

Chapter 12: Project Procurement Management

Information Technology Project
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Note: See the text itself for full citations.



Learning Objectives

- ▶ Understand the importance of project procurement management and the increasing use of outsourcing for information technology 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 what is involved in conducting procurements and strategies for obtaining seller responses, selecting sellers, and awarding contracts

Learning Objectives (continued)

- ▶ Understand the process of administering procurements by managing procurement relationships and monitoring contract performance
- ▶ Describe the process of closing procurements
- ▶ Discuss types of software available to assist in project procurement management

Importance of Project Procurement Management

- ▶ **Procurement** means acquiring goods and/or services from an outside source
- ▶ Other terms include purchasing and outsourcing
- ▶ Experts predict that global spending on computer software and services will continue to grow
- ▶ People continue to debate whether offshore outsourcing helps their own country or not

Why Outsource?

- ▶ To reduce both fixed and recurrent costs
- ▶ To allow the client organization to focus on its core business
- ▶ To access skills and technologies
- ▶ To provide flexibility
- ▶ To increase accountability

Contracts

- ▶ A **contract** is a mutually binding agreement that obligates the seller to provide the specified products or services and obligates the buyer to pay for them
- ▶ Contracts can clarify responsibilities and sharpen focus on key deliverables of a project
- ▶ Because contracts are legally binding, there is more accountability for delivering the work as stated in the contract
- ▶ A recent trend in outsourcing is the increasing size of contracts

What Went Wrong?

- ▶ Companies often change their minds about procurement; for example, JPMorgan Chase announced a seven-year, \$5 billion deal to outsource much of its data processing to IBM, but they revoked the contract less than two years into its existence because the procurement plan no longer fit their business strategy
- ▶ The Australian Computer Society says sending work offshore may lower the number of students entering IT courses, deplete the number of skilled IT professionals, and diminish the nation's strategic technology capability
- ▶ Procurement can also cause security problems, including the protection of intellectual property, integrity of data, and the reliability of infrastructure in offshore locations

Project Procurement Management Processes

- ▶ **Project procurement management:** acquiring goods and services for a project from outside the performing organization
- ▶ Processes include:
 - **Planning procurements:** determining what to procure, when, and how
 - **Conducting procurements:** obtaining seller responses, selecting sellers, and awarding contracts
 - **Administering procurements:** managing relationships with sellers, monitoring contract performance, and making changes as needed
 - **Closing procurements:** completing and settling each contract, including resolving of any open items

Figure 12-1. Project Procurement Management Summary

Planning

Process: **Plan procurements**

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

Executing

Process: **Conduct procurements**

Outputs: Selected sellers, procurement contract award, resource calendars, change requests, project management plan updates, project document updates

Monitoring and Controlling

Process: **Administer procurements**

Outputs: Procurement documentation, organizational process asset updates, change requests, project management plan updates

Closing

Process: **Close procurements**

Outputs: Closed procurements, organizational process asset updates

Project Start

Project Finish

Planning Procurements

- ▶ Identifying which project needs can best be met by using products or services outside the organization
- ▶ If there is no need to buy any products or services from outside the organization, then there is no need to perform any of the other procurement management processes

What Went Right?

- ▶ Several organizations, such as The Boots Company PLC in England, outsource their IT services to save money compared with the cost of running the systems themselves
- ▶ Carefully planning procurement can also save millions of dollars, as the U.S. Air Force did by using a unit pricing strategy for a large office automation project

Tools and Techniques for Planning Purchases and Acquisitions

- ▶ **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
- ▶ Often involves financial analysis
- ▶ Experts, both internal and external, can provide valuable inputs in procurement decisions

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?

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

Types of Contracts

- ▶ Different types of contracts can be used in different situations:
 - **Fixed price** or **lump sum** contracts: involve a fixed total price for a well-defined product or service
 - **Cost reimbursable** contracts: involve payment to the seller for direct and indirect costs
 - **Time and material** contracts: hybrid of both fixed price and cost reimbursable contracts, often used by consultants
 - **Unit price** contracts: require the buyer to pay the seller a predetermined amount per unit of service
- ▶ A single contract can actually include all four of these categories if it makes sense for that particular procurement

