

LINCS: Leveraging, Integrating, Networking, Coordinating Supplies

SUPPLY MANAGEMENT AND PROCUREMENT CERTIFICATION TRACK

for Entry- to Mid-Level Professionals in Supply Chain Management

Developed by the LINCS in Supply Chain Management Consortium, comprised of the following educational institutions:

Broward College (Lead Institution)
Columbus State Community College
Essex County College
Florida State College at Jacksonville
Georgia Institute of Technology
Harper College

Long Beach City College Northwestern University Rutgers, the State University of New Jersey San Jacinto College St. Petersburg College Union County College

In partnership with the Council of Supply Chain Management Professionals.





This material was funded in whole by a \$24.5M TAACCCT grant awarded by the U.S. Department of Labor's Employment and Training Administration to the LINCS Consortium.



Title Page

LINCS in Supply Chain Management Consortium Broward College, Lead Institution 1930 S.W. 145th Avenue, Suite 224 Miramar, FL 33027 (954) 201-8440

Author: LINCS in Supply Chain Management Consortium

Title: Supply Management and Procurement Certification Track

Release Date: 03/27/2017

Version: v2.26

Website: www.LINCSeducation.org

To learn more about LINCS, visit www.LINCSeducation.org

Content was developed and produced by LINCS in Supply Chain Management Consortium and is licensed under a Creative Commons Attribution 4.0 International License. Under this license, any user of this content herein must provide proper attribution as follows:

Use of this document as a bibliographic reference should employ the following citation: *Supply Management and Procurement Certification Track.* LINCS in Supply Chain Management Consortium. March 2017. Version: v2.26. www.LINCSeducation.org.

Disclaimer: The photos used within this document may only be used with this content. The license does not include copying photos for use with any other content.



Unless otherwise noted, this work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.



Preface

The information in this Preface is an overview of LINCS in Supply Chain Management.

Supply chain management (SCM) as a paradigm is nothing new to business and industry. However, academia and employers have recently seen SCM become a major focus. There are currently several industry-recognized certifications in SCM, largely focused on individuals with experience in management through the executive level. The curriculum in the certification tracks listed below is directed at those who have entry- to mid-level experience.

The curriculum for these certification tracks include eight topics in SCM:

- 1. SCM Principles
- 2. Customer Service Operations
- 3. Transportation Operations
- 4. Warehousing Operations
- 5. Supply Management and Procurement
- 6. Inventory Management
- 7. Demand Planning
- 8. Manufacturing and Service Operations

Each certification track can be taken on its own to earn one certification; multiple certifications can be earned in any order. Each certification track covers the basic elements of the primary certification track, which allows the learner to obtain a foundational understanding of the best practices and processes associated with each topic.

Common Learning Blocks accompany each certification track, providing an overview of SCM. It is highly recommended that both the standalone Common Learning Blocks document and the certification track document be thoroughly reviewed **prior** to taking a national certification examination.

The content provided within this certification track relates specifically to **Supply Management and Procurement**. The national certification examination will include questions on both the **Supply Management and Procurement** content and the **Common Learning Blocks** content.*

^{*}NOTE: Materials listed under *Optional Supplemental Resources* sections (in some certification track documents only) are not included on the national certification examination.



Supply Management and Procurement Certification Track Table of Contents

Title Page	2
Preface	3
Supply Management and Procurement Certification Track Table of Contents	4
Abstract	9
Learning Block 1: Supply Management and Procurement Overview	10
Learning Block 1 Description	10
Learning Block 1 Learning Objectives	10
Unit 1: What is Purchasing and Procurement?	10
A Procurement Example	11
The Importance of Procurement	12
Unit 2: Procurement Functions	13
Supporting Operational Requirements	14
Working with Other Functional Groups	15
Partnering with Suppliers	17
Supporting Organizational Goals and Objectives	19
Developing Sourcing Strategies	20
Unit 3: Roles and Activities Performed by the Procurement Function	21
Unit 4: Types of Buying Organizations and Types of Products and Services Purchased	22
Types of Buying Organizations	22
Types of Products and Services Purchased	23
Unit 5: Procurement Process Overview	24
Identifying the Need	25
Describing the Product or Service Needed	25
Searching for Potential Suppliers	25
Evaluating and Selecting Suppliers	25
Request for Price and Request for Quote Processes	26
Order Placement	26
Evaluating Performance	26
Learning Block 1 Summary	26
Learning Block 1 Practice Questions	27
Learning Block 2: Strategic Sourcing	29
Learning Block 2 Description	29
Learning Block 2 Learning Objectives	29
Unit 1: Strategic Sourcing	29
Procurement and Organizational Strategy	30



	Turning Strategic Goals into Procurement Objectives	. 31
	Unit 2: Portfolio Analysis	. 31
	Transaction Quadrant	. 33
	Market Quadrant	. 34
	Leverage Quadrant	. 34
	Critical Quadrant	. 35
	Unit 3: Strategic Sourcing Process	. 35
	Define Business Requirements Using Commodity Strategies	. 35
	Define the Strategic Importance of the Product or Service Procured	. 36
	Determine Business and Procurement Requirements, Spend, and Conduct a Market Analysis	. 36
	Set Goals and Conduct a Gap Analysis	. 37
	Develop Sourcing Strategies and Objectives	. 37
	Carry out the Strategy	. 38
	Monitor Results and Review Performance	. 38
	Unit 4: Types of Sourcing Strategies and Tactics	. 38
	Supply Base Rationalization	. 39
	Total Quality Management (TQM) with Suppliers	. 39
	Sourcing Globally	. 39
	Long-Term Supplier Relationships and Supplier Development	. 40
	Early Supplier Involvement in Design	. 40
	Total Cost of Ownership (TCO)	. 41
	Electronic Procurement (e-procurement)	. 42
	Unit 5: Evolving Sourcing Strategies and Best Practices	. 42
	Integrating Marketing and Sourcing	. 42
	Co-Locating Procurement Individuals with Internal Functions	. 42
	Learning Block 2 Summary	. 43
	Learning Block 2 Practice Questions	. 43
Le	earning Block 3: Supplier Identification and Evaluation	. 45
	Learning Block 3 Description	. 45
	Learning Block 3 Learning Objectives	. 45
	Unit 1: Overview of Supplier Identification and Evaluation	. 45
	Inclusion and Exclusion for Suppliers	. 46
	Importance of the Supplier Identification and Evaluation Process	. 46
	Unit 2: Market Intelligence for Identifying Suppliers	. 47
	The Process of Obtaining Supply Market Intelligence	. 47
	Elements of Supply Market Intelligence	. 47
	Unit 3: Uses, Categories, and Levels of Market Intelligence	. 48
	Unit 4: Supplier Evaluation	. 50
	Supplier Evaluation Objectives	50



	Supplier Evaluation Criteria	50
	Current Supplier Evaluation	53
	Unit 5: Global Supply Management	53
	Sourcing Globally	54
	Finding Global Suppliers and Supply Classification	54
	Learning Block 3 Summary	55
	Learning Block 3 Optional Supplemental Resource	56
	Learning Block 3 Practice Questions	56
Le	arning Block 4: Supplier Negotiations and Contracting	59
	Learning Block 4 Description	59
	Learning Block 4 Learning Objectives	59
	Unit 1: Buyer-Seller Negotiations	59
	Planning the Negotiations	60
	Conducting the Negotiations	62
	Concessions	63
	Sources of Power in Negotiations	63
	Tactics	64
	Win-Win and Win-Lose Negotiations	66
	Unit 2: Contracts and Contracting	66
	Unit 3: Contract Management Good Practices	68
	Identify Internal Customer Requirements during Contract Development	68
	Enter Into Agreements with World-Class Suppliers	68
	Develop Complete Contracts Whenever Possible	68
	Obtain Contract Performance Feedback from Internal Customers	68
	Assign a Relationship Manager with Performance Accountability to Each Contract	68
	Measure and Report Internal Customer and Site Compliance with Corporate Agreements	69
	Develop an Information System That Reports Prices Paid Against a Contracted or Baseline Price .	69
	Measure Real-Time Supplier Performance Whenever Possible	69
	Conduct Regular Contract Performance Review Meetings	69
	Develop a Company-Wide Contract Repository	70
	Benchmark Contract Management Practices against Other Leading Companies	70
	Double Translate Contracts Involving Foreign Suppliers	70
	Learning Block 4 Summary	70
	Learning Block 4 Optional Supplemental Resources	71
	Learning Block 4 Practice Questions	71
Le	arning Block 5: Procurement Execution	73
	Learning Block 5 Description	73
	Learning Block 5 Learning Objectives	73
	Unit 1: Evecuting Procurement Contracts	73



Purchasing Approval	73
Weighted Scorecard	74
Blanket Purchase Orders (BPOs)	75
Award Purchase Orders	75
Goods Receipt	75
Evaluate Supplier Post-Purchase Performance	76
Unit 2: Procurement Enablers	76
E-Procurement and Electronic Purchasing	77
Procurement Cards	77
Long-Term Purchasing Agreements	77
Electronic Data Interchange (EDI)	77
Electronic Catalogs	78
Automation of Bidding	78
Unit 3: Procurement Documents	78
Soliciting Information and Proposals from Sellers	78
Commonly Used Procurement Documents	79
Learning Block 5 Summary	81
Learning Block 5 Practice Questions	81
Learning Block 6: Supplier Management	84
Learning Block 6 Description	84
Learning Block 6 Learning Objectives	84
Unit 1: Measuring Supplier Performance	84
Why Measure Supplier Performance?	
Supplier Performance Scorecards	85
Unit 2: Managing Supplier Relationships	87
Types of Supplier Relationships	87
The Importance of Trust	88
Importance of Supplier Relationship Managers	88
Unit 3: Supplier Development	88
What is Supplier Development?	89
Factors Critical to Supplier Development Success	90
Learning Block 6 Summary	91
Learning Block 6 Optional Supplemental Resources	91
Learning Block 6 Practice Questions	92
Learning Block 7: Procurement Organizations and Roles	94
Learning Block 7 Description	
Learning Block 7 Learning Objectives	
Unit 1: The Organization of Procurement	94
Coography	0.4



Centralization	95
Commodities Specialists and Commodity Councils	95
Procurement Approach	95
Embedded Versus Shared Services	96
Direct Spend and Indirect Spend	96
Reporting Structures	97
Unit 2: Roles and Competencies	98
The Organization Roles of Procurement	98
Organizational Competencies and Talent Development	99
Unit 3: Procurement Metrics	99
Learning Block 7 Summary	100
Learning Block 7 Practice Questions	101
Learning Block 8: Applications of Law and Ethics in Procurement	103
Learning Block 8 Description	103
Learning Block 8 Learning Objectives	103
Unit 1: Commercial Law	103
Agency Law	104
Contract Law	104
Unit 2: Purchasing Ethics	105
Unit 3: Types of Unethical Behavior in Purchasing	106
Personal Buying	106
Financial Conflicts of Interest	106
Accepting Supplier Favors	106
Sharp Practices	106
Reciprocity	107
Unit 4: Supporting Ethical Behavior or Practices in Purchasing	107
Means of Supporting Ethical Behavior in Purchasing	107
Professional Principles and Standards of Ethical Conduct	108
Social Responsibility	108
Learning Block 8 Summary	108
Learning Block 8 Optional Supplemental Resources	109
Learning Block 8 Practice Questions	109
References	111
Practice Questions Answer Key	113
Supply Management and Procurement Certification Track Glossary	114
Notes Page	129
A did an about	100



Abstract

Procurement and purchasing associates, sourcing analysts, supplier managers, and associates in other supply chain domains should understand the importance and complexities of global supply management and procurement processes and how the procurement function interfaces with the other functions in a supply chain. This certification track is intended to provide students with an understanding of the basics of strategic sourcing, supplier management, and procurement execution processes so that they can quickly familiarize themselves and be effective contributors in specific industry settings.

Key elements of this certification track include strategic, tactical, and operational procurement; procurement organization structures; legal and regulatory considerations; the interaction of procurement organizations with the rest of the supply chain; and typical difficulties encountered in procurement processes.

The goal of this certification track is to prepare students to successfully pass the supply management and procurement national certification examination. The content of the certification track was developed by LINCS in Supply Chain Management Consortium. SCPro™ Fundamentals Certification examinations are owned and administered by the Council of Supply Chain Management Professionals (CSCMP).





Learning Block 1: Supply Management and Procurement Overview

Learning Block 1 Description

The purpose of this certification track is to equip the learner with knowledge about the key aspects of procurement and supply management. This learning block is intended to provide an overview and definitions of supply management and procurement. Additionally, key policies, procedures, processes, and requirements for effective and efficient implementation are presented.

The effective implementation of procurement activities are a critical function in the overall supply chain process. This learning block further describes the identification of requirements, identification and qualification of suppliers, supplier bidding and negotiation, approval for purchases, and supplier performance monitoring and performance measurement.

Learning Block 1 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Define procurement and its purpose
- Understand key procurement objectives
- Explain procurement roles and activities
- Analyze the key procurement procedures and processes
- Evaluate the key steps carried out in managing the procurement process

Unit 1: What is Purchasing and Procurement?

The terms procurement and purchasing are often used interchangeably; however, there are important similarities and differences between them. This certification track employs the following definitions for each term:

Procurement

Procurement is the management of all processes involved in obtaining the goods and services necessary for manufacturing products and providing services to customers. Procurement focuses on sourcing activities, negotiation with suppliers, and the strategic selection of goods and services that enable an organization to achieve maximum value from a select group of key supplier partners.

Purchasing

Purchasing is a function within the procurement process that is largely transactional and associated with how goods and services are ordered. Purchasing involves receiving and processing purchase requisitions (requirements) and converting them to purchase orders (POs) (awards to suppliers).



A Procurement Example

Procurement professionals interact with a wide array of internal and external organizations; they work with suppliers, other functions in the supply chain, and other functions within the company, such as marketing and engineering.

