考试

2016年12月1日 9:44

选择题

填空题

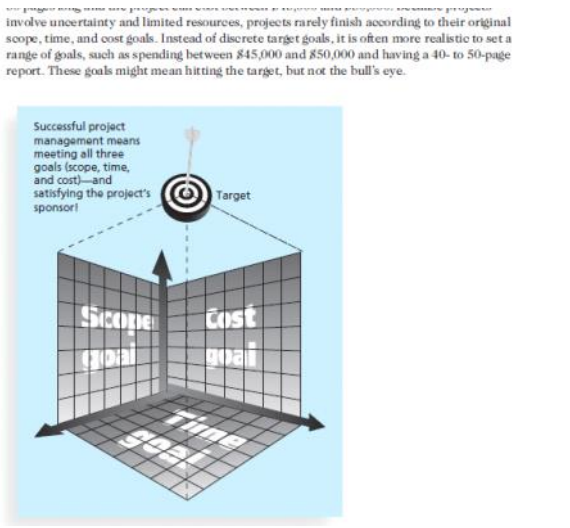
简答题 ：20-25

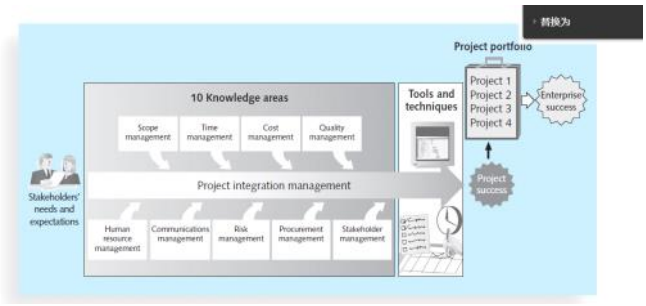
计算题：补充过依赖关系的题目，一定是要考的（时间管理）
25-30

分析题：20-25

题目是英文

给你一些案例，然后分析 采取这样的形式



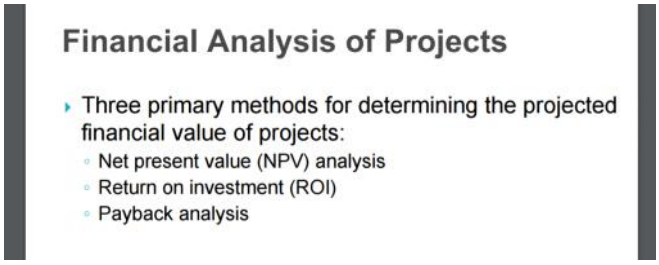


什么是pmp

Table3-1

Figure4-1

第四章：



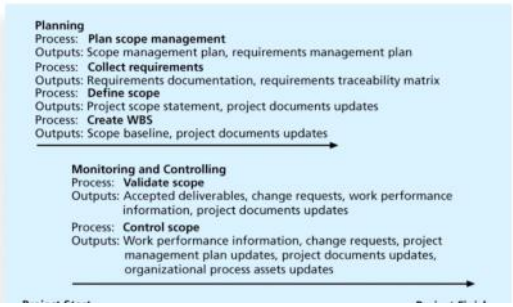
Performing Integrated Change Control

- Three main objectives are:
  - Influencing the factors that create changes to ensure that changes are beneficial
  - Determining that a change has occurred
  - Managing actual changes as they occur

第五章

非常重要的：wbs

Figure 5-1. Project Scope Management Summary



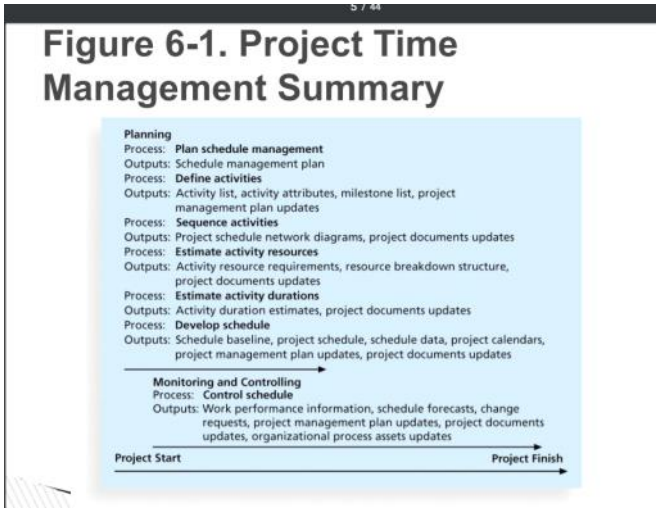
Creating the Work Breakdown Structure (WBS)

