

Project Procurement and Supply Chain

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PMG 433

Lecture 5



Foundational knowledge of Procurement

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Course Agenda

Chapter

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1. To discuss the Scope of Procurement.
 2. To overview the procurement process.
 3. To understand the factors affecting the procurement.
 4. To differentiate between the two meanings of procurement and purchasing
 5. To explain the roles of procurement team members.
 6. To understand the relationship between Supply Chain and purchasing.
 7. To understand more about sustainable procurement and investment recovery.

Procurement Key Terms

- Scrap materials
- Single sourcing
- Sustainable procurement
- Supplier audits
- Near-sourcing
- Obsolete materials
- Procurement (purchasing)
- Supplier development
- Supplier scorecards
- Supply management
- Total cost of ownership (TCO)
- Waste materials
- Multiple sourcing
- Bribes
- Excess (surplus) materials
- Global procurement (sourcing)
- Investment recovery

- **Refers** to the raw materials, component parts, and supplies bought from outside organizations to support a company's operations
 - Procurement costs often range between 60%-80% of an organization's revenues
 - Currently has a more strategic orientation in many organizations
- ❑ **Procurement manager may have responsibility for:**
- Reducing cycle times
 - Playing an integral role in product development
 - Generating additional revenues through collaboration with the marketing department

- **Effective Procurement** is critical for effective project management.
- Depending upon the specific type of project being managed, over 50 percent of the total project cost can be attributed to parts, supplies, and services procured, and for many high-technology projects, this procurement fraction can approach 90 percent.
- Further, because of long lead times, procured items nearly always define the critical path through the project schedule network. And dependence upon markets for procured items can create project management difficulties in terms of agency (e.g., information asymmetries, incentives) and coordination (e.g., redundant project management organizations, inter-organizational communications).

- In short, if a project manager is not managing procurement, then he or she is only managing 50 percent or less of the project as a whole.
- Despite this critical role, however, the term “procurement” remains broadly defined and is used to describe a variety of entities (e.g., functions, organizations, systems, processes).
- The term is also evolving through time, as the activities associated with procurement have become increasingly important to enterprise success.
- **For instance**, procurement was once descriptive of the simple clerical activities associated with purchasing well-specified items, but it has evolved in some organizations to describe instead strategic partnering efforts made by senior executives.

- In the former case, all that is required is buying an item that has already been specified, from a vendor that has already been selected, for a purpose that has already been determined (e.g., a part to be installed on an assembly line).
- But procurement also involves the activities associated with deciding whether an item will be made in-house or purchased from outside vendors (i.e., the make/buy analysis), and deciding from which vendor—or collection of vendors—to purchase an item is commonly included within the responsibilities assigned to procurement organizations

- **Procurement** further represents a central activity in terms of supply chain management, which seeks to integrate the processes and activities of vendors, suppliers, producers, and customers, and procurement executives are routinely relied upon to shape enterprise strategy based on opportunities to form partnerships, alliances, and joint ventures with “vendors.”
- As implied, the project management professional has a number of different lenses through which to view procurement.

- **For instance**, procurement has long been referred to in functional terms, which depict a division of labour (e.g., buying items vs. making them), specific job tasks (e.g., market research, obtaining vendor quotations), and worker skills (e.g., contract interpretation, negotiation).
- As another instance, procurement is also referred to in organizational terms, which depict a specific department or other organizational entity in the enterprise, complete with its own managerial hierarchy, worker roles, and organizational responsibilities.

- **Procurement** is further referred to in terms of a system, which involves examination of its inputs (e.g., requirements, information), outputs (e.g., purchase orders, received vendor items), transfer function (e.g., vendor selection, vendor management), and environment (e.g., corporation, industry).
- **To describe procurement in terms of a process**—actually is , a set of processes interlinking vendors, producers, and customers along the supply chain—with its attendant work activities (e.g., requirements determination, source selection), actors (e.g., market researchers, buyers), organizations (e.g., purchasing, contract management), and technologies (e.g., electronic catalogues, communication networks).