Figure 1 shows an example of a cereal manufacturing and supply chain process and the key role procurement plays to purchase grain and other raw materials, along with packaging and labeling products needed to make breakfast cereal, the finished product in this example. The parts of the process in blue text (raw materials, corrugated paper plant, and label plant) indicate the areas where purchasing needs to focus to procure the materials needed for cereal manufacturing.

In addition, to the raw materials, the company also purchases paperboard from a paper manufacturer and labels from a label manufacturer. In turn, the paper manufacturer purchases trees to make the paper, and the label manufacturer purchases semi-finished stock to make the labels. After making the cereal and packaging it, the cereal manufacturer sends the cereal to the distributor, which then ships the product to the grocery store at which the **end customers** purchase their cereal. Throughout this sample supply chain, the purchasing of goods and services takes place between various entities.

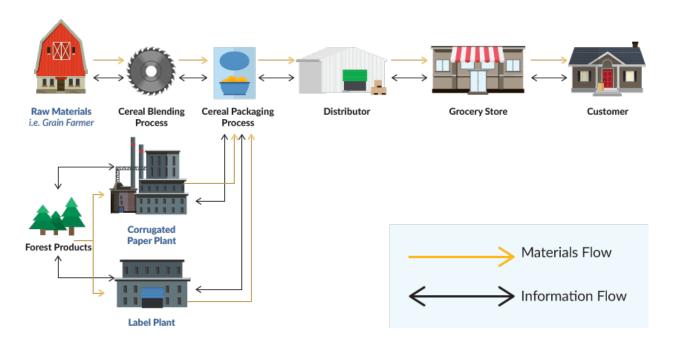


Figure 1. Blue text items indicate procurement focus in a cereal manufacturing and distribution process. Developed by LINCS in Supply Chain Management Consortium.

The figure shows how materials and products move from one entity to another while information (e.g., specification, quantities, and desired receiving date) also flows between the various entities. This information flow is important because it is needed to ensure the right products are delivered at the right place, the right time, and the right price.



The Importance of Procurement

The procurement function plays a critical role in supporting the ongoing functioning of a firm by ensuring a continuous flow of materials, products, and services to supports the firm's operations while continually seeking opportunities to reduce costs, minimize supply risk, and maintain expected quality levels. The importance of the procurement department can be seen by the key inputs it provides firms, including:



The raw materials and intermediate goods and services needed in the production of goods and services



Finished goods and services required for resale or for operational purposes



Capital goods and consumables needed for the business

Figure 2. Key inputs in procurement. Developed by LINCS in Supply Chain Management Consortium.

These inputs are critical to a business. The procurement department plays a key role in obtaining these inputs at appropriate levels of cost, quality, and on-time delivery to ensure continuity of inputs from suppliers. As noted previously, the procurement function plays a vital role in the supply chain; the following list describes several major benefits of effectively managing procurement.

Cost reduction

Procurement represents an excellent opportunity for saving money because organizations can spend up to 50% or more of their revenues on raw materials, work in process, finished goods, spare parts, services, and other goods needed to keep operations going. Significant savings can be achieved by applying effective procurement techniques.

Quality improvement

Procurement directly impacts the quality of the overall products sold by companies, because it is responsible for purchasing raw materials and other unfinished or finished goods. The quality of raw and other materials used in producing goods almost always affects the quality of the end products.

Product enhancement

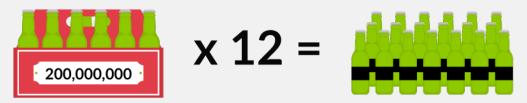
Procurement can also improve products and process designs by helping introduce new technologies into companies' product and service offerings. For example, procurement can work with internal and external engineering personnel and suppliers to improve product reliability and performance while also reducing costs.





Calculating Savings

In collaboration with other internal functions, here is an example of how the procurement function can help reduce costs in a company. Consider a beverage company that sells 200,000,000 cases of a product in a year, and there are 12 plastic bottles in each case. If a procurement department identified a combined savings of even a ¼ of a penny for each bottle, label, and cap, that would result in a cost savings of \$6,000,000 per year, calculated as follows:



 $200,000,000 \text{ cases} \times 12 \text{ bottles/case} = 2,400,000,000 \text{ bottles}$



2,400,000,000 bottles × ½ cent savings/per bottle = \$6,000,000/year Figure 3. Calculating savings. Developed by LINCS in Supply Chain Management Consortium.

This example shows that even a small per unit savings can result in a significant savings on a high-volume product.

Unit 2: Procurement Functions

The main objective of the procurement function is purchasing materials and services at the lowest total cost possible while ensuring the required quality levels and meeting the needs of internal and external customers. Much of this effort entails identifying and negotiating with suppliers to reduce the costs of purchased products and services; however, procurement departments must also consider other items that add to the total cost of procurement, including transportation costs, payment terms, return policies, and warranties.

The key objectives for a procurement department are supporting operational requirements, working with other functional groups, managing suppliers, supporting organizational goals and objectives, and developing sourcing strategies.





Figure 4. The key objectives for a procurement organization. Developed by LINCS in Supply Chain Management Consortium.

Supporting Operational Requirements

Procurement supports the day-to-day operational requirements of a firm by acquiring raw materials, components, subassemblies, finished goods, maintenance, repair items, and services, as outlined in Unit 5 of this learning block. Procurement aids supply chain elements like transportation and distribution centers (DCs) by ensuring that the end customers receive the replacement parts or finished products they need. Additionally, procurement supports the departments involved in developing new plants or products, installing and commissioning new machinery, and providing replacement parts by ensuring that parts, replacement parts, and machinery are available as needed in the required quantities, at the required quality, and at an appropriate cost.



Figure 5. The key objectives for a procurement organization – supporting operational requirements. Developed by LINCS in Supply Chain Management Consortium.



The procurement function is responsible for procuring raw materials, components, and capital equipment, as well as project procurement and spare parts procurement for aftermarket service, defective returns, and the warranty replacement process with suppliers. The procurement function also works closely with logistics functions on inbound and outbound supply chains. In order to cooperate effectively, procurement professionals must have operational knowledge of the logistical activities in a supply chain network, and a wide variety of agencies, policies, customs rules, taxation, commercial, logistical, and customs documentation, and commercial trade rules and terms.

Working with Other Functional Groups

Procurement plays a vital role in ensuring continuity of supply, reducing costs, sourcing from qualified suppliers, and ensuring that the quality of goods and services is maintained. However, procurement cannot accomplish these tasks without a close working relationship with several other functions within a firm, including top management, operations, engineering, marketing, quality assurance, and finance.

Procurement works with top management to ensure that the procurement strategy is aligned with the overall organizational strategy and objectives. *Figure 6* provides examples of the types of knowledge and insights that procurement personnel must have of other functional groups in order to work effectively with them.

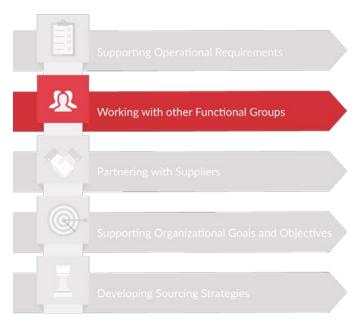


Figure 6. The key objectives for a procurement organization - working with other functional groups. Developed by LINCS in Supply Chain Management Consortium.

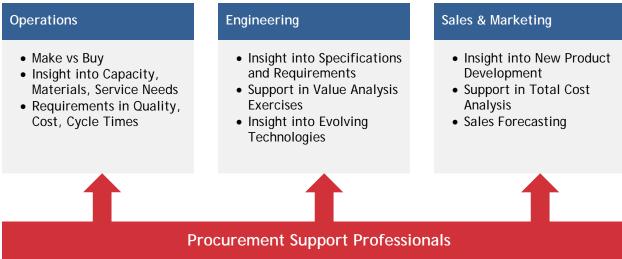


Figure 7. Procurement plays a vital role within organizations, Developed by LINCS in Supply Chain Management Consortium.

Procurement and Operations

In a manufacturing organization, procurement personnel must understand production plans like the components and services required by production to fulfill customers' requirements. These components can include materials, sub-assemblies, information technology (IT), and packaging materials. Procurement and operations departments must work closely together and are sometimes even co-located. This relationship can help when procurement sources inputs to support operational plans, including obtaining the required raw materials and products.

Procurement and Engineering

Another important linkage in firms exists between procurement and engineering, which typically work together on supplier selection and product development. In some cases, procurement departments employ commodity managers with technical backgrounds to handle various engineered products and services being procured, such as vehicles and components that are engineered to firms' own specifications to ensure high levels of reliability. Here are a few examples of tasks that procurement departments perform while working with engineering departments:

- Identify the most capable suppliers for an item
- Ensure suppliers meet quality and delivery targets
- Assess suppliers' production capabilities
- Provide input early in design processes
- Work with suppliers to encourage innovative ideas
- Identify new sources of technology to be integrated into new products and services
- Offer value analysis to identify the possibility of using less costly parts while maintaining quality
- Contribute technical and service support during product launch and customer fulfillment

Procurement and Marketing

Marketing personnel may develop new product ideas that procurement departments must support ensuring the availability of purchased items that would be used in manufacturing these proposed new products when they are actually produced. Additionally, marketing personnel develop sales forecasts that evolve into production plans; to support these plans, procurement departments source the materials required in accordance with the relevant schedules. Procurement is also involved in purchasing materials used in marketing campaigns, such as advertising, posters, end caps, media commercials, artistic services, and Internet advertising.



Procurement and Quality Assurance

Most firms outsource a large percentage of goods and services, so they rely heavily on the quality of the products from their suppliers. To ensure quality, procurement and quality assurance groups must work closely together to ensure that suppliers perform as expected. Joint projects between these departments include quality training for suppliers, quality engineering, corrective action planning, and supplier quality planning.

Procurement and Finance

Working with finance is also an important relationship. For example, procurement provides information about inbound items that have been procured to update accounts payable systems. Procurement also requires data from the cost accounting system to make certain determinations, such as material re-work costs and the total cost of an item. In addition, procurement works closely with finance departments when obtaining data that contribute to decisions about making or buying products and about making capital acquisition decisions.

Partnering with Suppliers

Partnerships and effective supplier management have become increasingly important to improve firms' SCM competitiveness. For instance, forming partnerships, or strategic alliances, with suppliers allows them to focus on providing quality products and services. This comes about while working closely with key suppliers to develop long-term partnerships based on trust. Additionally, close buyer-supplier relationships offer numerous technical, financial, and strategic advantages, such as opportunities to work together to re-engineer products to lower costs while maintaining functionality.

Many companies have adopted a strategy of using a smaller number of suppliers for key products and services rather than working with a large number of suppliers. This



Figure 8. The key objectives for a procurement organization managing suppliers. Developed by LINCS in Supply Chain Management Consortium.

strategy is adopted to allow companies to focus their efforts on improving performance and reducing costs with fewer, better suppliers. Typically, a partnership with suppliers is required in order to assure an adequate supply of quality materials over time at an optimal total acquired cost.

A strategic alliance has been defined as a purposive relationship between two or more independent firms that involves exchanging, sharing, or co-developing resources and capabilities to achieve mutually



relevant benefits (Kale & Singh, 2009). However, once formed, these strategic alliances must be developed through effective relationship management. For example, a company may provide warehouse layout and design services to multiple companies and may work together with a firm that provides the actual storage and handling equipment that support new warehouse designs.

Global competition has grown and companies have developed supply chains that rely heavily on external suppliers. One well-known example is Apple, which outsources product and component manufacturing. This emphasis on concentrating on **core competencies** has seen a dramatic rise in **outsourcing** to, and reliance on, external suppliers to provide not only materials and products but also services (e.g., IT support and design services).



Figure 9. Companies have increased emphasis on building strategic global alliances. Developed by LINCS in Supply Chain Management Consortium.

As more emphasis is placed on the use of external suppliers including global suppliers, procurement departments' roles must also involve close support and management of these suppliers. The procurement function has a key responsibility to meet the needs of both internal and external customers by choosing products and services with certain criteria. Products and services must come from the best sources of supply and be made to the correct specifications, have the desired levels of quality at an appropriate cost, and be made and delivered in the correct quantities. Products and services must be delivered at the right time and to the satisfaction of internal and external customers.



Supporting Organizational Goals and Objectives

In order for a company to grow and remain profitable, procurement can help increase revenues and reduce costs and expenses. Using effective procurement strategies, organizations can position themselves to be competitive on both the quality and pricing of their products and services. By helping to reduce the costs of materials and services, procurement thus improves corporate profit margins and return on assets. Additionally, procurement plays an important role in ensuring the quality of the goods and services needed by an organization.

Organizational goals and objectives can be described under four main categories: survival, growth, finances, and environment. For procurement goals and objectives, however, these are normally expressed using other terms like quality and function, delivery, quantity, price, terms and



Figure 10. The key objectives for a procurement organization - supporting organizational goals and objectives. Developed by LINCS in Supply Chain Management Consortium.

conditions, and services. A key first step in developing organizations' strategies is to develop strategic goals, in which procurement plays a major role. The next step is to translate these goals into specific procurement objectives. More information about this process is provided in Unit 3 of this learning block.

According to Monczka, Trent, and Handfield (2005), procurement functions must ultimately support the strategic goals and objectives of the entire organization, including ensuring overall profitability and adequate return on investment for organizations' shareholders.



Developing Sourcing Strategies

Many firms face the challenge of remaining competitive in the face of highly competitive world markets. A firm's ability to effectively develop and execute strategic plans is a major factor in generating future earnings and can even be critical to the firm's survival. Organizations must take in more than what they spend on operating costs over the long term if they want to grow and remain profitable. Increasing revenues, decreasing costs, or a mixture both can accomplish this key goal.

