Chapter 12: Project Procurement Management

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Learning Objectives

- Understand the importance of project procurement management and the increasing use of outsourcing for information technology (IT) projects

- Describe the work involved in planning procurements for projects, including determining the proper type of contract to use and preparing a procurement management plan, statement of work, source selection criteria, and make-or-buy analysis

- Discuss how to conduct procurements and strategies for obtaining seller responses, selecting sellers, and awarding contracts

Learning Objectives

- Understand the process of controlling procurements by managing procurement relationships and monitoring contract performance

- Describe the process of closing procurements

- Discuss types of software that are available to assist in project procurement management

Opening case

Maric对公司聘请协助完成一项重要的操作系统移植项目的外部咨询师的成本感到难以置信。这个咨询公司的建议书上说他们会提供有经验的、完成过类似项目的专家，如果4名咨询师全职工作，那么就可以在不超过6个月的时间内完成。9个月过去了，公司仍旧在付着高额的咨询费，而且半数咨询师也由新人替代了。其中一名新的咨询师刚从学校毕业两个月而且有相当糟糕的沟通能力。Maric 的同事们抱怨说他们在浪费时间来培训这些所谓的"有经验的专家"。Maric 同公司的采购经理就有关他们现在所面临问题的合同、费用和特别条款的事项进行了会谈。

使Maric感到沮丧的是合同解释起来困难重重。合同很长而且很显然是一个有法律背景的人撰写的。当她问到由于咨询公司没有遵循建议书，他们公司能采取什么措施时，采购经理书说建议书不是正式合同的一部分。Maric的公司付费是按服务时间和原料，不是按特定的可交付成果。没有任何条款规定咨询师的最低经验水平，也没有关于工作不能按时完成的任何惩罚条款。有一条终止条款，然而也只是意味着公司可以终止合同。Maric很奇怪为什么公司会签下这么一份拙劣的合同。是否有一个更好的方式来处理从外部公司的采购服务？

Opening case

【案例心得】

✓ 需要法律专业人士的参与

✓ 复杂的法律关系

　　往窗外扔瓶子，砸死人

　　✓ 故意

　　　　✓ 直接故意、间接故意

　　✓ 过失

　　　　✓ 过于自信、疏忽大意

　　✓ 不必负责

　　　　✓ 意外事件、不可抗力

✓ 定金

✓ 订金

哪一个能退?

Main Contents

1. The importance of project procurement management

2. Planning procurement management

3. Conducting procurement

4. Controlling procurement

5. Closing procurement

1. The importance of project procurement management

Procurement mean acquiring goods and services from an *outside source.*

- *purchasing, outsourcing*

Organizations or individuals who provide procurement services are referred to as *suppliers*, vendors, contractors, subcontractors, or sellers.

Experts predict that global spending on computer software and services will continue to grow.

Organizations could be seller and buyer !!

1. The importance of project procurement management

Debates on Outsourcing

- Some companies, such as Wal-Mart, prefer to do no outsourcing at all, while others do a lot of outsourcing. GM recently announced plans to switch from outsourcing 90% of IT service to only 10%

- Most organizations do some form of outsourcing to meet their IT needs and spend most money within their own country

- The U.S. temporary workforce continues to grow as people work for temporary job agencies so they can more easily move from company to company

1. The importance of project procurement management

IT Outsourcing Market Continues to Grow

- U.S. companies are transferring more work abroad, especially in the areas of IT infrastructure, application development and maintenance, and innovation processes

- India, China, and the Philippines are the preferred locations for outsourcing, and Latin America is growing in popularity

- A shortage of qualified personnel, not cost savings, is the top reason for global outsourcing of IT services

1. The importance of project procurement management

Goals:

- Access skills and technologies

- Reduce both fixed and recurrent costs

- Allow the client organization to focus on its core business

- Provide flexibility

- Increase accountability

Any drawbacks ?

1. The importance of project procurement management

Any drawbacks ?

- much / little control

- dependent on the suppliers (Apple)

- security for strategies or data

1. The importance of project procurement management

Project procurement management includes the processes required to acquire goods and services for a project from outside the performing organization.

4 main processes:

- Planning procurement management

- Conducting procurements

- Controlling procurements

- Closing procurements

Procurement management — 4 main processes

Planning

Process: Plan procurement management

Outputs: Procurement management plan, procurement statements of work, procurement documents, source selection criteria, make-or-buy decisions, change requests, project documents updates

Executing

Process: Conduct procurements

Outputs： Selected sellers, agreements, resource calendars, change requests, project management plan updates, project documents updates

Monitoring and controlling

Process: Control procurements

Outputs： Work performance information, change requests, project management plan updates, project documents updates, and organizational assets updates.