- A **WBS** is a deliverable-oriented grouping of the work involved in a project that defines the total scope of the project
- **Decomposition** is subdividing project deliverables into smaller pieces
- A **work package** is a task at the lowest level of the WBS
- The **scope baseline** includes the approved project scope statement and its associated WBS and WBS dictionary

Approaches to Developing WBSs

- Using guidelines: Some organizations, like the DOD, provide guidelines for preparing WBSs
- The **analogy approach**: Review WBSs of similar projects and tailor to your project
- The **top-down approach**: Start with the largest items of the project and break them down
- The **bottom-up approach**: Start with the specific tasks and roll them up
- Mind-mapping approach: **Mind mapping** is a technique that uses branches radiating out from a core idea to structure thoughts and ideas

第六章：重头戏



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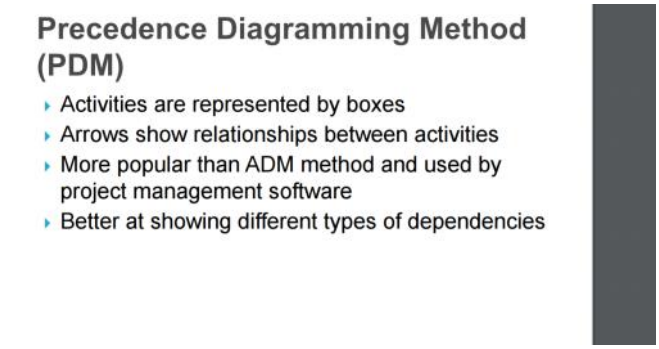
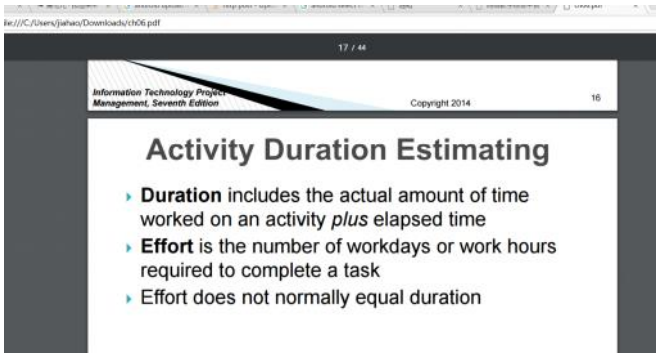
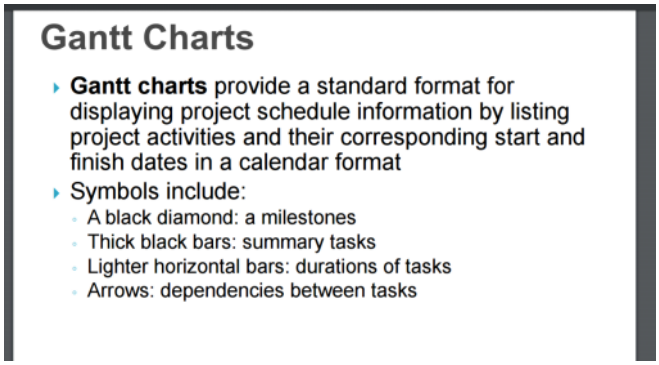


四中关系要会画





怎么找关键路径？

这一张占的比例很大

Using Critical Path Analysis to Make Schedule Trade-offs

- **Free slack** or **free float** is the amount of time an activity can be delayed without delaying the early start of any immediately following activities
- **Total slack** or **total float** is the amount of time an activity may be delayed from its early start without delaying the planned project finish date
- A **forward pass** through the network diagram determines the early start and finish dates
- A **backward pass** determines the late start and finish dates

Using the Critical Path to Shorten a Project Schedule

- Three main techniques for shortening schedules
  - Shortening durations of critical activities/tasks by adding more resources or changing their scope
  - **Crashing** activities by obtaining the greatest amount of schedule compression for the least incremental cost
  - **Fast tracking** activities by doing them in parallel or overlapping them