Procurement plays an important role in helping accomplish both objectives. Through effective procurement strategies, organizations can be competitive in quality and prices of their products and services. For example, reducing the costs of materials and services is an area in which procurement



Figure 11. The key objectives for a procurement organization - developing sourcing strategies. Developed by LINCS in Supply Chain Management Consortium.

plays a vital role and thus helps to improve corporate profit margins. In many cases, procured goods and services provide a major area of opportunity for reducing costs and improving return on assets.

Procurement departments must develop sourcing strategies to support the overall organizational strategy; they are aimed at ensuring the survival and competitiveness of the whole organization. A sourcing strategy is the expression of the goals and objectives for selecting best sources of supply and optimizing the procurement spend for an organization, which are tied to the overall corporate strategy. For example, a commodity sourcing strategy might develop a specific approach for a category or group of raw materials that maximizes quality and minimizes cost. More information about the types and development of sourcing strategies appears in Learning Block 2.





Figure 12. A broad range of examples of commodities. Developed by LINCS in Supply Chain Management Consortium.

Unit 3: Roles and Activities Performed by the Procurement Function

The procurement function seeks to obtain the highest quality of goods and services at the lowest possible costs at the right time and place. To achieve this goal, various roles and activities are performed at different levels of management within the procurement function; *Figure 13* lays out the roles and activities within procurement functions:



Figure 13. High-Level buying process workflow. Developed by LINCS in Supply Chain Management Consortium.

Procurement provides ongoing analysis of price and cost trends. The cost of purchased goods often represents the largest component of companies' costs, so procurement functions must analyze the cost of sourcing products and services to ensure they are obtained at the lowest possible cost.

- Procurement assists internal departments in defining and documenting material specifications to communicate to suppliers.
- Procurement estimates the future supply needs of organizations, which are then communicated to suppliers.
- Procurement ensures that sourced goods and services meet minimum quality standards in order to meet buyers' expectations, at an acceptable cost.
- Procurement regularly reports on material lead times and supplier performance.
- Procurement draws up contracts and negotiates mutually acceptable terms with suppliers.
- Procurement conducts market research to identify new suppliers to meet customers' needs.
- Procurement expedites and authorized premiums for the delivery of shipments, where necessary, to ensure that production needs are met and deliver appropriate customer order fulfillment.
- Procurement finds and develops best-in-class suppliers. The success of procurement depends



- on its ability to align supply-based decisions with organizations' strategic priorities and to identify or develop suppliers, analyze their capabilities, select the most appropriate options, and work with those suppliers to deliver continuous improvement.
- ▼ Procurement ensures the uninterrupted flow of materials, supplies, and services required to operate organizations. This prevents stock-outs or late deliveries of materials, components, and services (which can be extremely costly in terms of lost production), reduced revenue or profit, and a decline in customer goodwill.

Unit 4: Types of Buying Organizations and Types of Products and Services Purchased

Types of Buying Organizations

Organizations procure goods and services for different purposes. According to Fill and Fill (2005), here are the main forms of organization that procure goods and services:



Figure 14. Commercial organization. Developed by LINCS in Supply Chain Management Consortium.

Commercial organizations: Commercial organizations consist of industrial distributors, original equipment manufacturers (OEMs), users, and retailers. They procure goods as raw materials, components, and finished products for resale. Additionally, the miscellaneous materials and services needed to support running an organization need to be procured. Support items may range from office supplies and real estate to lawn services and health insurance policies.



Figure 15. Governments. Developed by LINCS in Supply Chain Management Consortium

Governments: Governments are the biggest procurement customers. They often use procurement to meet small business (e.g., women-owned, veteran-owned, Native American-owned, etc.) objectives, spending many billions annually as a result. Governments' procurement budget is spent on a wide range of activities, from public hospitals and schools to the organization of the departments themselves.





Figure 16. Institutions. Developed by LINCS in Supply Chain Management Consortium.

Institutions: These include private universities, hospitals, and schools. Institutions buy, for example, textbooks, classroom furniture, medical equipment, audio visual equipment, and computers.

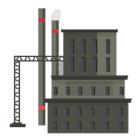


Figure 17. Public organizations. Developed by LINCS in Supply Chain Management Consortium

Public organizations: Public organizations include railways and nuclear power plants that make purchases for operational and production purposes.

Types of Products and Services Purchased

Procurement personnel are responsible for purchasing many different products and services, depending on the nature of their industry and the nature of their organization. These are examples of different goods and services procurement is responsible for procuring:

Raw materials



Semi-finished goods



Capital equipment



These include products that have not been processed or have undergone only a small degree of processing. They are the basic materials in the production process and become part of final manufactured products. Examples include mined minerals, coal, and cotton.

Semi-finished products are also known as manufactured products because they have been partially assembled; however, they need further assembly and processing before they can be sold. These products are visible in final products and include elements such as steel and rolled wire.

Capital items are usually the most expensive purchases; they include large pieces of equipment used in production processes, such as power generating equipment and buildings.



OEMs' component parts



Maintenance, repair, operating materials



Finished goods



OEMs are products that are purchased for resale or assembled into final products with no further processing. An example of an OEM is the alternator in a motor engine.

Maintenance, repair, and operating materials (MROs) are not directly required for the production process but are important for the continued operation of organizations, such as office and cleaning supplies and other consumables.

Finished goods require no further processing. They are bought for resale or for use within organizations, such as stock bought for resale by retail organizations.

Accessory equipment



Services



Major subcontracted items



Accessory equipment includes products used to facilitate production, such as personal computers, hand tools, desktop printers, and toolboxes.

According to Dwyer and Tanner (2009), services include transportation, advertising, banking, and labor services.

These include high-cost items to be used in finished products, such as automobile engines and aircraft engines.

Unit 5: Procurement Process Overview















Identify Need

Describe Product/Service Suppliers

Search for

Evaluate & Select Supplier

Request for Price or Quote

Place Order

Evaluate Performance

Figure 18. Key activities in the procurement process. Developed by LINCS in Supply Chain Management Consortium.

The procurement process contains steps ranging from working to understand firms' needs through ongoing evaluations of supplier performances. These steps are:







A need or requirement may arise from any function, but is most often developed through the **demand** planning process. A need may be raw materials for production purposes or office furniture for administrative departments. **User functions** sometimes fail to identify needs promptly, which can result in urgent requirements and create challenges for procurement personnel; these challenges can include the need to expedite supply of goods and the additional costs associated with paying a premium to expedite orders.

Describing the Product or Service Needed



Requirements are communicated to the procurement function along with the appropriate documents, such as a purchasing requisition. The information contained in the requisition includes the date, originating department, account to be charged, complete descriptions and quantities of materials or services required, date when materials or services are needed, special instructions for **shipping** or service delivery, and the name of the authorized **requisitioner**. As part of the procurement process, procurement professionals work with requisitioners to confirm that material and service specifications have been captured correctly. In many cases, engineering drawings and other documents accompany the requisition to describe complex and non-standard items accurately.



Searching for Potential Suppliers

When appropriate suppliers are not available from a pre-approved list, procurement personnel assume the responsibility for finding other potential suppliers. This search can take place using catalogs, websites, professional organizations, and personal contacts.

Evaluating and Selecting Suppliers



The critical task of evaluating potential suppliers is accomplished by a multi-function team that conducts a site visit to evaluate a wide range of capabilities, including management, manufacturing planning, process control, quality, and overall workload assessments. While procurement takes the lead, other functions support the evaluation process to ensure a supplier can actually meet the anticipated requirements with smaller standard-item and procurement and catalog items bought through a published price list, the procurement professional may be able to perform an effective evaluation without assistance.





Request for Price and Request for Quote Processes

This stage occurs when purchase requisitions are received by purchasing personnel and they initiate a request for price or request for quote (RFQ). Requests for price are initiated and sent to suppliers to obtain pricing for simple, lower-cost items while RFQs involve more complex and expensive items and are sent to suppliers to solicit specifications, pricing, delivery, and other requested information.



Order Placement

After the request for price and RFQ responses are received, purchasing can place a PO. However, the purchasing buyer and supplier may have completed a negotiating process that included a final agreement on price, delivery arrangements, product requirements, and quality requirements before the buyer actually issues a PO.



Evaluating Performance

After a supplier has been awarded a PO, it is continually evaluated to determine if its products satisfy the order details stipulated in the PO. Suppliers that provide acceptable products may receive additional orders in the future, but poor supplier performance may lead to removal from the approval database and a lack of future POs. Some procurement departments use supplier scorecards to evaluate supplier performances on quality, delivery timeliness, cost containment, and responsiveness.

Figure 19. Procurement process overview. Developed by LINCS in Supply Chain Management Consortium.

Learning Block 1 Summary

Procurement is the management of all processes involved in obtaining the goods and services necessary for manufacturing products and providing customer services. Procurement focuses on sourcing activities, negotiations with suppliers, and the strategic selection of goods and services that enable an organization to achieve best value from a select group of key supplier partners.

Procurement functions must have close working relationships with other functions, including production, engineering, and sales and marketing functions, because those areas use the products and



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium.



services that procurement obtains. Organizations of different types are involved in procuring goods and services for different purposes, including commercial and public organizations, governments, and institutions. Stages in the procurement process include receiving requirements for purchase, describing the materials needed, defining and approving suppliers, soliciting suppliers using requests for price and RFQs, placing POs, and evaluating supplier performance.

Learning Block 1 Practice Questions

1. Procurement is defined as:

- a. The management of all of the processes involved in obtaining goods and services necessary for manufacturing and customer service.
- b. A process that involves the management of planning and manufacturing operations.
- c. A process that involves the management of logistics functions.
- d. A process that involves the acquisition of goods only.

2. Which of the following types of organizations is procurement's biggest customer?

- a. Commercial
- b. Government
- c. Institutions
- d. Public

3. Procurement supports the day-to-day operational requirements of a firm through:

- a. Developing hiring plans
- b. Acquiring raw materials, components, sub-assemblies, finished goods, maintenance and repair items, and services
- c. Postponing supplier payments
- d. Paying invoices early

4. The correct order of stages in the procurement process is:

- a. Identifying the need, searching for potential suppliers, describing the products and/or services needed, evaluating and selecting suppliers, and ordering and evaluating performance
- b. Identifying the need, describing the products and/or services needed, searching for suppliers, evaluating and selecting suppliers, initiating requests for price & RFQs, placing orders, and evaluating performance
- Identifying the need, describing the products and/or services needed, searching for potential suppliers, evaluating performance, evaluating and selecting suppliers, and ordering
- d. Describing the products and/or services needed, identifying the need, searching for potential suppliers, evaluating and selecting suppliers, and ordering and evaluating performance



5. Once requirements have been identified, it is then necessary to:

- a. Describe the products and services needed
- b. Evaluate suppliers
- c. Issue POs
- d. Identify qualified suppliers

6. Why is it often necessary to evaluate potential suppliers?

- a. Place order stage
- b. To ensure that intended requirements can be met
- c. Evaluate performance stage
- d. Identify need stage

7. Procurement and engineering personnel work together to achieve which goal?

- a. Provide information about procured inbound items to update accounts payable systems
- b. Evaluate marketing programs
- c. Identify the most technically capable suppliers for products or services
- d. Hire manufacturing employees

8. The procurement function is responsible for meeting the needs of internal and external customers by buying products and services from which sources of supply?

- a. Any available source
- b. The most expensive
- c. International suppliers
- d. Qualified and approved

9. By working with a smaller group of suppliers for key products and services, companies can:

- a. Assume that costs are controlled
- b. Increase transportation costs
- c. Increase expediting activities
- d. Focus their efforts on improving performance and reducing costs

10. Procurement works with top management to ensure which of the following?

- a. Assure that more purchase orders are placed
- b. Focus efforts on maintenance, repair, and operating materials
- c. Procurement strategy is aligned with the overall organizational strategy and objectives
- d. Procure fewer raw materials





Learning Block 2: Strategic Sourcing

Learning Block 2 Description

Strategic sourcing is a key component of the procurement function; it gives firms a competitive edge when it is linked to firms' overall goals and objectives. The concept of strategic sourcing and how it is developed, an overview of the importance of understanding materials, products, and services procured by corporations, and the relative importance of different components to those corporations are outlined in this learning block.

Additionally, how procurement functions contribute to companies' attaining their strategic goals is discussed, after which the various procurement and sourcing strategies that can be chosen to help ensure the support and achievement of corporate strategies are presented. The final part of this learning block includes evolving strategies that modern procurement groups are adopting to remain competitive in their industries.

Learning Block 2 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Recognize key strategic sourcing principles and objectives
- Understand portfolio analyses and their use in developing procurement strategies
- Explain the commodity strategy development process and the key steps in that process
- Apply the procurement of goods and services based on their relative strategic importance
- Analyze the various procurement strategies used to achieve competitive advantage
- Evaluate current and evolving strategies in the procurement field

Unit 1: Strategic Sourcing

Strategic sourcing is defined as the process of determining *long-term* supply requirements, finding potential sources to fulfill those needs, selecting and approving suppliers to provide the services, negotiating PO agreements, and managing suppliers' performance. Procurement functions support firms' success by understanding organizational goals and objectives, analyzing and prioritizing sourcing alternatives, and developing effective sourcing strategies.

By employing strategic sourcing processes, firms can be competitive as changes occur in markets, suppliers, global competition, new technologies, and risks. Remaining competitive requires procurement to contribute to the profitability of a firm, which can be done by concentrating on and



developing world-class processes and suppliers, coordinating procurement activities related to organizations' objectives, and identifying and managing risk.



STRATEGIC SOURCING

Figure 21. Simple representation of the strategic sourcing process. Developed by LINCS in Supply Chain Management Consortium.

In order to achieve these advantages, procurement organizations need to adopt strategic sourcing processes. These processes encompass the entire supply network, its linkages, and how they impact procurement and purchasing decisions. The focus is on the top-tier supply network, value creation, risk, and uncertainty in the supply chain, as well as the overall responsiveness and resilience of the supply chain.