Closing

Process: Close procurements

Outputs： Closed procurements, organizational process assets updates

Project start

Project finish

2. Planning procurement management

Planning procurement involves identifying which project needs can best be met by using products or services outside the organization. *It involves deciding whether to procure, how to procure, what to procure, how much to procure and when to procure.*

Outputs:

Make-or-buy decision

If there is no need to buy products or services from outside the organization, then further procurement management is not needed.

2. Planning procurement management

Inputs:

- The project management plan

- Requirements documentation

- The risk register

- Activity resource requirements

- The project schedule

- Activity cost estimates

- The stakeholder register

- Enterprise environmental factors

- Organizational process assets

2. Planning procurement management

Types of contracts

3 broad categories of contracts:

- Fixed price or lump sum contracts

- Cost reimbursable contracts

- Time and material contracts

2. Planning procurement management

- Fixed price or lump sum contracts

① Firm-fixed-price (FFP) contract

② Fixed-price with economic price adjustment contract (FP-EPA)

③ Fixed-price incentive fee (FPIF)

The Point of Total Assumption (PTA) is the cost at which the contractor assumes total responsibility for each additional dollar of contract cost.

PTA = (ceiling price – target price)/government share + target cost

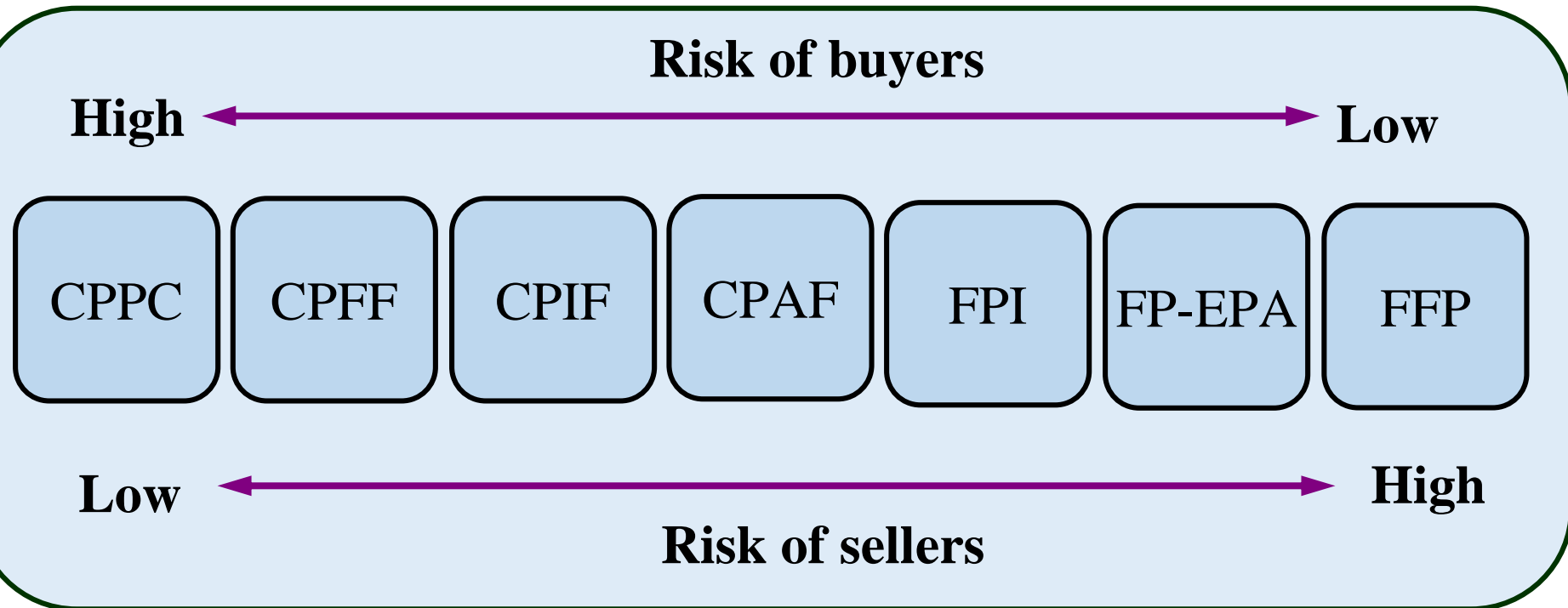# 2. Planning procurement management

- Cost reimbursable contracts

① Cost plus incentive fee (CPIF) contract

② Cost plus fixed fee (CPFF) contract

③ Cost plus award fee (CPAF) contract

④ Cost plus percentage of costs (CPPC) contract

2. Planning procurement management

- Time and material contracts is a mixture of fixed price contract and cost reimbursable contract.

