down estimates)** use the actual cost of a previous, similar project as the basis for estimating the cost of the current project.
   2) **Bottom-up estimates** involve estimating individual work items or activities and summing them to get a project total.
   3) **Parametric modeling** uses project characteristics(parameters) in a mathematical model to estimate project costs.

Chapter-8

1. What is quality?

   Answer: Reflect the entity to meet the explicit and implicit characteristics of the total capacity required。A set of inherent characteristics meet the requirements of the degree of。

2. What is benchmarking(基准测试)?

   Answer: Benchmarking is that a uninterrupted and elevated process for the enterprise to improve on operating achievement and operating performance with comparing own products, services, cost and management practice with those in which those enterprises are very best and very fruitful.

3. What are quality audits?

   Answer: A quality audit(查账，审计) is one of the main tools and techniques for quality assurance. Quality audit is the process of systematic examination of a quality system carried out by an internal or external quality auditor or an audit team. It is an important part of organization's quality management system.

   Quality audits are structured reviews of specific quality management activities that help identify lessons that can improve performance on current or future projects. Quality audits can be scheduled or random, and they can be performed by in-house auditors or by third parties with experience in specific areas.

   Quality audit is a type of software audit in which one or more auditors who are not members of the software development organization conduct and the focus is the software quality.

4. What are the tools and techniques for quality control?

   Answer: Quality control includes many general tools and techniques.

   Includes:

   1) **Pareto(柏拉图) analysis.** It involves identifying the vital few contributors that account for the most quality problems in a system
   2) **Statistical sampling（采样）** involves choosing part of a population of interest for inspection

3) **Six Sigma** is "a comprehensive and flexible system for achieving, sustaining（维持）, and maximizing business success.

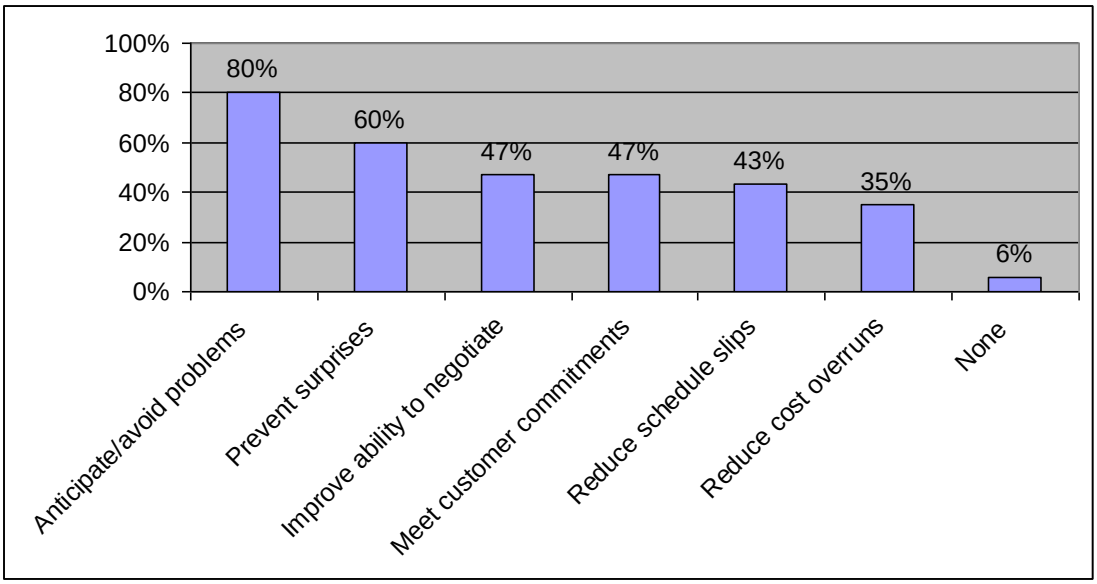
5. What are the different types of tests?
   Answer: **Unit test** is done to test each individual component to ensure it is as defect-free as possible. Unit tests are performed before moving on to the integration test.
   Integration testing occurs between unit and system testing to test functionally grouped components. It ensures a subset(s) of the entire system works together.
   System testing tests the entire system as one entity. It focuses on the big picture to ensure the entire system is working properly.
   User acceptance testing is an independent test performed by end users prior to accepting the delivered system. It focuses on the business fit of the system to the system to the organization, rather than technical issues.

6. What are the 5 cost categories related to quality?
   Answer: The five major cost categories related to quality include:
   Prevention cost: the cost of planning and executing a project so that it is error-free or within an acceptable error range.
   Appraisal cost: the cost of evaluating processes and their outputs to ensure that a project is error-free or within an acceptable error range.
   Internal failure cost: a cost incurred to correct an identified defect before the customer receives the product.
   External failure cost: a cost that relates to all errors not detected and corrected before delivery to the customer.
   Measurement and test equipment costs: the capital cost of equipment used to perform prevention and appraisal activities.

Chapter-11

1. What is Project risk management?
   Answer: Project risk management is the art and science of identifying, analyzing, and responding to risk throughout the life of a project and in the best interests of meeting project objectives.