Procurement and Organizational Strategy

Organizational strategy contains long-term goals and objectives, including elements that restrict particular organizational current or desired activities and markets. Corporate strategies should contain specific plans of how firms will differentiate themselves from their competition, achieve long-term growth, manage costs, keep abreast of and respond to changes in the market, achieve customer satisfaction, remain profitable, and meet shareholders' expectations.

Procurement strategies must be linked to and support organizational strategy. Procurement is a key element of organizations' objectives and by linking procurement and overall strategies, organizations can achieve competitiveness in procuring good-quality items at fair prices. In fact, procured goods and services typically provide a major area of opportunity to reduce costs and improve profitability.



Turning Strategic Goals into Procurement Objectives

The difference between goals and objectives is that goals are potential achievements that are to be reached, while objectives are the specific steps taken to reach those achievements. Developing strategic goals is a major part of developing strategy processes, including those for procurement; procurement thus works with senior management when developing these goals. The next step is translating these goals into concrete objectives.

For example, if a company's strategic goal is to reduce costs, then a key procurement goal could be to reduce purchased inventory. Then, an example of specific and measurable objectives for this goal would be to reduce purchased inventory by a certain percentage in the coming year. *Figure 22* shows examples of different types of strategic goals and associated procurement goals and objectives.

According to Monczka et al. (2005), another key element in effective strategic sourcing is translating company-wide procurement goals and objectives into specific commodity-level goals and objectives. Essentially, this requires developing an appropriate procurement strategy for the products and services that companies purchase, depending on the relative importance of each product and service. These strategies are typically achieved using portfolio analysis, which is outlined Unit 2 of this learning block.

Strategic Company Goal	Procurement Goal	Procurement Objective
Maximize return on spend	Consolidate spend with fewer suppliers	Reduce supply base by 20% and establish price target reductions of at least 5%
Improve return on assets	Reduce parts inventory supply	Optimize cycle and lead times to minimize stock levels on the ten most costly parts
Improve product quality for end customers	Improve quality of purchased materials	Implement Six Sigma total quality management (TQM) programs with the top five spend suppliers to achieve zero defects
Reduce overall expenses	Reduce expenses to optimize procurement	Analyze procurement process flows to improve productivity by 10%
Concentrate on core competencies	Outsource non-core competency items to suppliers	Work with manufacturing to establish a formal make vs. buy process to identify core and non-core items

Figure 22. Examples of linking company strategic goals to procurement goals and objectives. Developed by LINCS in Supply Chain Management Consortium.

Unit 2: Portfolio Analysis

Portfolio analysis involves classifying procured items and services into one of four categories, according to the relative cost and supply risk associated with each item. Each type of purchase is assigned to a quadrant that describes the supply strategy for the items and services classified within it. This supply segmentation indicates the need for different supply strategies for each quadrant of the portfolio matrix (see *Figure 23*).



Segmenting purchased items and services in this way makes it easier to decide which strategies and tactics should be applied in different supply markets and environments. Procurement personnel can clearly see how various items and services impact their firms' competitiveness and profitability and can determine the appropriate operational strategy for handling each item from a procurement perspective.

Figure 23 presents the portfolio matrix, which is a tool that supply managers must understand and employ. Presented in a 2x2 format, the matrix recognizes that an effective supply department must apply a variety, or portfolio, of strategies and approaches to different supply requirements.

Users of this matrix segment their purchase requirements across two dimensions: the number of qualified suppliers in the marketplace and the value of specific goods or services to the buying organization. For some industry or organization requirements, qualified suppliers might consist of three to four suppliers or dozens of suppliers. In the matrix, value does not have a specific definition; it can be a function of total dollars spent on items or the perceived value of the item to the organization's end customers and its ability to enhance the organization's competitive position.

Items = purchased goods and services Critical Items Leverage Items High Collaborative relationships Cooperative relationships Cost focus Cost focus Transaction Items Market Items Transactional relationships Competitive relationships Low Transaction cost focus Price focus Few Many **QUALIFIED SUPPLIERS**

Figure 23. The portfolio matrix. Contributed by Lisa Smith of Harper College. Developed by LINCS in Supply Chain Management Consortium.

Perhaps the most important reason for using the portfolio matrix is its prescriptive nature. For example, when supply managers or teams quantify the total spend for each commodity or category, goods or services can be positioned within the most appropriate quadrant. Classifying products and services in this way helps to identify the following: determining supplier relationships, participating in win-lose negotiations or win-win negotiations, taking a price- or cost-analytic approach, deciding on the best supply strategies and approaches, and creating value across different purchase requirements.



As a more detailed example, personnel from an IT company used portfolio analysis to determine what they believed were the best sourcing strategies for their various needs. An IT help desk might be determined as less specialized, or core, to the business and therefore placed in the transaction quadrant, while other functions, such as Java 2 Platform and Enterprise Edition (J2EE) development might be determined to be more critical and thus placed in the critical quadrant. The quadrants into which specific requirements are categorized in the portfolio analysis help determine how work should be sourced, as well as the degree of information search and risk management that should take place. The following sections briefly describe each quadrant within the portfolio matrix and outline the development of different types of sourcing strategies for the items categorized in each quadrant.

Transaction Quadrant

The goods and services in the transaction quadrant at the lower left have a lower total value with a limited supply market. Although many suppliers might be available to provide these items, the cost of a supplier search almost always outweighs the value of the search, because when the supply market is limited, the low cost of goods outweighs the value of the search of suppliers, even though there may not be many suppliers.

Therefore, the supply market is actually limited. Items usually assigned to the transaction guadrant include



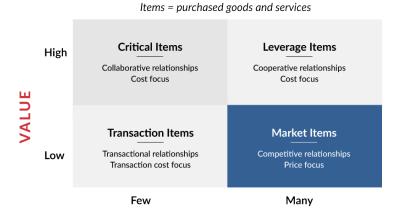
Figure 24. Transaction items. Developed by LINCS in Supply Chain Management Consortium.

miscellaneous office supplies, one-time purchases, magazine subscriptions to trade journals, and emergency tools needed at remote locations. The main way for supply professionals to create value in this quadrant is by reducing the transaction cost of purchasing these items, which is usually achieved through electronic systems or procurement cards; however, the items in the transaction quadrant are of minimal concern in terms of supply risk.



Market Quadrant

On the lower right is the market quadrant, which includes standard items and services that have the following characteristics: they are involved in an active supply market; they have low to medium total value; they have many suppliers that can provide substitute products and services with low supplier switching costs; and they feature well-defined specifications. Goods that are often categorized in this quadrant here include commodity items like fasteners, corrugated packaging, and other basic, raw materials that do not have an especially high dollar



OUALIFIED SUPPLIERS
Figure 25. Market items. Developed by LINCS in Supply Chain Management
Consortium.

value. Market quadrant items are often sourced globally because they are easy to specify, many supply alternatives are available, and supply managers do not look much past cost, quality, and delivery.

Leverage Quadrant

On the upper right is the leverage quadrant, which includes items that should lead to a range of benefits after consolidating purchase volumes and reducing the size of the supply base. Leverage items include any grouping or family of items in which volumes can be combined companywide for economic advantage, such as bulk chemicals and standard semifinished products. Because leverage items are often candidates for longterm agreements, supply managers should engage in intense information searches regarding them. Developing long-term contracts should lead to



Figure 26. Leverage items. Developed by LINCS in Supply Chain Management Consortium.

questions about cost, quality, delivery, packaging, logistics, inventory management, financial health, and after-sales service. Although this quadrant does not have the most suppliers in terms of numbers, the dollar value of the leverage items should be high. It is common to have suppliers in this quadrant receive 80% or more of total purchase dollars, with leverage often employed.



Critical Quadrant

The upper left quadrant is the critical quadrant, which includes goods and services with the following characteristics: they consume a large portion of the total purchase dollars; they are essential to service or product functions; or they involve areas where end customers value the differentiation offered by goods and services. This quadrant typically has fewer suppliers that satisfy purchaser requirements and often involves customization rather than standardization. At times, suppliers are critical because they have patent rights to goods or services that the



Figure 27. Critical items. Developed by LINCS in Supply Chain Management Consortium.

buying company simply must acquire. Products that fall into this quadrant include specially engineered items like aircraft engines and complex medical equipment.

Unit 3: Strategic Sourcing Process

This section covers the commodity strategy development process. It is crucial for companies to follow a structured process in developing commodity strategies to help ensure that it is carried out in an effective and efficient manner. The following steps should be completed by procurement personnel when procuring goods and services that are of relative strategic importance to companies' success in the marketplace. The exact products and services that are to be subjected to this strategic sourcing process are determined through portfolio analysis. Each of the steps needs to be completed in the order indicated to help ensure that commodity strategies are developed and executed well.

Define Business Requirements Using Commodity Strategies

The business unit strategy is the driving force of procurement strategies for the products and services procured by business units within firms. These strategies are translated into purchasing goals, from which strategies are developed for commodity families. Commodities are general categories, or families of, procured items, such as fuel, office supplies, wood, and cotton.

Developing procurement strategies is often carried out by commodity teams that are led by procurement professionals dedicated to procuring specific commodities or groups of commodities. Commodity teams are often formed from employees across businesses, all of whom are familiar with the commodity being procured. The commodity team is responsible for developing the commodity strategies that define the details and the action plans for managing commodities.



Define the Strategic Importance of the Product or Service Procured

2

The next step in the sourcing strategy is understanding the relative importance to the business unit objectives of the product or service procured, which is typically achieved using portfolio analysis, as previously noted. A portfolio analysis typically includes supply market risks and focuses on the value-generating capability of a purchase in light of the risks of making that purchase in the marketplace. From this analysis, the goods and services purchased by organizations can be placed in the appropriate quadrant, broad procurement strategies can be developed by quadrant, specific commodity strategies can be developed for each commodity within a quadrant, and decisions can then be made about the most appropriate sourcing strategy for each category.

Determine Business and Procurement Requirements, Spend, and Conduct a Market Analysis

This stage requires a **spend analysis**, which entails identifying the products and services that each business unit—marketing, production, engineering, warehousing, etc.—is buying. It is important to understand where money is being spent and with which suppliers. This spend analysis can reveal different that business units are paying different prices for the same items. It can also reveal where it is possible to consolidate spends for various items with fewer suppliers or where excessive variety exists.

Then, a market analysis should be conducted. This identifies the important characteristics of supply markets and business unit requirements. The results of this analysis provide a sound basis for decision-making. The information for this research can come from the Internet, supplier literature, government reports, professional associations, trade magazines, and database research.

The main steps carried out in spend and market analyses are:

- 1. Identify past expenditures by commodity and supplier
- 2. Determine total expenditure for commodities or services as a percentage of the total for the business unit
- 3. Identify current suppliers and potential suppliers by commodity
- 4. Determine the marketplace pricing for commodities and services
- 5. Determine trends in pricing
- 6. Carry out supplier analyses by completing supplier scorecards and other forms of assessment
- 7. Investigate strategies of market leaders to identify best practices
- 8. Determine current and future volume requirements that could be held by the organization
- 9. Identify opportunities for future spend and market analyses



Set Goals and Conduct a Gap Analysis

4

The next step in strategic sourcing is establishing specific targets for evaluating progress against goals. Goals should relate directly to the objectives and requirements of businesses and business units. Effective goals, which are established with stakeholders, should be measurable and action-oriented, evaluate internal progress over time, and compare performance to external benchmarks and competition. They should also go beyond price to be based on total costs.

Goals should also be based on competitive analyses, comparisons with market leaders, and future trends. An integral part of this process is the gap analysis, which is carried out to determine firms' current standings in terms of their competition. Gap analyses help business managers understand and quantify the gaps that exist between their current status and the ideal state of their businesses.

Develop Sourcing Strategies and Objectives

5

In this step, sourcing strategies are developed from the information obtained and the analyses carried out in the previous steps. Sourcing strategies should include the following elements:

- Recommended suppliers, locations, and relative sizes (e.g., local, regional, or global suppliers)
- Number of suppliers and amount of business to be awarded to suppliers
- Lengths and types of contracts
- Product design requirements and extent of supplier involvement in product and service designs
- Supplier development, relationship management requirements, and activities
- Overall sourcing volume mix by suppliers and products, services, or commodity groups

Many of these criteria flow from, and are functions of, the area of the portfolio analysis matrix in which commodities and services were classified. For example, commodities that fall into the market quadrant would not be candidates for strategic alliances with suppliers because the relatively low value of the items purchased in this quadrant and the relatively high number of potential suppliers involved do not warrant the time and effort involved in developing such alliances. Conversely, items with high purchase volumes have a potential for significant savings by, for example, consolidating spend with fewer suppliers and through standardization.



Carry out the Strategy

6

In this step, procurement professionals carry out their sourcing strategies. Key elements of strategy execution include the following:

- 1. Documenting and communicating the strategy to everyone involved, including owners, stakeholders, customers, and suppliers
- 2. Establishing tasks to be completed and timelines for completion
- 3. Assigning accountability for executing the strategy
- 4. Ensuring adequate resources are made available
- 5. Developing contingency plans

Various individuals within the procurement group, working in cross-functional teams, would typically be tasked with the responsibility for implementing the strategy and carrying out the plans.

Monitor Results and Review Performance

The final step is to ensure that the strategy is achieving its desired objectives. Regular reviews must be conducted to determine if the strategy is achieving its objectives and to determine if a modification of the strategy is required. It is important to remember that strategy outcomes may vary considerably, depending on the specific commodities and supply markets involved. These key steps are carried out by procurement management and must be included in monitoring and reviewing performance:

- Conduct regular review meetings to determine if the strategy is achieving the desired results
- Share results with stakeholders
- Assess internal and external stakeholder perceptions
- Ensure objectives and goals that are outlined in the strategy are met, adjusting it if necessary
- Provide feedback on actions taken

Unit 4: Types of Sourcing Strategies and Tactics

Organizations use a variety of procurement strategies and tactics to achieve a competitive advantage, including supply base rationalization, total quality management efforts with key suppliers, global sourcing, long-term supplier relationships and supplier development, early supplier involvement in design, and electronic procurement (e-procurement). This section briefly reviews some of the key strategies that are used in many of these organizations.