- Unit price contract is a contract in which the buyer pays the supplier according to the unit price of products or services

2. Planning procurement management

Time and material contracts

Unit-price contracts

2. Planning procurement management

Contract Clauses

Contracts should include **specific clauses** to take into account issues unique to the project.

Can require various educational or work experience for different pay rights.

A **termination clause** is a contract clause that allows the buyer or supplier to end the contract.

2. Planning procurement management

Tools and techniques for planning procurement management

- **Make-or-buy analysis:** General management technique used to determine whether an organization should make or perform a particular product or service inside the organization or buy from someone else.

- **Expert judgment**

- **Market research**

2. Planning procurement management

Make-or-Buy Example

Assume you can lease an item you need for a project for $800/day.

To purchase the item, the cost is $12,000 plus a daily operational cost of $400/day.

How long will it take for the purchase cost to be the same as the lease cost?

2. Planning procurement management

Make-or Buy Solution

Set up an equation so both options, purchase and lease, are equal:

In this example, use the following equation.

Let d be the number of days to use the item:

$12,000 + $400d = $800d

Subtracting $400d from both sides, you get:

$12,000 = $400d

Dividing both sides by $400, you get:

d = 30

If you need the item for more than 30 days, it is more economical to purchase it.

2. Planning procurement management

Make-or-buy decision

自制的理由
- 生产成本低
- 无适合的供应商
- 保证充足的供应
- 利用过剩的劳动力、发挥边际效用
- 获得需求的数量
- 排除供应商间的勾结
- 在不对供应商作禁止性许诺的情况下获得特殊的产品
- 维持组织的才能
- 保护专利，保证质量
- 增加／维持公司的规模

外购的理由
- 外购成本低
- 保留供应商的许诺
- 获得技术和管理能力
- 生产能力不足
- 降低存货成本
- 保证供应商的灵活性和可替代性
- 互惠性
- 产品受到专利获商业秘密的保护
- 在重要的商业环节中享有免费管理

2. Planning procurement management

Procurement management plan is a document that describes how procurement processes will be managed, from developing documentation for making outside purchases or acquisitions to contract closure.

What contents do you think should be included in procurement management plan?

2. Planning procurement management

✓ 使用何种类型合同的指南

✓ 标准采购文档或模板

✓ 生成合同工作分解结构、工作说明书和其他采购文档指南

✓ 项目组和相关部门的角色和职责

✓ 评估卖方的指南

✓ 管理多供方的建议

✓ 协调采购决策的过程

✓ 采购相关的约束和假设条件

✓ 采购提前期

✓ 采购的风险减缓策略

✓ 确认符合条件和有意向卖方的清单

✓ 辅助评估卖方和管理合同的采购准则

2. Planning procurement management

Contract Statement of Work (SOW)

- A **statement of work** is a description of the work required for the procurement

- If a SOW is used as part of a contract to describe only the work required for that particular contract, it is called a **contract statement of work**

- A SOW is a type of scope statement

- A good SOW gives bidders a better understanding of the buyer's expectations

2. Planning procurement management

SOW Includes:

- Scope of work

- Location of work

- Period of performance

- Deliverables schedule

- Applicable standards

- Acceptance criteria

- Special requirements

2. Planning procurement management

Figure 12-3. Statement of Work (SOW) Template

Statement of Work (SOW)

I. **Scope of Work:** Describe the work to be done in detail. Specify the hardware and software involved and the exact nature of the work.

II. **Location of Work:** Describe where the work must be performed. Specify the location of hardware and software and where the people must perform the work.

III. **Period of Performance:** Specify when the work is expected to start and end, working hours, number of hours that can be billed per week, where the work must be performed, and related schedule information.

IV. **Deliverables Schedule:** List specific deliverables, describe them in detail, and specify when they are due.

V. **Applicable Standards:** Specify any company or industry-specific standards that are relevant to performing the work.

VI. **Acceptance Criteria:** Describe how the buyer organization will determine if the work is acceptable.

VII. **Special Requirements:** Specify any special requirements such as hardware or software certifications, minimum degree or experience level of personnel, travel requirements, and so on.

2. Planning procurement management

Procurement documents

The project team often uses *standard forms* and *expert judgment* as **tools** to help create relevant procurement documents and evaluation criteria.