Critical Chain Scheduling

- **Critical chain scheduling**
  - a method of scheduling that considers limited resources when creating a project schedule and includes buffers to protect the project completion date
- Uses the **Theory of Constraints (TOC)**
  - a management philosophy developed by Eliyahu M. Goldratt and introduced in his book *The Goal*.
- Attempts to minimize **multitasking**
  - when a resource works on more than one task at a time

Program Evaluation and Review Technique (PERT)

- **PERT** is a network analysis technique used to estimate project duration when there is a high degree of uncertainty about the individual activity duration estimates
- PERT uses **probabilistic time estimates**
  - duration estimates based on using optimistic, most likely, and pessimistic estimates of activity durations, or a three-point estimate

牵扯计算

Basic Principles of Cost Management

- **Profits** are revenues minus expenditures
- **Profit margin** is the ratio of revenues to profits
- **Life cycle costing** considers the total cost of ownership, or development plus support costs, for a project
- **Cash flow analysis** determines the estimated annual costs and benefits for a project and the resulting annual cash flow

Types of Costs and Benefits

- **Tangible costs** or **benefits** are those costs or benefits that an organization can easily measure in dollars
- **Intangible costs** or **benefits** are costs or benefits that are difficult to measure in monetary terms
- **Direct costs** are costs that can be directly related to producing the products and services of the project
- **Indirect costs** are costs that are not directly related to the products or services of the project, but are indirectly related to performing the project
- **Sunk cost** is money that has been spent in the past; when deciding what projects to invest in or continue, you should *not* include sunk costs

More Basic Principles of Cost Management

- **Learning curve theory** states that when many items are produced repetitively, the unit cost of those items decreases in a regular pattern as more units are produced
- **Reserves** are dollars included in a cost estimate to mitigate cost risk
  - **Contingency reserves** allow for future situations that may be partially planned for (sometimes called **known unknowns**) and are included in the project cost baseline
  - **Management reserves** allow for future situations that are unpredictable (sometimes called **unknown unknowns**

Table 7-2. Types of Cost Estimates

Type of Estimate	When Done	Why Done	How Accurate
Rough Order of Magnitude (ROM)	Very early in the project life cycle, often 3–5 years before project completion	Provides estimate of cost for selection decisions	–50% to +100%
Budgetary	Early, 1–2 years out	Puts dollars in the budget plans	–10% to +25%
Definitive	Later in the project, less than 1 year out	Provides details for purchases, estimates actual costs	–5% to +10%

Cost Estimation Tools and Techniques

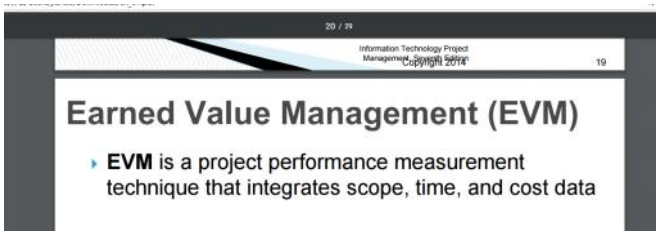
- Basic tools and techniques for cost estimates:
  - **Analogous** or **top-down estimates:** use the actual cost of a previous, similar project as the basis for estimating the cost of the current project
  - **Bottom-up estimates:** involve estimating individual work items or activities and summing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

书上有案例，把案例看懂

Determining the Budget

- Cost budgeting involves allocating the project cost estimate to individual work items over time
- Important goal is to produce a **cost baseline**
  - a time-phased budget that project managers use to measure and monitor cost performance