Supply Base Rationalization

The supply base comprises all suppliers that organizations utilize to procure their goods and services. Rationalizing the supply base is primarily aimed at determining the appropriate number and mix of suppliers for all organizations. This process is ongoing as organizations' needs change over time, and it involves analyzing the number of suppliers required for current and future needs of purchased items and/or services. Supply base rationalization focuses on developing the best blend of suppliers, given organizations' requirements. The intention is to identify the best values and the appropriate number of suppliers for all commodities, based on overall business strategies.

Total Quality Management (TQM) with Suppliers

Total Quality Management (TQM) is a management system that involves all employees in ongoing quality improvement efforts. TQM with suppliers involves the procurement departments to work with key suppliers to initiate a quality improvement program. This program requires working with suppliers to establish standards of performance, to measure performance, and to even support the supplier by assisting them with training for their organization in quality improvement tools and techniques. This is especially true when companies reduce the total number of their suppliers, frequently in conjunction with TQM programs or Just-In-Time productions and inventory systems. Just-In-Time is a method of supply using a strategy of shipping in smaller, more frequent lots with deliveries that arrive as they are needed



Figure 28. TQM. Developed by LINCS in Supply Chain Management Consortium.

rather than stockpiling materials or parts. It is also important to note that subpar quality from a supplier can have an adverse impact on the manufacturing and production processes.

Essentially, procurement professionals recognize that quality management requires quality materials and parts. That is, the final product is only as good as the parts used in the process, and procurement is vital in helping suppliers ensure the quality of parts that create final products. Procurement accomplishes their role by visiting sites to assess supplier quality and helping suppliers implement a quality improvement program for improving the quality of their supplied products and services.

Sourcing Globally

Many firms engage in global sourcing; however, long distances make planning and logistics more difficult, currency fluctuations can change the economics of a transaction, different business cultures and languages can lead to misunderstandings, and the paperwork with international transactions can be cumbersome. Nonetheless, for most procurement managers global sourcing is about price. Other motivators include gaining access to new sources of technology and higher quality as well as introducing competition to the domestic supply base.



Price reduction is a key motivator behind outsourcing globally. Potential price savings opportunities can be realized by sourcing globally by taking advantage of significantly lower labor costs in certain countries. There is also the risk of hidden costs, particularly for less-experienced organizations. These costs are due to extended supply chains and include costs of anticipating and managing increased risks and increased inventories.

Another reason companies procure globally is that some commodities are only available from certain regions, which makes worldwide sourcing a necessity when those items are required. Also, the supply base to support certain industries, particularly in the United States (U.S.) and Europe, might be gone or severely depleted. For example, many companies that manufacture electronic components and contract manufacturers of



Figure 29. Sourcing globally. Developed by LINCS in Supply Chain Management Consortium.

other products, such as clothing, might be entirely relocated to Asia from South America. Firms can have their unique reasons for sourcing globally, which can differ among firms (e.g., requiring a certain brand's product that is only provided by one supplier in another country).

Long-Term Supplier Relationships and Supplier Development

Long-term supplier relationships involve working with key suppliers to reduce costs and improve service levels overall. In some cases, procurement may find that suppliers' capabilities do not match current or future expectations, but the department may wish to develop the supplier because it has the potential to perform well. In this case, procurement will work with such suppliers to facilitate improvement.



Figure 30. Using a smaller number of suppliers leads to partnerships. Developed by LINCS in Supply Chain Management Consortium.

Learning Block 1 discussed how the sourcing strategy use a smaller number of suppliers, which frequently leads to an alliance or partnership with suppliers to assure an adequate supply of quality materials over time and at an optimum total acquired cost. This

partnership concept encompasses more than the procurement process; it also includes different areas and industries throughout supply chains. For example, partnerships can evolve with transportation companies, contract logistics companies (i.e., third-party providers), and other channel members.

Early Supplier Involvement in Design

Early involvement of suppliers in design is the process of working with suppliers early during the design and development of current or new products that companies want to purchase. Supplier involvement may be informal or formal, depending on the nature of the products or services procured and the desired nature of the relationship with given suppliers. It is beneficial to involve suppliers early in the design phase to enlist supplier's ideas and to ensure that products can be manufactured in accordance with the engineering specifications as it becomes increasingly difficult and costly to make design changes after designs have been fully developed. This process is illustrated in *Figure 31*.



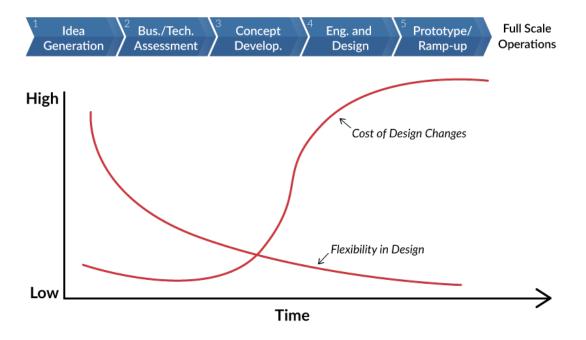


Figure 31. Design flexibility and cost of changes. Created by LINCS in Supply Chain Management Consortium

As shown in *Figure 31*, the cost impact of design changes will increase substantially in the later phases of the design process. Additionally, design modifications become less flexible and more costly to achieve during the latter phases of design completion.

Total Cost of Ownership (TCO)

Total Cost of Ownership (TCO) is a calculation designed to help procurement personnel make more informed financial decisions when purchasing products or services. It is also one of the most important concepts in purchasing and supply management. Rather than simply identifying the purchase price of items, TCO adds to the initial purchase price other costs expected to be incurred during the life of the product (e.g., service, repair, and insurance).

In addition to price, TCO considers total costs of acquisition use and administration, maintenance, and disposal of given items or services. TCO analysis involves determining all costs related to the procurement of given products or services to allow for a number of needs: accurate estimation of true costs, cost comparison purposes, and supplier negotiation.



Figure 32. TCO. Developed by LINCS in Supply Chain Management Consortium.



Electronic Procurement (e-procurement)

E-procurement is a way of using Enterprise Resource Planning (ERP) systems and the Internet to allow businesses to purchase the goods and services in an easier, faster, and less-expensive way. The overall goal is to streamline the purchasing process so businesses can focus more management time on earning revenue and serving customers.

With e-procurement, purchases are easier to track because they are completed using ERP systems and the Internet, and the company's managers can easily see who made which purchases without waiting to receive a monthly revolving credit statement. Furthermore, many companies incorporate product specifications into their e-procurement systems. Buyers also save time by not needing to leave their desks or make phone calls to suppliers to place orders.

Suppliers receive orders almost immediately, so they can fulfill and ship them much faster than with the traditional procurement methods. Using the ERP systems and Internet for procurement also makes it possible to research information about suppliers and to compare product and service offerings. Various software applications can be used for e-procurement. According to EPIQ (2014), e-procurement applications provide tools that let businesses organize and compare supplier information more effectively.

Unit 5: Evolving Sourcing Strategies and Best Practices

A number of evolving sourcing strategies and several best practices exist in the procurement of goods and services. The following provides several examples of evolving strategies and best practices in procurement.

Integrating Marketing and Sourcing

In certain firms, sourcing managers may be integrated with marketing. Examples of areas in which marketing teams require procurement's support include sourcing printing services, conventions, meetings, promotional displays and tradeshows, marketing research services, and advertising and promotion. Integrating sourcing managers with marketing helps promote a closer and better understanding of marketing-related sourcing requirements and how these requirements can best be fulfilled. Sourcing involvement, for example, may result in reducing the number of company-wide printing suppliers from 600 to 500.

Co-Locating Procurement Individuals with Internal Functions

In many firms, the procurement function is co-located and works closely with other internal supply chain functions, such as transportation, warehousing, and production. Co-location occurs when procurement individuals are physically situated in close proximity with supply chain professionals in organizations. Working in similar spaces helps to ensure, for example, that sourcing has early insight into new products that might affect the development of strategic sourcing plans. The direct involvement of sourcing with other supply chain team members is a best practice at many successful firms.



Learning Block 2 Summary

Procurement plays a significant role in formulating strategies for firms as a whole and with regard to individual items and services. This department also uses a commodity strategy development process and follows a number of key steps in that process.

Additionally, procurement develops a strategy for, and efforts connected to, the procurement of goods and services based on the relative strategic importance of those goods and services.

Organizations use a variety of procurement strategies to achieve competitive advantage. Lastly, there are a number of current and evolving strategies in the procurement field.



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium.

Learning Block 2 Practice Questions

- 1. The organizational strategy contains:
 - a. Long-term objectives and purposes
 - b. Firms' short-term objectives and purposes
 - c. A list of all suppliers
 - d. Contract agreements with all suppliers
- 2. The benefit of involving suppliers in the product design process is to:
 - a. Integrate supplier ideas and ensure ease of manufacturing
 - b. Create sole source procurements
 - c. Minimize competition
 - d. Support poor engineering initiatives
- 3. Developing a procurement strategy is often led by:
 - a. Operations management
 - b. Quality control personnel
 - c. Commodity teams
 - d. Distribution management
- 4. Portfolio analysis involves classifying procured items or services into four quadrants, namely:
 - a. Transaction quadrant, supplier quadrant, market quadrant, and critical quadrant
 - b. Transaction quadrant, market quadrant, quality quadrant, and leverage quadrant
 - c. Transaction quadrant, market quadrant, leverage quadrant, and critical quadrant
 - d. Transaction quadrant, market quadrant, leverage quadrant, and strategic quadrant



5. Actions carried out in market analysis include:

- a. Developing long-terms contracts
- b. Selecting suppliers
- c. Carrying out negotiations
- d. Determining trends in pricing

6. Long-term supplier relationships involve which of the following?

- a. Working only with global suppliers
- b. Working with the most costly suppliers
- c. Looking for alternative sources of supply
- d. Working with key suppliers to reduce costs and improve overall service levels

7. The portfolio matrix is used to identify which of the following?

- a. Nonperforming suppliers
- b. Take a price- or cost-analytic approach
- c. Slow-paying customers
- d. Purchases from global suppliers only

8. Rationalizing the supply base is primarily aimed at determining the appropriate number and mix of which of the following?

- a. Customers
- b. Suppliers
- c. Products
- d. Competitors

9. TCO is primarily aimed at:

- a. Identifying the lowest price for goods and services
- b. Identifying poor supplier quality issues and developing quality programs
- c. Understanding the total cost of acquisition and administration, maintenance, and disposal of given items or services
- d. Understanding the financial strengths of supplier companies

10. Electronic procurement (e-procurement) is described by which of the following?

- a. A management system that involves employees in ongoing quality improvement efforts
- b. A way of using the Internet to make it easier and less costly to purchase goods and services
- c. The process of working with suppliers early during the design of a current or new product that a company wishes to purchase
- d. Primarily aimed at determining the appropriate number and mix of suppliers





Learning Block 3: Supplier Identification and Evaluation

Learning Block 3 Description

This learning block provides an overview of how companies identify and evaluate potential suppliers. It includes information about the use of market information and intelligence to identify suppliers and additional information about supplier evaluation practices and the criteria used for selecting the best suppliers. Also included is a review of global supply management, the need for evaluating global sources of supply, and the challenges associated with identifying, evaluating, and selecting global suppliers.

Learning Block 3 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Discuss the various sources of market intelligence
- Recognize the use of market intelligence in identifying potential suppliers
- Understand key supplier evaluation practices
- Explain the need for identifying and evaluating global suppliers

Unit 1: Overview of Supplier Identification and Evaluation

Supplier identification and evaluation is the process of searching for potential suppliers who will be able to deliver products, materials, or services required by companies. The outcome of this process is to compile a list of potential suppliers. Procurement then takes the lead to evaluate each prospective supplier against specific criteria like cost, quality, consistency, and other performance metrics.



Inclusion and Exclusion for Suppliers

Approved suppliers for a product or service may already exist, which could be the case for repetitive purchases. For items that do not currently have approved suppliers or situations in which organizations want to re-evaluate the existing supply base, evaluations involve identifying possible new suppliers that might be able to satisfy the user requirements.

It is important at this stage to include, where appropriate, possible suppliers that have not previously been used. Identifying possible suppliers, especially in the global business and supply environment, can be a challenge and often requires extensive research.



Figure 33. Inclusion and exclusion of suppliers. Developed by LINCS in Supply Chain Management Consortium.

Importance of the Supplier Identification and Evaluation Process

Among the most important responsibilities of the procurement function are supplier identification, evaluation, and eventual selection. Having fewer suppliers with long-term contracts exposes the form to the risks and costs of making incorrect decisions that can have long-lasting consequences. As suppliers often command a significant proportion of firms' total spend, the logic behind creating a world-class identification and evaluation process becomes increasingly important. Suppliers also can impact a broad range of end-customer requirements in terms of quality, reliability, and availability of products.

Not all supplier identification and selection decisions warrant comparable effort. This means the amount of time and effort involved in searching for and evaluating suppliers that provide generic, low-cost items such as motor oil or bandages would be different from the time and effort involved in searching for and evaluating suppliers that provide high-cost, specially engineered items like motor car engines or surgical equipment.



For example...

Firms that excel at supply management understand the need to approach the identification and evaluation decisions based on their key requirements. The way buying firms subsequently manage their suppliers also differs from requirement to requirement. Segmenting supply requirements (e.g., with the portfolio matrix tool) begins to define the intensity of the search, the contracting approaches and performance measures to employ, and, eventually, the kind of relationships to pursue with selected suppliers.