2. What are the benefits from software risk management practices?



Answer:
1.Ariticipate/avoid problems
2.Prevent surprises
3.Improve ability to negotiate
4.Meet customer commitmerits
5.Reduce schedule slips
6.Reduce cost overruns

3. What is risk utility?
Answer: Risk utility is the amount of satisfaction or pleasure received from a potential payoff. It has risk-averse, risk-neutral, and risk-seeking preferences.

4. Explain the various project risk management processes?
Answer:

Risk Management Planning: Risk Management Planning is the process where decisions are made on how to approach, plan, and execute risk management activities. This is completed as a part of the planning process group.

Risk Identification: Risk Identification determines the risk which can affect the project's objectives, and identifies the characteristics of those risks. Risk Identification is commonly first engaged in the planning process group.

Qualitative Risk Analysis: Qualitative Risk Analysis prioritizes risk for future analysis by analyzing the probability of occurrence and impact. Qualitative Risk Analysis is commonly first engaged within the planning process group.

Quantitative Risk Analysis: Quantitative Risk Analysis assigns a number to risks as a part of determining the impact on overall project objectives. Quantitative Risk Analysis is commonly engaged within the planning process group.

Risk Response Planning: Risk Response Planning ascertains the options and action plans to enhance the opportunities and mitigate the threats. Risk Response planning is normally first started in the Risk Response Planning Group.

Risk Monitoring and Control: Risk Monitoring and Controlling is an ongoing process. It involves overseeing the effectiveness of risk responses, monitoring residual risks, identifying and documenting new risks, and assuring that risk management processes are followed. This is done throughout the Monitoring and Controlling Process Group.

5. What are the topics addressed in a Risk management plan?
Answer: The topics addressed in a risk management plan are:

- Methodology(方法学)
How will risk management be performed on this project? What tools and data sources are available and applicable?
- Roles and Responsibilities
Who are the individuals responsible for implementing specific tasks and providing deliverables related to risk management?
- Budget and Schedule
What are the estimated costs and schedules for performing risk-related activities?
- Risk Categories
What are the main categories of risks that should be addressed on this project? Is there a risk breakdown structure for the project?
- Risk Probability and Impact
How will the probabilities and impacts of risk items be assessed? What scoring and interpretation methods will be used for the qualitative and quantitative analysis of risks?
- Risk Documentation
What reporting formats and processes will be used for risk management activities?

6. What are the categories of risk in a project?
Answer: The Categories of risk is:

1) Market risk
If the information technology project is to produce a new product or service, will it be useful to the organization or marketable to others? Will users accept and use the product or service? Will someone else create a better product or service faster, making the project a waste of time and money?

2) Financial risk
Can the organization afford to undertake the project? How confident are stakeholders in the financial projections? Will the project meet NPV, ROI,

and payback estimates? If not, can the organization afford to continue the project? Is this project the best way to use the organization's financial resources?

3) Technology risk
Is the project technically feasible? Will it use mature, leading edge, or bleeding edge technologies?

4) People risk
Does the organization have or can they find people with appropriate skills to complete the project successfully? Do people have the proper managerial and technical skills?

5) Structure/Process risk
What is the degree of change the new project will introduce into user areas and business procedures? How many distinct user groups does the project need to satisfy?

7. What is risk breakdown structure?
Answer: A risk breakdown structure is a useful tool that can help project managers consider potential risks in different categories. Similar in structure to a work breakdown structure, a risk breakdown structure is a hierarchy of potential risk categories for a project. Risk breakdown structure provides a simple, one-page chart to help ensure a project team is considering important risk categories related to all information technology projects.

8. Explain the various tools and techniques used for risk identification?
Answer: The tools and techniques used for the Risk Identification include:

1) Brainstorming
It is a technique by which a group attempts to generate ideas or find a solution for a specific problem by amassing ideas spontaneously and without judgment

2) Delphi technique
It is used to derive a consensus among a panel of experts who make predictions about future developments

3) Interviewing
It is a fact-finding technique for collecting information in face-to-face, phone, e-mail, or instant-messaging discussions

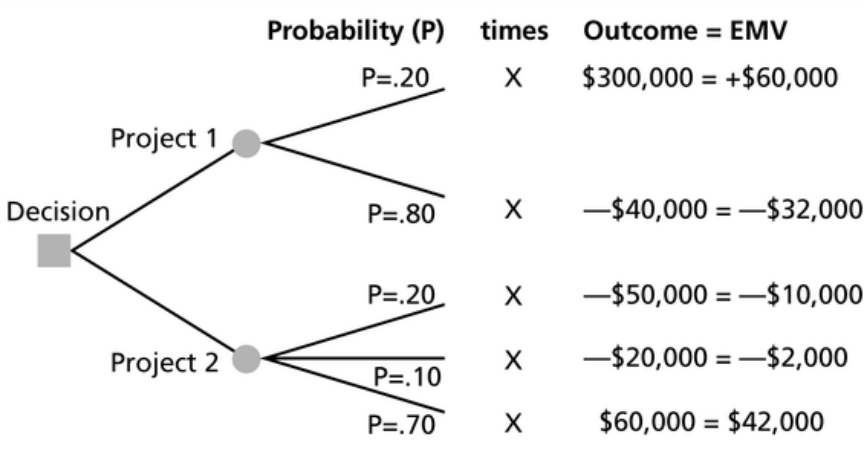
4) Strengths, weaknesses, opportunities and threats (SWOT) analysis
It can also be used during risk identification

9. what is a risk register?
Answer: A **risk register** is a document that contains the results of various risk management processes and that is often displayed in a table or spreadsheet format. It is a tool for documenting potential risk events and related information.