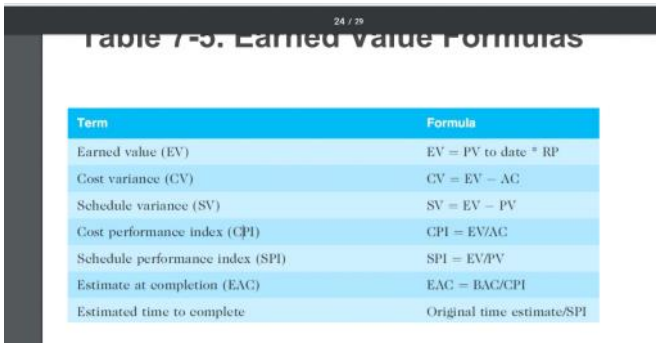
什么事成本基线

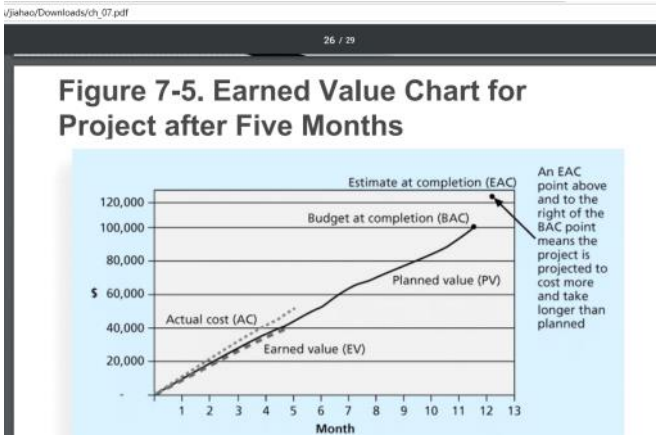


evm如何计算

Table 7-4. Earned Value Calculations for One Activity After Week One

Activity	Week 1
Earned Value (EV)	5,000
Planned Value (PV)	10,000
Actual Cost (AC)	15,000
Cost Variance (CV)	–10,000
Schedule Variance (SV)	–5,000
Cost Performance Index (CPI)	33%
Schedule Performance Index (SPI)	50%





要能看懂这个图

Scope Aspects of IT Projects

- **Functionality** is the degree to which a system performs its intended function
- **Features** are the system's special characteristics that appeal to users
- **System outputs** are the screens and reports the system generates
- **Performance** addresses how well a product or service performs the customer's intended use
- **Reliability** is the ability of a product or service to perform as expected under normal conditions
- **Maintainability** addresses the ease of performing maintenance on a product

Cause-and-Effect Diagrams

- **Cause-and-effect diagrams** trace complaints about quality problems back to the responsible production operations
- They help you find the root cause of a problem
- Also known as **fishbone** or **Ishikawa diagrams**

The Seven Run Rule

- The **seven run rule** states that if seven data points in a row are all below the mean, above the mean, or are all increasing or decreasing, then the process needs to be examined for non-random problems

Checksheet

- A checksheet is used to collect and analyze data
- It is sometimes called a tally sheet or checklist, depending on its format

Scatter diagram

- A **scatter diagram** helps to show if there is a relationship between two variables
- The closer data points are to a diagonal line, the more closely the two variables are related

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Basic Information on Six Sigma

- The target for perfection is the achievement of no more than **3.4 defects per million opportunities**
- Six Sigma projects normally follow a five-phase improvement process called DMAIC

Six 9s of Quality

- **Six 9s of quality** is a measure of quality co equal to 1 fault in 1 million opportunities

Types of Tests

- **Unit testing** tests each individual component (often a program) to ensure it is as defect-free as possible
- **Integration testing** occurs between unit and system testing to test functionally grouped components
- **System testing** tests the entire system as one entity
- **User acceptance testing** is an independent test performed by end users prior to accepting the delivered system

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Modern Quality Management

- Modern quality management:
  - Requires customer satisfaction
  - Prefers prevention to inspection
  - Recognizes management responsibility for quality
- Noteworthy quality experts include Deming, Juran, Crosby, Ishikawa, Taguchi, and Feigenbaum

这三个理念要了解

Iso90003是什么

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Improving Information Technology Project Quality

- Several suggestions for improving quality for IT projects include:
  - Establish leadership that promotes quality
  - Understand the cost of quality
  - Focus on organizational influences and workplace factors that affect quality
  - Follow maturity models

问答题会出这个

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The Cost of Quality

- The **cost of quality** is the cost of conformance plus the cost of nonconformance
  - **Conformance** means delivering products that meet requirements and fitness for use
  - **Cost of nonconformance** means taking responsibility for failures or not meeting quality expectations

第九章

Keys to Managing People

- Important areas related to project management include
  - motivation theories
  - influence and power
  - effectiveness