Unit 2: Market Intelligence for Identifying Suppliers

A major request MADE of supply management tends to be *where* to find suitable suppliers. The issue of obtaining credible market intelligence confronts supply managers in their efforts to find, qualify, and approve appropriate sources of supply. However, the answer to this seemingly simple request for information (RFI) has many aspects.

The Process of Obtaining Supply Market Intelligence

First, supply departments must identify which potential suppliers exist for a particular commodity and where they are located. Next, they must determine which suppliers are capable of providing the required goods and at what total cost. Organizations must then narrow the supplier pool through a structured evaluation process to arrive at a smaller set of supplier candidates. Lastly, a rigorous evaluation must occur to evaluate suppliers' past performance and capabilities.

These factors, however, become more challenging when suppliers are located in distant areas. Gathering supply market intelligence (SMI) requires supply managers to obtain and analyze the available intelligence, which is generally more complex and more difficult when suppliers are located in distant areas requiring extensive, and often costly, travel. According to Trent and Roberts (2009), supply market intelligence exists in many forms and places, so no single source of this intelligence is available.

SUPPLIER POOL SUPPLIER SUPPLIER SUPPLIER SUPPLIER A1 **B1** SUPPLIER SUPPLIER SUPPLIER A2 A1 A2 SUPPLIER SUPPLIER SUPPLIER SUPPLIER **A3 A3**

Figure 34. Gathering market intelligence aids in obtaining the best suppliers. Developed by LINCS in Supply Chain Management Consortium.

Elements of Supply Market Intelligence

Supply market intelligence is the result of obtaining and analyzing information relevant to companies' current and potential supply markets with the objective of supporting effective decision-making. According to Dominick (2008), supply market intelligence includes six important elements:

• Commodity profile information: This information identifies the type and nature of products or services, manufacturing or service delivery processes, and quality requirements or standards.



- Cost structure: This element consists of the costs associated with capital investment, raw materials, manufacturing, quality, storage, transportation, duties, export control, inventory carrying, taxes, insurance, port of entry, supplier development, energy, overhead, and profit.
- Supply base information: This portion includes current and potential suppliers, supplier characteristics, and country location.
- Market information: This information identifies supply and demand price drivers, capacity
 utilization, and other factors that determine price and availability for the commodities in
 question, along with the market size and predicted growth rate.
- Competitive analysis information: This analysis is for buyers' and suppliers' relative size and
 buying power, substitute products and services (i.e., products and services that can be readily
 substituted for those currently sourced and are comparable at lower prices), other customers
 using the same sources of supply, and other factors influence buying leverage.
- Quality: Evaluation of suppliers' past performance regarding product failure rates and overall
 quality leading to customer satisfaction. Further evaluation would reveal the extent of quality
 programs to prevent defects (such Total Quality Management or lean) and how defects are
 corrected.

Unit 3: Uses, Categories, and Levels of Market Intelligence

Supply managers obtain and use intelligence to identify suppliers who can provide the necessary products and services that will enable the procuring company to enhance its competitive standing (see *Figure 35*).

The intelligence gathered under these categories allows supply managers to make informed decisions about the various supply issues. When collected on a regular basis, this information also allows supply managers to keep abreast of developments, such as shifts and changes in demand and supply markets, the introduction of new products and technologies, the entrance of new competitors, and changes to manufacturing processes. Insights gained from this intelligence help supply departments adjust their sourcing strategies in a timely manner. Market intelligence can be gathered at the following levels:

- Macro environmental level: Information from this level includes market dynamics, world trade, demographics, political climate, economics, environment, and technology.
- Country level: This information is often a subset of the macro environmental level, with additional topics that include cultural issues, levels of crime, logistics infrastructure including the natural geography and size of country, safety of intellectual property (IP), political climate and stability, national holidays, working hours, and time zone differences.
- Industry and commodity level: Industry and commodity market intelligence relates to the types, sizes, and relative strengths of industries that exist and the worldwide users and suppliers of commodities.
- Supplier level: Supplier information comprises the next level of supplier market intelligence and relates to the number of potential suppliers that exist, the products and services they provide, their locations, relative sizes, and capabilities.



Type of SMI	Use of Supplier Market Intelligence
Commodity	To determine which commodities would benefit from global buying
Industry	To determine industries and suppliers within those industries, including capacity utilization and constraints
Competitive environment	To determine the competitive environment that exists by industry and supplier
Market forces	To determine the market forces at play that influence cost and pricing
Early warning signals	To determine early warning signals for supply market changes that affect availability, cost, price, or delivery
Suppliers	To determine the suppliers that exist and that can potentially supply a given commodity or service
Supplier capability	To determine those suppliers with the needed expertise to meet or exceed supply requirements
Supplier viability	To determine financial viability and continuity
New suppliers or new capabilities entering the market	To determine new suppliers coming into the market and potential new capabilities among existing suppliers
Levels/tiers of suppliers	To determine second- and third-tier suppliers that exist for a given commodity or service and their effects on the supply chain
Technology	To determine what new technologies will be available and their potential impact on supply and costs
Local laws and customs	To determine local laws and customs in potential supply countries and their potential effect
Trade barriers	To determine the implications of trade barriers that may be in effect
Customs and excise	To determine customs and excise requirements and duties that would apply
Child labor laws and practices	To determine child labor laws and practices in potential supply countries and the history of conformance with or violation of these laws
Supply chain	To determine the supply chain that exists for a given commodity
Total cost	To determine total supply chain costs involved in outsourcing and the development of cost models based on this information
Risk	To determine risk factors involved in sourcing from specific suppliers or countries and the potential effects if these risks occur

Figure 35. Uses of supply market intelligence. Developed by LINCS in Supply Chain Management Consortium.



Unit 4: Supplier Evaluation

After potential suppliers have been identified, it is necessary to evaluate suppliers. An important step

is to pre-screen possible sources of supply to identify the suppliers who meet a minimum set of criteria. Pre-screening reduces the number of potential suppliers to those who can satisfy users' demands. In some instances, and for some goods or services, pre-screening can be a relatively simple task. In other instances that involve complex items (e.g., jet engines and medical testing equipment), more time and effort are required.

With the potential pool of suppliers reduced to those who can meet users' requirements, the next step is to determine which suppliers can *best* meet those requirements. This could be accomplished through competitive bidding if the procurement items are fairly simple or standard (e.g., stationery items, such as pens and paper or



Figure 36. Comparing suppliers. Developed by LINCS in Supply Chain Management Consortium.

consumable maintenance items, such as grease, nuts, and bolts) and if there is a sufficient number of potential vendors. If these conditions do not exist, a more elaborate evaluation, such as engineering tests, may be necessary, and a site visit to the supplier's facility could be warranted.

Supplier Evaluation Objectives

A key objective in the supplier evaluation process is to identify the suppliers who can become a source of competitive advantage for the procuring company. Another objective should be to reduce risk and maximize value. Risk includes the potential risk of a supplier failure, such as risk of suppliers not being able to deliver products or services at a consistent level of quality, quantity, and cost over time. With regard to maximizing value, the evaluation process should be able to determine suppliers that are willing to, and capable of, working with the buying company to co-design engineered items, collaborate to reduce total costs, and work together on ongoing quality improvement projects.

The time involved in evaluating suppliers should be related to the importance of items purchased. For example, the effort involved in evaluating suppliers should be different for jet engines than it is for commercial stationery. For the most important goods and services with high engineering complexity or significant cost, organizations should employ cross-functional teams to evaluate suppliers' financial conditions, capacities, global capabilities, logistical networks, cost structures, supply management practices, process capabilities, technology innovations, quality, and design and engineering capabilities. The time and cost of making supplier visits can be high, but the cost of making a poor selection decision can be devastating.

Supplier Evaluation Criteria

According to Monczka et al. (2005), the following broad criteria are examples of what supply managers should consider during the evaluation process. This list is not exhaustive, but does include some of the more common criteria used in organizations:



Location

This criterion lists where suppliers are located in relation to the purchasing firm and the relative advantages and disadvantages of the location, including distance, supply chain infrastructure, and geographic stability.



Employee capabilities

This criterion provides commitment to quality and continuous improvement, the overall skills and abilities of the workforce, turnover, history of strikes and labor disputes, and general morale.



Cultural and language differences

This consists of the type of culture in place and any challenges to communicating clearly among parties due to language differences.



Cost structure

This includes suppliers' total costs, including production costs, administrative costs, material costs, supply chain costs, and marketing costs.



Infrastructure and assets

This criterion is the age and quality of buildings and equipment and the support infrastructure for maintaining buildings and equipment.



Citations and awards

This encompasses reviewing the citations and awards a supplier has received from other customers and local, state, and federal agencies.



Working conditions

This is the amount of attention paid to general working conditions, health and safety practices, first aid capabilities, and the use of child labor.

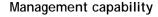


Process and technological capability

Ø

This includes current and future capabilities in design, methods, equipment, processes, and investments in research and development.

Environmental regulation compliance



This broad category includes management qualifications and experience, long-range planning practices, commitment to quality management, customer focus, the history of labor-management relations, investment to sustain growth, employee training and development programs, and strategic sourcing programs.



This criterion includes demonstrated commitment to the protection of the environment and the level and severity of infractions that have occurred, as well as companies' capabilities in, and history of, toxic waste management, use of environmentally friendly materials, and

use of returnable and recyclable packaging and shipping containers.





Financial stability

This entails the financial history of companies, the levels of capital available for investment in companies, credit history, level of debt, and current stability.



This consists of the types of IT in place, the ability to link and communicate electronically with technology used at buying organizations or other supply chain partners, and a demonstrated willingness to invest in new technologies.



Suppliers' own supplier network

This includes the nature and extent of the network and the potential risk exposure to target suppliers from their own multilevel supplier networks.

Employee turnover

This includes assessing the stability of the workforce by evaluating the tenure of employees and new hires versus terminations and identifying critical skills like welding.



Quality capabilities

This consists of the quality assurance systems and procedures in place, workers' involvement in quality assurance, quality record, and the ability to sustain quality consistency for current demand and anticipated increases in demand.

Evaluation of customer base

This entails assessing the degree to which the supplier is dependent on other customers for business; being dependent on only one customer may not enable a supplier to focus on new requirements.



Each of these criteria should also include a set of detailed questions designed to evaluate suppliers' capabilities with a predetermined scale, which is then used to rate suppliers' capabilities against each of the previously explained criteria. *Figure 37* is an example of a summary supplier evaluation matrix that is used to compare the merits of different potential suppliers. Specific criteria are listed and weighted according to their perceived relative merits. Companies are then evaluated on each of the criteria, and weighted scores are tallied across all criteria to determine the best potential supplier.



ENTED INCODMATION IN WHITE ADEAS OF	WI V		SCORING							
ENTER INFORMATION IN WHITE AREAS ONLY			1 - Not Acceptable							
			2 - Requires Som 3 - Meets Expect							
EVALUATION MASTER			4 - Exceeds Expectations							
		Į.	5 - Significantly E	xceeds Expectation	ns					
EVALUATION CATEGORY	RATING	RFP SOURCE	Supplier 1	Supplier 2	Supplier 3	Supplier 4	Supplier 5	Supplier 6	Supplier 7	
Total Score	100%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Service and Quality	15%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Reporting Delivery & Capabilities		Section IV, Subsection G. q. 1 - 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Service Level Agreement - Quality Focus		Section IV, Subsection H. q. 1 - 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Implementation Plan		Section IV, Subsection I. q. 1 - 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Account Management	15%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Experience & Qualifications - Acct Mgr & Support		Section III, Subsection F; Section IV, subsection A. q. 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Global Support		Section IV, Subsection J; q. 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Client References		Section III, Subsection C. q. 1 - 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Attention to Detail within RFP		Entire RFP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Financials	20%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Market Presence		Section III, Subsection B. q. 1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Competitive Pricing (proposal)		Section IV, Subsection D. q. 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Systems / Requirements	40%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Objectives and Requirements		Section IV, Subsection B. q. 1 - 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
System Functional Requirements		Section IV, Subsection C. All	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Global Capabilities		Section IV, Subsection J. q. 2 - 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Technology		Section IV, Subsection F. q. 1 - 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Diversity Program	10%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MWBE Owned		Section III, Subsection D. g. 1 & 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Support Tier 1 Objectives		Section III, Subsection D. g. 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Figure 37. Supplier evaluation matrix. Developed by LINCS in Supply Chain Management Consortium.

Current Supplier Evaluation

Sometimes, companies evaluate their current suppliers when they need to source products or services, especially new products or services. These companies will typically identify which of their current suppliers may be capable of providing these products or services and look for other potential suppliers where necessary. Investigating new suppliers can provide a basis of comparison for costs, quality, delivery capabilities, and other supply essentials.

Current suppliers' capabilities will then be evaluated against prospective suppliers' capabilities to determine how well they fit with particular companies' needs. For existing suppliers, sourcing professionals have a wealth of information about historical performance that can be used in the evaluation process. This information is helpful, but good performances on contracts in the past do not guarantee good performances on future contracts and different products or services.

Unit 5: Global Supply Management

The search for new sources of competitive advantage is a relentless challenge that organizations face, and it is crucial that supply groups showcase annual progress. Organizations must show constant improvements, particularly cost reductions, which result in a search for low-cost sources of supply that have become a central part of most supply strategies. This has resulted in procurement groups in many companies seeking overseas sources of supply to achieve lower costs.





Figure 38. Global supply management. Developed by LINCS in Supply Chain Management Consortium.

Sourcing Globally

As noted in Unit 4, most companies are under constant pressure to contain and reduce their costs, which largely explains the motivation behind global sourcing; the primary reason that companies source from around the world is to obtain lower prices. For example, as a cost-cutting measure, Dell moved its European manufacturing plant from Ireland to Poland (Fottrell & Scheck, 2009). This was no small undertaking and affected almost 2,000 employees; however, the move was part of a \$3 billion company-wide cost reduction initiative.

Other reasons that companies use global suppliers include gaining access to new sources of technology, obtaining higher quality, or introducing competitive organizations to the domestic supply base.