10. what is MSF?

Answer: MSF is Microsoft Solution Framework. It includes a risk management model that includes developing and monitoring a top-ten master list of risks. MSF is the methodology Microsoft uses for managing projects.

11. what is EMV?
Answer: **Estimated monetary value (EMV)** is the product of a risk event probability and the risk event's monetary value. The following figure illustrates the EMV:



Project 1's EMV = $60,000 —32,000 = $28,000
Project 2's EMV = —$10,000 —2,000 + 42,000 = $30,000

12. What are the 4 main response strategies for negative risks?
Answer: The four basic response strategies for negative risks are:

1) Risk avoidance
Eliminating its causes

2) Risk acceptance
Accepting the consequences should a risk occur

3) Risk transference
Shifting the consequence of a risk and responsibility for its management to a third party

4) Risk mitigation
Reducing the impact of a risk event by reducing the probability of its occurrence

13. What are workarounds?
Answer: If carrying out individual risk management plans, the original strategy has failed, it must implement the contingency plans, if there are no contingency plans, project teams sometimes use **workarounds**--unplanned responses to risk events that must be done when there are no contingency(偶然) plans.

Chapter-12

1. Why are projects outsourced?

   Answer:

   - To reduce both fixed and recurrent (repeated) costs

     Save Labor Cost
   - To allow the client organization to focus on its core business

     Focus on Marketing , Customer service and new product design
   - To access skills and technologies

     Professional skills and hardware
   - To provide flexibility

     Extra staffing during periods of peak workloads
   - To increase accountability（可说明性）

     Contracts are legal binding

2. What are contracts?

   Answer: Contracts are mutually binding agreement that obligates the buyer to pay for them – can clarify responsibilities and sharpen focus on key deliverables of a project.

   In law, a contract is a binding legal agreement that is enforceable in a court of law. That is to say, a contract is an exchange of promises for the breach of which the law will provide a remedy.

3. List the various project procurement management processes?

   Answer: Project Procurement Management includes the implementation of the organization from access to goods and services outside of the process. If the project requires that each process can be done by individuals, persons or groups.

   1) Development of procurement plans
      a) manufacturing, procurement analysis
      b) the choice of type of contract
      c) the preparation of procurement plans
   2) Procurement Process Management
      a) Inquiry (Solicitation)
      b) supply-side options (SourceSelection)

   c) Contract Management
3) Procurement Cost Analysis
   a) bidding costs
   b) construction costs
   c) loss of cost of ownership
4) Procurement of security and confidentiality

4. What are the tools and techniques for planning purchases and acquisitions?

   Answer: Tools and techniques for planning purchases and acquisitions include performing make-or-buy analysis, consulting with experts and types of contracts.

   Make-or-buy analysis is a general management technique used to determine whether a particular product or service should be made or performed inside the organization or purchased from someone else.

   Internal experts should be **consulted** as part of procurement planning. They might suggest that the company could not provide quality maintenance, training, and service for the laptops since the service involves so many people with different skill levels in so many different locations.

   Contract type is an important consideration. Different types of contracts can be used in different situations.

5. What are the different types of contracts?

   Answer:

   1) **Fixed price or lump sum(总金额) contracts** involve a fixed total price for a well-defined product or service.
   2) **Cost reimbursable（可偿还） contracts** involve payment to the supplier for direct and indirect actual costs.
   3) **Time and material** contracts: Hybrid（混合） of both fixed price and cost reimbursable contracts, often used by consultants
   4) **Unit price contracts** require the buyer to pay the supplier a predetermined amount per unit of service, and the total value of contract is a function of the quantitied needed to complete the work.

6. Explain SOW document?

Answer: The statement of work (SOW) is a description of the work required for the procurement.

The contract SOW is a type of scope statement that describes the work in sufficient detail to allow prospective suppliers to determine if they are capable of providing the goods and services required and to determine an appropriate price.

It should describe all services required and include performance reporting.

7. Explain RFP and RFQ?

Answer: RFP is short for Request for Proposal. **Request for Proposals** are used to solicit（恳求） proposals from prospective sellers. A **proposal** is a document prepared by a seller when there are different approaches for meeting buyer needs.

RFQ is short for **Requests for Quotes**. **Requests for Quotes** is used to solicit quotes or bids from prospective suppliers. A **bid**, also called a tender or quote (short for quotation), is a document prepared by sellers providing pricing for standard items that have been clearly defined by the buyer.