Intrinsic and Extrinsic Motivation

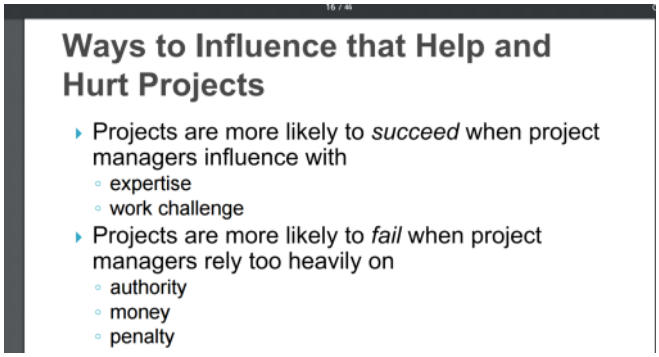
- **Intrinsic motivation** causes people to participate in an activity for their own enjoyment
- **Extrinsic motivation** causes people to do something for a reward or to avoid a penalty

Maslow's Hierarchy of Needs

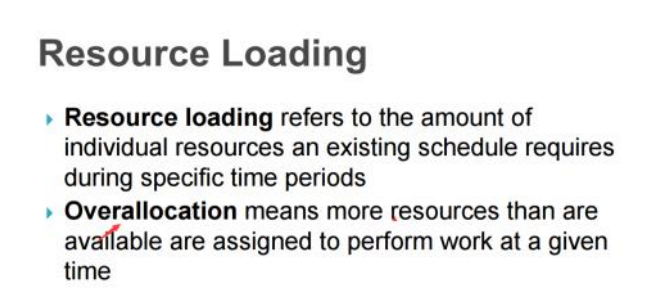
- Abraham Maslow argued that humans possess unique qualities that enable them to make independent choices, thus giving them control of their destiny

McGregor's Theory X and Y

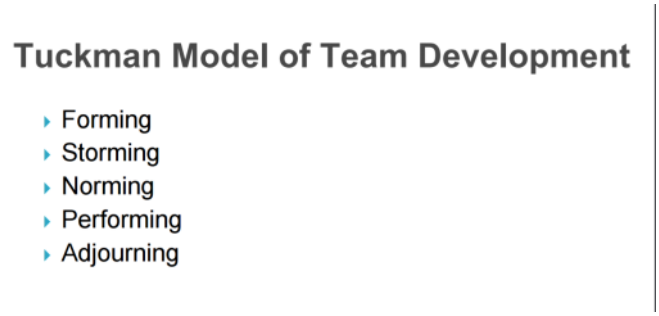
- Douglas McGregor popularized the human relations approach to management in the 1960s
- Theory X: assumes workers dislike and avoid work, so managers must use coercion, threats and various control schemes to get workers to meet objectives
- Theory Y: assumes individuals consider work as natural as play or rest and enjoy the satisfaction of esteem and self-actualization needs
- Theory Z: introduced in 1981 by William Ouchi and