What is Procurement?

- **Procurement** – The process of acquiring and evaluating goods and services beginning with determining needs through product utilization, conclusion of contracted service, or until the end of the useful life of a capital equipment item.
- **Purchasing** – The process of “buying:” placing an order, receiving a product or service, and paying the supplier.

What is Procurement?

- **Procurement** involves a more comprehensive scope of activities than does “purchasing”.
- The term “**purchasing**” is most similar to the term buying.
- Those with procurement responsibilities have two primary concerns: to identify and secure the products and services that will best allow the organization to meet the wants and needs of its customers, and to obtain them at a fair price.

What is Procurement?

- There is typically a direct relationship between the quality of a product or service and the price that the organization will pay for it
- When a “Do or Buy” analysis is undertaken, the buyer considers the availability of alternatives (first), quality considerations (second) and, finally cost.
- The final step in the procurement process is an evaluation of the process.
- A purchasing system whose primary goal is to get needed products delivered on time at the lowest cost would be considered a Price-Conscious Purchasing system.

Objectives of Effective Procurement

- Obtain the right **product** or **service** at the right **price** from the right **source** in the right **quantity** at the right **time**.

Overview of Procurement Process

- 1: Identify Need for Product/Service
- 2: Determine Quality Requirements
- 3: Conduct “**Make (Do) or Buy Analysis**”
 - **Make (do) or buy analysis** – A systematic process to determine whether products should be prepared on-site or purchased from an external supply source. Sometimes called “Do/Buy Analysis” when on-site versus supplier-provided services are analyzed.
- 4: Determine Quantity to Purchase

- 5: Identify Alternative Supplier Sources
- 6: Determine Sources (Supplier) for Order
- 7: Order Product/Service
- 8: Receive Product or Service
- 9: Pay for Product or Service
- 10: Review Supplier Performance and Ordering Process
- 11: Evaluate Procurement Process

■ Internal Factors

- Skills and abilities of their staff members
- Anticipated business volume
- Available storage space for products
- Timing requirements for service deliveries
- Property's ability to pay on a timely basis
- Interest of owners and managers to participate in non-traditional purchasing methods

■ External Factors

- Consumer demands
- Distributions channels (e-commerce)
- Global trade conditions
- Governmental regulations
- Environmental concerns
- Competitors processes
- **Benchmarking** – A search for best practices and an understanding of how they are achieved in efforts to determine how well an organization is doing and to learn ways to become even better.

- **Purchasing director** – The top-level manager in a large organization with responsibilities for that organization's procurement function; also called purchasing manager.
- **Purchasing agent** – A staff member in a large organization with responsibilities to purchase specific lines of products, services, supplies, or equipment; also called buyer.

Roles of Procurement Team Members

- **Purchasing system (centralized)** – A purchasing system in which all (or most) purchases are made by the designated purchasing agent for the entire organization
- **Purchasing system (decentralized)** – A purchasing system in which all (or most) purchases needed by a department are made by department heads or someone within their department who is designated to do so.

Roles of Procurement Team Members

- **Staff positions** – Organizational roles (positions) occupied by technical, advisory specialists such as purchasing agents who provide advice to, but who do not make decisions for, those in the chain of command.
- **Line positions** – Organizational roles (positions) occupied by decision-makers in the chain of command. Line decision-makers have authority that flows from one level of management to the next.

Roles of Procurement Team Members

- **Issue (product)** – The task of transferring products from storage areas to user departments in quantities that enable user personnel to meet production needs.
- **Delivery invoice** – A document signed by an authorized representative of the organization's operation when products are delivered to transfer product ownership to the property. The delivery invoice is the source of supplier charges to the property.
- **Purchase order** – A document used by the organization's operation to solicit prices from suppliers, and to inform the appropriate supplier that a shipment should be delivered.