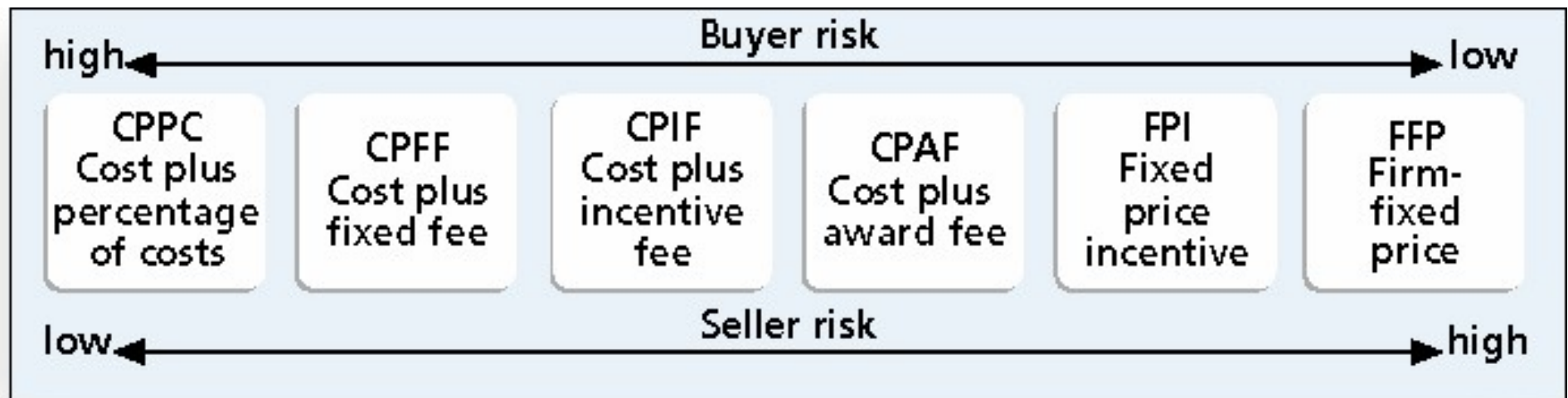
Point of Total Assumption

- ▶ The **Point of Total Assumption (PTA)** is the cost at which the contractor assumes total responsibility for each additional dollar of contract cost
- ▶ Contractors do not want to reach the point of total assumption because it hurts them financially, so they have an incentive to prevent cost overruns
- ▶ The PTA is calculated with the following formula:
$$\text{PTA} = (\text{ceiling price} - \text{target price}) / \text{government share} + \text{target cost}$$

Cost Reimbursable Contracts

- ▶ **Cost plus incentive fee (CPIF):** the buyer pays the supplier for allowable performance costs plus a predetermined fee and an incentive bonus
- ▶ **Cost plus fixed fee (CPFF):** the buyer pays the supplier for allowable performance costs plus a fixed fee payment usually based on a percentage of estimated costs
- ▶ **Cost plus percentage of costs (CPPC):** the buyer pays the supplier for allowable performance costs plus a predetermined percentage based on total costs

Figure 12-2. Contract Types versus Risk



Contract Clauses

- ▶ Contracts should include specific clauses that take into account issues that are 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

Procurement Management Plan

- ▶ Describes how the procurement processes will be managed, from developing documentation for making outside purchases or acquisitions to contract closure
- ▶ Contents vary based on project needs

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

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.

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

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**

Evaluation Criteria

- ▶ It's important to prepare some form of evaluation criteria, preferably before issuing a formal RFP or RFQ
- ▶ Beware of proposals that look good on paper; be sure to evaluate factors, such as past performance and management approach
- ▶ Can require a technical presentation as part of a proposal

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

Approaches for Procurement

- ▶ 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

Source Selection

- ▶ Evaluating proposals or bids from sellers
- ▶ Choosing the best one
- ▶ Negotiating the contract
- ▶ Awarding the contract

Figure 12-5. Sample Proposal Evaluation Sheet

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

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

Administering 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

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

Suggestions for Change Control in Contracts (continued)

- ▶ 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

Best Practice

- ▶ Accenture developed a list of best practices from experienced outsourcers throughout the world:
 1. Build in Broad Business Outcomes Early and Often
 2. Hire a Partner, Not Just a Provider
 3. It's More Than a Contract, It's a Business Relationship
 4. Leverage Gain-Sharing
 5. Use Active Governance
 6. Assign a Dedicated Executive
 7. Focus Relentlessly on Primary Objectives

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

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

Chapter Summary

- ▶ Project procurement management involves acquiring goods and services for a project from outside the performing organization
- ▶ Processes include:
 - Plan procurements
 - Conduct procurements
 - Administer procurements
 - Close procurements