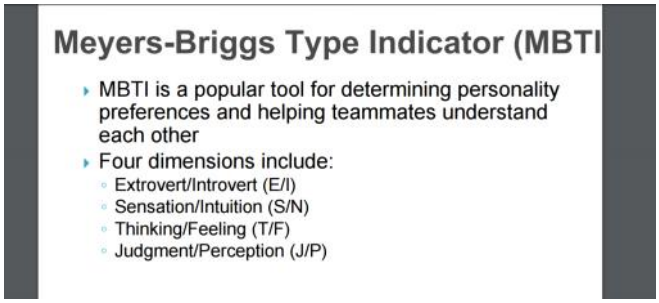
细节上会考 做出一些选择



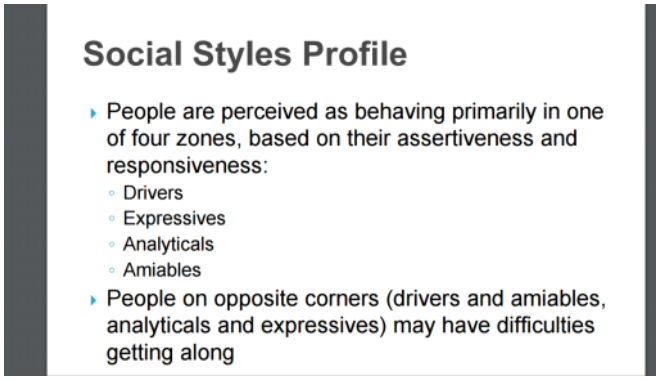
树上的例子看一下



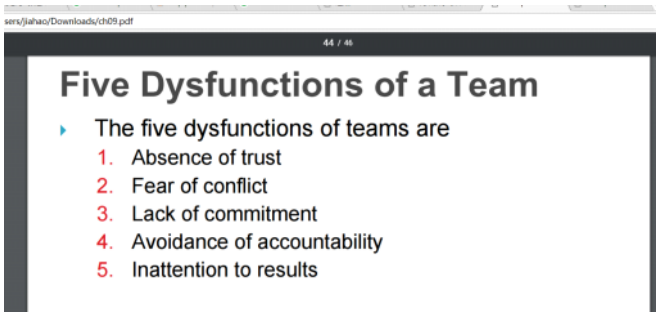
团队开发的流程要知道



知道mbti的分类就行了 不用知道细节

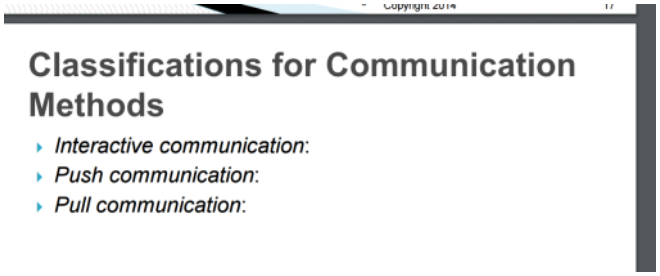


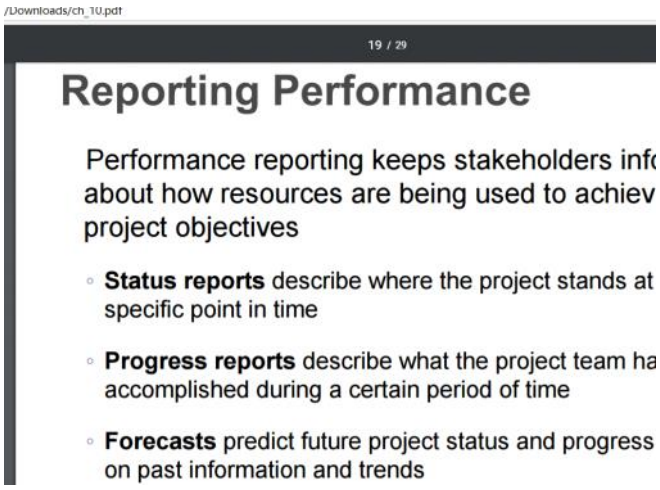
对角线.....



人力资源很多细节的内容会在选择题里出现

第十章：沟通渠道的计算要懂





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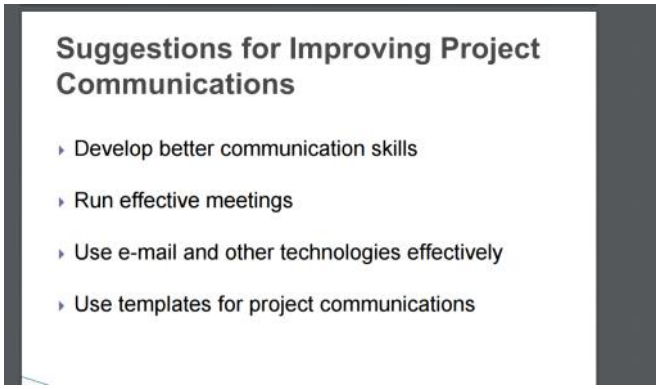
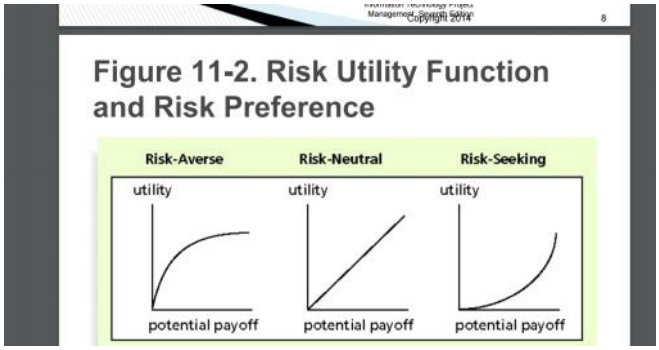
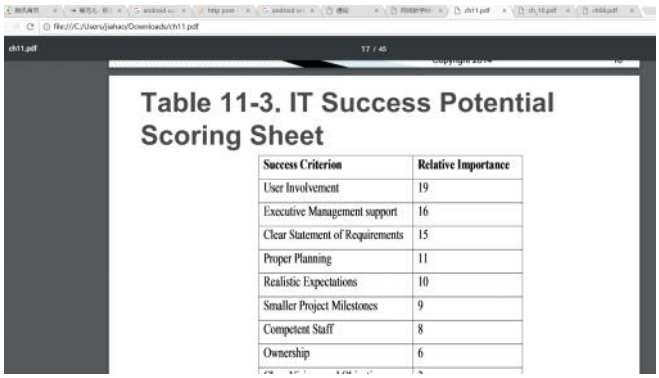