Global purchasing can result in cost savings, but the global supply process also requires supply managers to address a wider range of issues of cost, time, and complexity. At least a quarter of the unit cost savings from global purchasing disappears, on average, when estimating the total cost of purchase ownership. This is due to hidden costs associated with lengthened supply chains, including increased lead times, increased inventory and increased risks.

Finding Global Suppliers and Supply Classification

Many supply managers use a classification scheme to segment suppliers by their geographic capabilities. This designation helps when searching databases for potential suppliers. In fact, internal supply groups can benefit from this classification in their examination of potential suppliers, whether they are involved with global supply management or not. This approach helps strategy development teams understand location of suppliers and supplier capabilities more accurately. The classification scheme is as follows:

- Local supplier: A local supplier serves only a limited number of sites or buying locations (often only one) within a country. The database should include information about the country and the sites within that country that the supplier is capable of serving.
- Domestic supplier: A domestic supplier can serve any location within a country. The database must note the country or countries that the supplier can competitively serve.
- Regional supplier: A regional supplier competitively serves many countries within a single region. Examples of regions include North America, Latin America, Asia-Pacific, and Europe. A



few suppliers may also serve only a portion of a region.

- Multi-regional supplier: A multi-regional supplier can competitively serve two or more regions.
- Global supplier: A global supplier can competitively serve most, if not all, countries around the world.

Learning Block 3 Summary

Discovering potential suppliers is the process of searching for suppliers who will be able to deliver the products, materials, or services required by a company. The outcome of this process is the list of potential suppliers, after which procurement evaluates each prospective supplier against specific criteria like cost, quality, consistency, and other performance metrics. Obtaining suitable market intelligence is an issue that confronts procurement managers daily in their efforts to find, qualify, and use appropriate sources of supply. Additionally, supply departments must identify which potential suppliers exist for a particular commodity and where they are located.

Supply market intelligence is the outcome of the process of obtaining and analyzing information relevant to a company's current and potential supply markets with the objective of supporting effective decision-making. Supply market intelligence includes five elements: commodity profile information, cost structure, supply base information, market information, and competitive analysis. Supply market intelligence also has varied uses. Supply managers obtain and use intelligence to identify suppliers that can provide the necessary products and services at consistent levels of cost, quality, and quantity. The evaluation of potential suppliers attempts to answer



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium.

two main questions: Is this supplier capable of supplying the purchaser's requirements satisfactorily over both the short and long terms? Is this supplier motivated to supply these requirements in the way that the purchaser expects over the short and long terms?

A main objective of the evaluation process is to reduce purchase risk and maximize overall value, and the time that goes into evaluating suppliers should be a function of the importance of items purchased. Suppliers are generally rated across multiple categories using weighting evaluation criteria, according to the relative importance of each criterion. Most firms engage in global sourcing at some level, and the primary reason to source on a worldwide basis is to obtain lower prices. Many firms source globally and have realized savings as a result. Supply managers from leading companies have developed a classification scheme to segment suppliers by their geographic capabilities.



Learning Block 3 Optional Supplemental Resource

The optional supplemental resource listed below may be used to reinforce the content covered within this learning block.

Handfield, R. B. (2006). Supply market intelligence: A managerial handbook for building sourcing strategies. Boca Raton, FL: Taylor & Francis Group.

Learning Block 3 Practice Questions

1. Supply market intelligence is defined as:

- a. Being smart about finding the right suppliers
- b. The acquisition of products and services
- c. Understanding which suppliers would like to do business with a company
- d. The outcome of obtaining and analyzing information relevant to a company's current and potential supply markets

2. Commodity profile information:

- a. Includes current and potential suppliers, their characteristics, and country location
- b. Identifies supply and demand price drivers, capacity utilization, and other factors that determine price and availability
- c. Identifies the type and nature of products or services, manufacturing or service delivery processes, and quality requirements or standards
- d. Is an assessment of buyers' and suppliers' relative size and power, substitute products and services, other customers using the same sources of supply, their relative size and buying power, and other factors that influence buying leverage

3. Supply market intelligence includes the following elements, namely:

- a. Commodity profile information, cost structure, supply base information, market information, and quality information
- b. Commodity profile information, cost structure information, supply base information, market information, competitive analysis information, and quality information
- c. Commodity profile information, price structure, supply base information, market information, and competitive analysis
- d. Commodity profile information, cost structure, customer base information, market information, and competitive information

4. Insights gained from supply market intelligence help supply departments to:

- a. Obtain goods at the lowest price
- b. Grow procurement groups
- c. Adjust their strategy and tactics
- d. Reduce involvement in supplier development



5. Researching suppliers often requires a large amount of time and resources, so it should be done only:

- a. When carrying out emergency or spot buying
- b. When firms have driven down prices with their current suppliers, and those suppliers cannot further reduce their prices
- c. To ensure that there are multiple suppliers for all products and services purchased
- d. For those suppliers who stand a serious chance of receiving a significant order

6. Supply market intelligence should be gathered at different levels, including:

- a. Macro environmental level, customer level, supplier level, and country level
- b. Macro environmental level, country level, industry and commodity level, and supplier level
- c. Macro environmental level, continent level, industry and commodity level, and supplier level
- d. Macro environmental level, country level, state level, and industry and commodity level

7. Key supplier evaluation criteria include infrastructure and assets, which refer to:

- a. Where suppliers are located in relation to purchasing firms and the relative advantages and disadvantages of those locations
- b. The age and quality of buildings and equipment
- c. The amount of attention paid to general working conditions
- d. The quality of products and services

8. The supplier classification scheme to segment suppliers by their geographic capabilities includes:

- a. Local supplier, domestic supplier, regional supplier, multi-regional supplier, global supplier
- b. Local supplier, foreign supplier, regional supplier, multi-regional supplier, global supplier
- c. Local supplier, domestic supplier, country supplier, multi-regional supplier, global supplier
- d. Local supplier, domestic supplier, regional supplier, continent-wide supplier, global supplier

9. Domestic suppliers can serve:

- a. Only a limited number of sites or buying locations
- b. The countries within a single region
- c. Any location within a country
- d. Multiple regions



10. Some of the issues that can arise when sourcing globally include:

- a. The long distances involved, which make planning and logistics more difficult; currency fluctuations, which change the economics of a transaction; and different cultures and languages, which lead to misunderstandings.
- b. The long distances involved, which make planning and logistics more difficult; currency fluctuations, which change the economics of a transaction; and different personalities, which lead to misunderstandings.
- c. The long distances involved, which make planning and logistics impossible; currency fluctuations, which change the economics of a transaction; and different cultures and languages, which lead to misunderstandings.
- d. The long distances involved, which make planning and logistics more difficult; stable currencies, which change the economics of a transaction; and different cultures and languages, which lead to misunderstandings.





Learning Block 4: Supplier Negotiations and Contracting

Learning Block 4 Description

After suppliers are approved, buyers often negotiate with them to arrive at a purchase contract. At times, contracts may involve nothing more than the placement of POs that require little or no negotiations between buyers and sellers. At other times, negotiations span longer periods of time and are quite complex. This learning block addresses two important procurement topics: buyer-seller negotiations and buyer-seller contracts. This learning block also outlines procurement contracts, operational contracts, and several best practices in contracting.

Learning Block 4 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Recognize the important relationship between planning for and succeeding in negotiations
- Understand the important roles that power, tactics, and concessions play in negotiations
- Analyze the difference between win-lose and win-win negotiations
- Generate a basic understanding of procurement contracting and best practices in contracting

Unit 1: Buyer-Seller Negotiations

Negotiations are processes of formal communication in which two or more people seek mutual agreement about one or more issues. It can be a time-consuming process that requires extensive planning and a commitment of time and effort on behalf of the parties carrying out the negotiations.

The difference between good and poor supplier agreements can be the result of the negotiators' effectiveness. Negotiating long-term agreements is an important part of the strategy development process, so firms use trained negotiators or external teams to assist in negotiations.

Figure 39 presents a logical set of steps to follow when engaging in negotiations. It is important to recognize that not all purchase processes require negotiations because some are simple and do not require anything beyond competitive bidding, which involves no negotiations at all. Negotiations are typically conducted when any of the following criteria is met:



- Contracts involve a large amount of money (i.e., high value)
- The parties involved must agree on elements of cost and other non-cost issues
- Purchase requirements are technically complex or requirements evolve to a higher level of complexity
- Buyers want to formalize continuous improvement metrics and payment milestones or schedules
- Contracts extend for long periods of time
- Suppliers are asked to perform services involving a detailed statement of work (SOW), such as product design or prototype design and manufacturing



Figure 39. The negotiating framework. Developed by LINCS in Supply Chain Management Consortium.

Planning the Negotiations

Negotiations can take a long time to execute, and planning is the most important part of the process. Poor planning increases the probability of a poor outcome, especially if the other parties have in fact engaged in proper planning. Some common planning errors involve not devoting sufficient time to the planning effort, not establishing clear objectives, not developing convincing arguments, not having



sufficient support for a given position on an issue, and not considering the other parties' potential positions or needs.

The planning process involves many activities. These activities include:

- Determining who will participate in negotiations from both buyers and sellers
- ✓ Identifying specific negotiating objectives
- ✓ Analyzing the strengths and weaknesses of all parties' company
- ✓ Gathering relevant information
- ✓ Recognizing other parties' needs
- ✓ Separating facts from conjecture
- Establishing negotiating positions and ranges on each issue (see Figures 40 and 41)
- Developing appropriate negotiating strategies and tactics. *Strategies* are the pre-determined approaches or prepared plans of action to achieve specific goals. *Tactics* are the short-term plans and actions employed to execute negotiating strategies.
- Including other key personnel within the organization about the negotiations
- Practicing negotiating with colleagues

In *Figure 40*, the buyers' maximum price that for a given item is \$11, and the minimum price the seller is willing to sell the item for is \$12. As the figure shows, neither party has left room for compromise. The likely outcome in this scenario is an inability to reach an agreement on this issue.

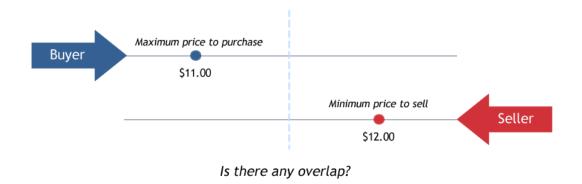


Figure 40. Negotiating with no range. Developed by LINCS in Supply Chain Management Consortium.

In *Figure 41*, each party has planned for flexibility in its approach to price. This figure reveals that an overlap occurs between \$11.25 and \$12, which is the likely area of agreement.





Where is the likely area of agreement?

Figure 41. Negotiating with ranges. Developed by LINCS in Supply Chain Management Consortium.

Effective negotiators know they must plan diligently for negotiations, understand their own needs and the other parties' needs, and know when and how to use specific negotiating tactics and concessions (i.e., demonstrated willingness to move away from a given position). At some point, parties within a relationship may become so comfortable with sharing information that price negotiations are replaced by a cooperative effort to achieve a pre-established target price.

Conducting the Negotiations

After planning is complete, it is time to begin negotiations. Deciding where to carry out negotiations is important. Negotiations may not be conducted in person, but when negotiating, it is best to have a less formal atmosphere to make everyone more comfortable. As negotiations proceed, those involved should summarize positions and points of agreement throughout the negotiations to gauge their progress. If possible, managers should be removed from this process because they can change dynamics during negotiations; negotiators may not want to seem like they are either yielding to or being too strict about contract terms. Finally, it is important to debrief after each negotiating session and to identify lessons learned from the experience.

Effective negotiators display certain behaviors. It is important to think about these behaviors when engaging in negotiations. First, effective negotiators are willing to compromise and to change their

goals when necessary. This indicates a willingness to be flexible, a trait that enhances the possibility of reaching an agreement. They also establish lower and upper limits for each major area of negotiations, which creates room for concessions about the price the buyer is willing to pay or the price at which the supplier is willing to sell.



Figure 42. Conducting negotiations. Developed by LINCS in Supply Chain Management Consortium.



Concessions

Concessions are an integral part of the negotiating process, as outlined in the next section of this unit. Concessions show a demonstrated willingness to move away from a given position. It is important for negotiators to modify their position at appropriate times when conducting negotiations as part of the give and take that usually occurs during negotiations. Parties involved in negotiations must be willingly flexible; without a willingness to make concessions or find alternate solutions, parties in negotiations may become deadlocked, which is the inability to agree during negotiations. The way in which individuals approach negotiations is important. *Figure 43* presents six different negotiating scenarios.

As *Figure 43* shows, the total concession in each of the six supplier scenarios is \$200. The only difference between the scenarios is how the \$200 is presented to the buyer. In Round 1, the first supplier offers the buyer an additional \$50 concession during each round of negotiations. With the second supplier, the amount of monetary concession offered to the buyer is \$125 in Round 1, \$70 in Round 2, \$0 in Round 3, and \$5 in Round 4.

The question for the buyers in these scenarios is whether to proceed to a fifth round of concessions. Some of these scenarios would indeed move on to a fifth round, but others would not, even though the total amount of concessions for the first four rounds is equal for each scenario. For example, scenarios 2 and 4 would not go to a fifth round because minimal or no further concessions would be gained by further negotiations.



Concessions Received Per Negotiation Round

Figure 43. Concession patterns. Developed by LINCS in Supply Chain Management Consortium.

Figure 43 shows that the way concessions are offered can greatly influence the outcome of negotiations. Using concessions during negotiations is not without risk, particularly if one party offers most of the concessions, which could be viewed by the party making most of the concessions as unfair jeopardize the success of the entire negotiating process.

Sources of Power in Negotiations

Power in negotiations is the ability of those involved to influence the others' positions. This power comes from different sources. Having and using different sources of power can have short- and long-



term effects on negotiations. It is common to use one or more forms of power during negotiations, but overusing power can damage relationships.