Two common examples of procurement documents include a **Request for Proposal (RFP)** and a **Request for Quote (RFQ)**.

2. Planning procurement management

Procurement documents

- **Request for Proposal (RFP)** is a document used to solicit proposals from prospective suppliers.

  - A **proposal** is a document prepared by a seller when there are different approaches for meeting buyer needs

- **Request for Quote (RFQ)** is a document 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

2. Planning procurement management

Figure 12-4. Request for Proposal (RFP) Template

Request for Proposal Template

I.   Purpose of RFP

II.   Organization's Background

III. Basic Requirements

IV.   Hardware and Software Environment

V.   Description of RFP Process

VI.   Statement of Work and Schedule Information

VII. Possible Appendices

   A. Current System Overview

   B. System Requirements

   C. Volume and Size Data

   D. Required Contents of Vendor's Response to RFP

   E. Sample Contract

2. Planning procurement management

Source selection criteria

Organizations use criteria to rate or score proposals, and they often assign a weight to each criterion to indicate its importance.

- Technical approach (30%)

- Management approach (30%)

- Past performance (20%)

- Price (20%)

3. Conducting procurements

After planning, next:

- Deciding whom to ask to do the work

- Sending appropriate documentation to potential sellers

- Obtaining proposals or bids

- Selecting a seller

- Awarding a contract

Tools:

- A bidders' conference

- Source selection

3. Conducting procurements

- Organizations can advertise to procure goods and services in several ways:

    - ❑ Approaching the preferred vendor

    - ❑ Approaching several potential vendors

    - ❑ Advertising to anyone interested

- A bidders' conference can help clarify the buyer's expectations.

3. Conducting procurements

Figure 12-5. Sample Proposal Evaluation Sheet

Criteria	Weight	Proposal 1		Proposal 2		Proposal 3, etc.	
		Rating	Score	Rating	Score	Rating	Score
Technical approach	30%						
Management approach	30%						
Past performance	20%						
Price	20%						
Total score	100%						

3. Conducting procurements

Seller Selection

- Organizations often do an initial evaluation of all proposals and bids and then develop a short list of potential sellers for further evaluation.

- Sellers on the short list often prepare a best and final offer (BAFO).

- Final output is a contract signed by the buyer and the selected seller.

4. Controlling procurements

Controlling procurements ensures that the seller's performance meets contractual requirements.

- Contracts are legal relationships, so it is important that legal and contracting professionals be involved in writing and administering contracts.

- It is critical that project managers and team members watch for **constructive change orders**, which are oral or written acts or omissions by someone with actual or apparent authority that can be construed to have the same effect as a written change order

4. Controlling procurements

Suggestions for Change Control in Contracts

- Changes to any part of the project need to be reviewed, approved, and documented by the same people in the same way that the original part of the plan was approved.

- Evaluation of any change should include an impact analysis. How will the change affect the scope, time, cost, and quality of the goods or services being provided?

- Changes must be documented in writing. Project team members should also document all important meetings and telephone phone calls.

4. Controlling procurements

Suggestions for Change Control in Contracts

- Project managers and teams should stay closely involved to make sure the new system will meet business needs and work in an operational environment
- Have backup plans
- Use tools and techniques, such as a contract change control system, buyer-conducted performance reviews, inspections and audits, and so on

5. Closing procurements

- Involves completing and settling contracts and resolving any open items

- The project team should:
    - ❑ Determine if all work was completed correctly and satisfactorily
    - ❑ Update records to reflect final results
    - ❑ Archive information for future use

- The contract itself should include requirements for formal acceptance and closure

5. Closing procurements

Tools:

- Procurement audits

- Negotiated settlements

- A records management system

Outputs:

- Closed procurements

- Updates to organizational process assets

Using Software to Assist in Project Procurement Management

- Word processing software helps write proposals and contracts, spreadsheets help evaluate suppliers, databases help track suppliers, and presentation software helps present procurement-related information

- E-procurement software does many procurement functions electronically

- Organizations also use other Internet tools to find information on suppliers or auction goods and services

Case Outcome

✓ **Marie** 阅读合同后发现有一款提前终止合同的条款

✓ 由于项目仍然需要咨询，**Marie**重新进行采购

✓ 新合同要求

- 工作说明书

- 特定产出物

- 顾问经验水平的最低要求

✓ 激励奖金

Chapter Summary

- Project procurement management involves acquiring goods and services for a project from outside the performing organization

- Processes include:

    - Plan procurement management

    - Conduct procurements

    - Control procurements

    - Close procurements