

Project Procurement Management

Procurement

- Involves planning for all the resources - people, goods and services - required by the project.
- It includes:
 - selection of goods and services,
 - writing and evaluating tenders and estimates and
 - negotiating contracts to obtain goods and services for the project.
- Most organizations do some form of outsourcing to meet their IT needs and spend most money within their own country

Activity from the WBS	Selection process (estimates, tender, evaluation, contracts)	Expert to be consulted	Person responsible for managing	When needed
Purchase of cabling	Standard estimates process.	Purchasing dept.	Project Manager	28-03-03
Contract for lease of hardware	Standard formal tender, evaluation, selection and contract	Finance dept.	Project Manager	28-04-03

Why Outsource?

- To reduce both fixed and recurring costs
- To allow the client organization to focus on its core business
- To access skills and technologies
- To increase accountability (how?)

Contracts

- **A contract**
 - 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

Procurement Management Processes

- Processes include
 - **Planning purchases and acquisitions:** determining what to procure, when, and how
 - **Planning contracting:** describing requirements for the products or services desired from the procurement and identifying potential sources or **sellers** (contractors, suppliers, or providers who provide goods and services to other organizations)
 - **Requesting seller responses:** obtaining information, quotes, bids, offers, or proposals from sellers, as appropriate
 - **Selecting sellers:** choosing from among potential suppliers through a process of evaluating potential sellers and negotiating the contract
 - **Administering the contract:** managing the relationship with the selected seller
 - **Closing the contract:** completing and settling of each contract

Planning Purchases and Acquisitions

- 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

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?

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 would be more economical to purchase it

Types of Contracts

- Different types of contracts can be used in different situations:
 - Fixed price or lump sum:
 - involve a fixed total price for a well-defined product or service
 - Cost reimbursable:
 - involve payment to the seller for direct and indirect costs
 - Time and material contracts:
 - hybrid of both fixed price and cost reimbursable, 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 three of these categories, if it makes sense for that particular procurement

Cost Reimbursable Contracts

- Cost plus incentive fee (CPIF):
 - the buyer pays the supplier for allowable performance costs plus 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

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
- Contract 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

Statement of Work (SOW)

Template

- I. **Scope of Work:** Describe the work to be done to 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.

Planning Contracting

- Involves preparing several documents needed for potential sellers to prepare their responses and determining the evaluation criteria for the contract award
 - **Request for Proposals (RFP):** 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 (RFQs):** 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

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 like past performance and management approach
 - Can require a technical presentation as part of a proposal

Requesting Seller Responses

- Deciding whom to ask to do the work, sending appropriate documentation to potential sellers, and obtaining proposals or bids
- 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

Selecting Sellers

- Also called source selection
- Involves
 - evaluating proposals or bids from seller
 - choosing the best one
 - negotiating the contract
 - awarding the contract

Sample Proposal Evaluation Sheet

		Proposal 1		Proposal 2		Proposal 3	
Criteria	Weight	Rating	Score	Rating	Score	Rating	Score
Technical Approach	30%						
Management Approach	30%						
Past Performance	20%						
Price	20%						
Total Score	100%						

Seller Selection Process

- Organizations often do an initial evaluation of all proposals/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 the Contract

- 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
- Many project managers ignore contractual issues, which can result in serious problems

Suggestions on Change Control for 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
- Project managers and teams just stay closely involved to make sure the new system will meet business needs and work in an operational environment
- Have backup plans

Closing the Contract

- Involves completion and settlement of contracts
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