Evolution of Procurement Systems

- **Phase 1:** Price-Conscious Purchasing
- **Phase 2:** Price and Quality Purchasing
- **Phase 3:** Purchaser-Supplier “Partnerships”
- **Phase 4:** Integrative Procurement

- **Speculative purchasing** – The act of making decisions about the quantities of products to purchase based upon forecasted future prices.
- If prices are judged to be increasing, larger quantities of items may be ordered.
- Conversely, if prices are judged to be decreasing, smaller quantities with more frequent deliveries may be purchased.

- **Outsourcing** – The act of purchasing a product or service from an external provider that could, alternatively, be provided by the organization's own employees.

- **Outsourcing** –Is a growing practice within the IT industry, and it is important to appreciate the reasons it is adopted:
 - 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.

- **Intermediaries** – All organizations and/or individuals involved in the flow of products from their source to the buyer; often called “middle-man.”
- **Basic functions include:**
 - Business functions
 - Logistical functions
 - Facilitating functions

Types of Intermediaries:

- **Agent** – An intermediary who does not take title to the products and who makes a profit from commissions and fees paid for services provided
- **Broker** – An independent organization or individual who negotiates a contract between a buyer and a seller.
- **Merchant wholesaler** – An intermediary that purchases products handled and who generates a profit from the sale of these items; see full-line merchant wholesaler and limited-line merchant wholesaler.

Types of Intermediaries:

- **Distributor** – An intermediary who sells specific (branded) products within a specifically-defined sales territory.
- **Retailer (cash and carry)** – An outlet that sells products to organizations and to individual consumers at retail prices.

Distribution Channels

- **Indirect Channels of distribution** – Distribution channels involving intermediaries who perform channel functions between the producer of the item and the organization.
- **Direct Channels of distribution** – A distribution channel in which the producer and the organization interact directly with each other.

- **Vertical distribution system** – A distribution system in which one or more functions normally performed by an intermediary is undertaken by the organization.

Channel Flow Begins With the Order

- **Traditional Method**
- **Alternative Methods**
- **Contract leakage** – A term referring to the purchase of products “out of contract” by a property whose product purchase needs can be addressed in group purchase contracts with affiliated properties.
- **Group buying** – A purchasing system in which orders for products of a specified quality are combined for participating properties. Suppliers receiving the order deliver products to and receive payment from the participating properties

- **Logistics** – Activities designed to best assure that the correct amount of the correct products are at the correct place at the correct time, and that they were moved there at lowest possible cost.
- **Logistics management** – The practice of planning and implementing the cost-effective flow of raw products, in-process inventory, and finished products from product source to the product user while satisfying customer requirements.
- **Total logistics cost** – All costs related to transportation, handling and warehousing, inventory, stock outs, order processing, and return of unacceptable products.

- **Internal customers** – The organization's employees who use the products which are purchased.
- **Distribution centers** – Locations used by multi-unit organizations to store products, consolidate products from different suppliers, and sort them into shipments to specific properties.
- **Freight forwarders** – Businesses that accumulate small product shipments into larger lots, and then contract with a carrier to transport them to, for example, a local merchant wholesaler; also called freight consolidator.

- Refers to the integration of social and environmental considerations into all stages of the purchasing process
- Goal is to minimize the impact of procurement activities on human health and the environment

- Identifies opportunities to recover revenues or reduce costs associated with:
 - **Scrap**
 - **Surplus**
 - **Obsolete**
 - **Waste materials**
- Often the responsibility of the procurement manager
- Can provide an organization the opportunity to simultaneously increase revenues (through cost reduction) while addressing selected environmental considerations

- Even the best managed organizations generate:
 - **Excess (surplus)**
 - Stock materials that exceed reasonable requirements
 - **Obsolete**
 - Materials not likely to ever be used again
 - **Scrap**
 - Materials that are no longer serviceable, have been discarded or are a by-product of the production process
 - **Waste**
 - Materials that have been spoiled, broken, or otherwise rendered unfit for further use or reclamation (have no economic value)

Summary of Learning Objectives

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Essential Reference

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Thank You