简答题

第十一章：分为负面风险和正面风险



要理解



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Risk Breakdown Structure

- A **risk breakdown structure** is a hierarchy of potential risk categories for a project

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Probability/Impact Matrix

- A **probability/impact matrix** or **chart** lists the relative probability of a risk occurring on one side of a matrix or axis on a chart and the relative impact of the risk occurring on the other

Top Ten Risk Item Tracking

- **Top Ten Risk Item Tracking** is a qualitative risk analysis tool that helps to identify risks and maintain an awareness of risks throughout the life of a project

Performing Quantitative Risk Analysis

- Large, complex projects involving leading edge technologies often require extensive quantitative risk analysis
- Main techniques include:
  - Decision tree analysis
  - Simulation
  - Sensitivity analysis

决策树牵扯计算

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Steps of a Monte Carlo Analysis

1. Assess the range for the variables being considered
2. Determine the probability distribution of each variable
3. For each variable, select a random value based on the probability distribution
4. Run a deterministic analysis or one pass through the model
5. Repeat steps 3 and 4 many times to obtain the probability distribution of the model's results

流程要记下来

Planning Risk Responses

- After identifying and quantifying risks, you must decide how to respond to them
- Four main response strategies for negative risks:
  - Risk avoidance
  - Risk acceptance
  - Risk transference
  - Risk mitigation

为什么要外购 选择题会出现

Figure 12-2. Contract Types Versus Risk

哪一种对卖家风险低 哪一种对买家风险低

Rfp rffq

Procurement Documents

- **Request for Proposals**: Used to solicit proposals from prospective sellers
  - A **proposal** is a document prepared by a seller when there are different approaches for meeting buyer needs
- **Requests for Quotes**: 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

Conducting Procurements

- Deciding whom to ask to do the work
- Sending appropriate documentation to potential
- sellers
- Obtaining proposals or bids
- Selecting a seller
- Awarding a contract

采购的过程要记一下

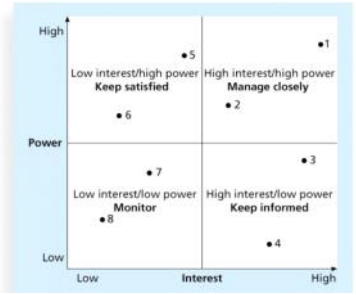
十三章

Table 13-1. Sample Stakeholder Register

Name	Position	Internal/ External	Project Role	Contact Information
Stephen	VP of Operations	Internal	Project sponsor	stephen@globaloil.com
Betsy	CFO	Internal	Senior manager, approves funds	betsy@globaloil.com
Chien	CIO	Internal	Senior manager, PM's boss	chien@globaloil.com
Ryan	IT analyst	Internal	Team member	ryan@globaloil.com
Lori	Director, Accounting	Internal	Senior manager	lori@globaloil.com
Sanjay	Director, Refineries	Internal	Senior manager of largest refinery	sanjay@globaloil.com
Debra	Consultant	External	Project manager	debra@gmail.com
Suppliers	Suppliers	External	Supply software	suppliers@gmail.com

这个表应该包含什么内容？

Figure 13-2. Power/Interest Grid



Stakeholder Engagement Levels

- Unaware: Unaware of the project and its potential impacts on them
- Resistant: Aware of the project yet resistant to change
- Neutral: Aware of the project yet neither supportive nor resistant
- Supportive: Aware of the project and supportive of change
- Leading: Aware of the project

Stackholder 给你一个项目 让你找出stackholder