Informational Power

Informational power involves the use of facts and data in negotiations. In this form of power, the parties involved have, for example, conducted research about the other parties' total costs for products and are able to use that knowledge in negotiating pricing.

Reward Power

In this form of power, the parties involved are able to offer something of value to other parties. The ability to offer a purchase contract is an example of reward power.

Coercive Power

Coercive power involves the use of punishment that can lead to failed negotiations. For example, one or more parties involved may have great buying power and use it to force concessions.

Legitimate Power

This power has to do with the position that is held by individuals within organizations that are involved in negotiations. For example, a vice president at a supplier would have legitimate power to make decisions or commitments during negotiations with buyers.

Expert Power

An individual with expert power is someone who is knowledgeable in a particular field; he or she may also be acknowledged by others as being an expert in that field. For example, highly qualified and experienced engineers might be involved in negotiations for engineered parts, as they understand the makeup of these parts, their intended functions, and typical costs.

Referent Power

Referents have attributes that attract other parties. The strength of people's charisma indicates their referent power. For example, negotiators who are outgoing and friendly are usually able to use these traits to influence other parties in negotiations.

Tactics

Negotiating tactics are the plans and actions used to carry out negotiating plans. Understanding tactics is important, particularly because each party has likely thought about their tactics during planning for negotiations. The main objective of having tactics is to try to persuade counterparts to agree to a position. Negotiators must recognize the types of tactics that counterparts are using, as well as their own tactics. Literally dozens, if not hundreds, of negotiating tactics exist; however, it is important to remember that not all negotiating tactics are ethical.



Silence

Many individuals are uncomfortable with silence, so when parties engage in silence, they hope the other parties will fill the void with talking. Silence can be interpreted as dissatisfaction among the silent parties, who hope that the talkative parties will improve their offer.

Use of Power

Buyers and sellers bring different sources of power to negotiations, as discussed previously. This tactic involves emphasizing a source of power that parties possess.

Phantom Quotes

This is an unethical tactic used by buyers to drive down price. The phantom quote, which is always lower than what sellers might offer, is a figment of buyers' imaginations.

Scarcity

Sellers use this tactic to pressure buyers into a purchase. For example, sellers may indicate that if buyers delay a purchase, the goods may no longer be available due to market scarcity.

Low Ball

In this tactic, sellers accept lower negotiated prices, but they intend to raise prices once they have a signed contract.

High Ball

Employing high ball tactics means that sellers or buyers open with an unrealistic offer of either a very high selling price or a very low offer to buy. Then, negotiators show a willingness to compromise away from that offer, which the other party interprets as a sign of good-faith bargaining; they hope that the final agreement will still be attractive because negotiations started from such a high and unrealistic opening offer. The final agreement can appear attractive compared to the starting point.

Price Increase

This tactic is used by sellers, who tell buyers that if they do not agree to a price on the same day of the negotiations, the price will go up in the near future.

Best and Final Offer

This tactic signals that discussions about certain parts of, or the negotiations as a whole, are coming to a close. Parties that make a best and final offer must be willing to walk away if the other party does not accept the offer. Otherwise, this tactic loses its effectiveness quickly.

Honesty/Openness

This tactic indicates a willingness to share information and engage in win-win negotiations for all parties involved. Negotiators rarely state upfront whether they are engaging in win-win or win-lose



negotiations. They demonstrate their intentions mainly through their actions and behaviors during negotiations.

Win-Win and Win-Lose Negotiations

Win-win negotiations are cooperative and involve collaboration with rather than competition against other parties. In this type of negotiations, the amount of value derived from negotiations and business relationships can increase, with each party obtaining something of value out of the negotiations. However, win-lose negotiations are those in which the parties involved do not provide concessions to the other parties; each wishes to derive most of the value from the negotiations—often at the expense of other parties.



For example...

A buyer might want to purchase an item from a supplier, and the seller has offered a price of \$250 but is willing to come down to \$230. The buyer may then offer a price of \$230 for the item but may also require initial training for how to install and use the item; this is a win-win situation. Therefore, the seller gets the price it was willing to accept, while the buyer receives add-on services in the form of training. However, in win-lose negotiations, the buyer may offer to pay \$220 for the item, including training, and may not budge from that offer.

Unit 2: Contracts and Contracting

A contract is an agreement developed by two or more parties that can be enforced in court; each party agrees to perform, or refrain from performing, an act or service now or in the future. Contracts typically do the following:

- 1) Specify performance attributes to an agreed-upon level of quantity, quality, and cost
- Include opportunities to create value for all parties involved
- Prevent or resolve disputes
- Manage and mitigate risk
- Provide legal protection to all parties involved

When developing contracts, it is important to understand internal customers and their requirements. Contracts are an excellent way of conveying buyers' requirements to the supplier; they help prevent problems by addressing important issues, such as agreed conditions for cost increases and conditions under which contracts may be terminated. Contracts can promote improvement in relationships between suppliers and buyers by formally including language about requirements and goals. Contracts can also include formal ways to measure contract performance, such as adherence to agreed pricing and adherence to delivery schedules.

A typical commercial contract contains a few key elements. The first is the master purchase of goods agreement, also called simply the purchase agreement. This document contains the essential legal



terms governing the sale and purchase of commercial goods and usually cannot be modified without the approval of a legal department within a company that is a party. The master service agreement is similar to the master purchase of goods agreement, but applies to the sale and purchase of services rather than goods.



Figure 44. Statement of work. Developed by LINCS in Supply Chain Management Consortium.

Another key element of a contract is the SOW, which is a clear and adequate description of what buyers expect of providers of goods or services. The SOW comprises the major part of most contracts between buyers and sellers. The SOW often contains many different components, such as:

- Scope of work and objectives include what the work will and will not cover, and the key objectives of the work.
- Contract timing describes when the work should be completed.
- Description of deliverables outlines the key outputs of the work.
- Special service requirements include the particular services required, which could encompass after-hours delivery and expedited shipping under certain circumstances.
- Relationship-specific investment discusses the time and relative effort expected from all parties involved in the work.
- Costs and pricing includes rates for specific services and deliverables and the agreed costs or rates for the contracted services and deliverables.
- Transportation topics involve the shipping terms and risk of loss, the specific transportation shipping terms, such as whether shippers or buyers will pay for freight costs, and indemnity for loss during transportation of goods.
- Incentives and rebates describe the specific conditions when bonuses or discounts would apply.
- Joint improvement activities are the specific duties of each party for joint performance improvement.
- Penalty clauses include the penalties that would apply under certain conditions.
- Required contract performance reviews detail when contract reviews that will take place and what they will encompass.
- Quality specifications, testing, and acceptance criteria describe the levels of quality required, how and when testing will be carried out, and the related acceptance criteria.
- Performance requirements include the levels of performance required in terms of delivery timing, quality, quantity, and cost.
- Contract terms and invoicing include the contract's key terms, such as length, confidentiality, and breach of contract, and the timing of invoice payments.



Unit 3: Contract Management Good Practices

The contracting process is an important aspect of an organization's operational efficiency and critical for the organization's competitive advantage. The following presents an overview of some of the best practices being implemented by leading organizations to facilitate the contract management process.

Identify Internal Customer Requirements during Contract Development

When developing contracts, companies use their internal systems to identify customer requirements or individual site requirements efficiently. When purchasers negotiate on behalf of internal customers at different locations, it is important to know whether contract items for each location that are *must haves, would like to have,* or *do not need.* If internal locations have different requirements, negotiators can create contract addenda for individual sites that become part of the master purchase agreement.

Enter Into Agreements with World-Class Suppliers

This practice recognizes the importance of supplier selection as a core business process. The objective should be to evaluate suppliers rigorously and select only qualified suppliers in order to prevent compliance problems later in the relationship.

Develop Complete Contracts Whenever Possible

Complete contracts do not necessarily mean long contracts. Contract completeness is the degree to which the obligations of the exchange are clearly outlined so that all parties understand. When contracts clearly describe the actions that suppliers should take and the outcomes that should be achieved, the risks of contract failure and the costs of monitoring contract relationships are lower.

Obtain Contract Performance Feedback from Internal Customers

Procurement personnel should regularly survey internal customers about their satisfaction with contracted suppliers in areas related specifically to the contract. One approach for obtaining feedback is using companies' intranet or online survey tools to solicit performance reviews from internal customers or sites, particularly about service providers.

Assign a Relationship Manager with Performance Accountability to Each Contract

The contract relationship manager may be an executive sourcing manager, a commodity team leader, a contract manager, a buyer or lead buyer, or even a cross-functional sourcing team. Relationship managers should have identified counterparts at suppliers. Relationship managers should



also be accountable for suppliers and contract performances, and they should regularly report internally and externally about supplier performance and contract compliance.

Measure and Report Internal Customer and Site Compliance with Corporate Agreements

This practice seeks to avoid the risk that internal users will not follow the contract or will avoid using the suppliers specified in the contract. Procurement personnel should work with systems and the finance and accounts payable groups to develop contract compliance measures. If contract compliance is an issue, an investigation should occur to find out why internal participants are not using the contract. Contract relationship managers should also regularly ask suppliers if they are complying with the contract on their side; this is part of being a good customer.

Develop an Information System That Reports Prices Paid Against a Contracted or Baseline Price

The objective of this practice is to ensure that suppliers adhere to contracted prices and do not engage in price creep; this refers to suppliers increasing prices over time outside of agreed contract terms and in the hope that buyers will not notice small, incremental changes. Ideally, there should be information systems in place that allow access to information about price paid by commodity over a period of time. These systems should also report any price changes or savings that occur throughout the year.

Measure Real-Time Supplier Performance Whenever Possible

Many supplier performance measurement systems do a poor job of supporting contract requirements due to the lag time in measuring of supplier performance against contract requirements; if evaluation takes place too long after the period being evaluated, there may be no recourse. This measurement often takes place and results are reported too late to allow meaningful action to take place. Ideally, the supplier measurement system should use real-time, or nearly real-time, data to assess supplier performance on cost, quality, and delivery. Data should also be regularly made available to contract or relationship managers, particularly when suppliers exhibit poor performance like late deliveries or cost overruns).

Conduct Regular Contract Performance Review Meetings

Most critical contracts that have a high dollar value or are for products or services that are of vital importance to the organization should be regularly reviewed with internal executive leaders and external suppliers to compare supplier performance against the contracted terms. Review meetings in which procurement personnel meet with suppliers at regular intervals during the life of the contract are usually the responsibility of the relationship or contract manager. During these meetings, supplier performance should be identified relative both to other suppliers within a commodity and to the contract. Reviews of the contract should address not only contract performances but should also address ways to ensure continuous improvement in the relationship.



Develop a Company-Wide Contract Repository

Creating a central **repository** for contracts is one way to avoid confusion about contract details. Repositories store large quantities of items at a time. The repository is normally an IT-based system that stores contracts electronically and provides early visibility to the appropriate contract manager about expiring agreements. This helps avoid renewing contracts under adverse conditions due to buyers' failure to act in a timely manner.

Benchmark Contract Management Practices against Other Leading Companies

Benchmarking is a continuous search for best practices by comparing an organization's performances against industry standards and best in-class performances. When benchmarking contract management practices, it is often a good idea to benchmark against non-competitors. First, every company engages in contracting, so the best ideas may reside outside the industry in which they originated. Second, obtaining valuable information from benchmarking will likely be easier when working with non-competitors. Even the best-performing companies in contracting should still benchmark because there is always room to improve.

Double Translate Contracts Involving Foreign Suppliers

Double-translating contracts helps ensure that disputes do not arise due to language misunderstandings. If a contract is negotiated in English buyers, should have qualified translators to translate the contract into suppliers' languages. Then, other translators should translate the contract back into English. The original English version and the translated English version should then be compared for consistency. Any inconsistencies between versions may indicate different interpretations between buyers and sellers because some words or phrases do not translate well. Different perceptions can lead to problems later in the contract period.

Learning Block 4 Summary

This learning block focused on negotiation preparation and success, along with the skills and tactics needed for differing types of negotiations to achieve the successful outcome of a contract between buyer and seller. The goal of experienced procurement is to create a positive negotiating environment and enable a communication process in which both buyers and sellers can state their objectives to achieve positive outcomes.



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium.



Learning Block 4 Optional Supplemental Resources

The optional supplemental resources listed below may be used to reinforce the content covered within this learning block.

- Atkin, T., & Rinehart, L. (2006). The effect of negotiation practices on the relationship between suppliers and customers. *Negotiation Journal*, *22*(1), 47-65. doi:10.1111/j.1571-9979.2006.00085.x
- Ertel, D. (1999). Turning negotiation into a corporate capability. *Harvard Business Review*, 77(3), 55-70. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/10387578
- Lewicki, R., Barry, B., & Saunders, D. (2015). *Essentials of negotiation* (6th ed.). New York, NY: McGraw-Hill.
- Ury, W. (1993). Getting past no: Negotiating in difficult situations. New York, NY: Bantam.

Learning Block 4 Practice Questions

- 1. Which of the following is not part of the negotiation planning process?
 - a. Determining who will participate in negotiations
 - b. Trying to understand other parties' needs
 - c. Performing negotiations
 - d. Identifying facts versus issues
- 2. What is a characteristic of an effective negotiator?
 - a. Being less willing to compromise and change their goals when necessary
 - b. Realizing that offering concessions is a sign of weakness
 - c. Establishing only upper limits for each major issue
 - d. Viewing issues independently rather than linking issues to each other
- 3. What type of power features someone who is knowledgeable in a particular field?
 - a. Expert power
 - b. Informational power
 - c. Legitimate power
 - d. Referent power
- 4. What is the tactic in which sellers accept lower negotiated prices with the intention of raising prices after they receive the contract?
 - a. High ball
 - b. Low ball
 - c. Scarcity
 - d. Price increase



- 5. The negotiation tactic using openness, honesty, and the willingness to share information is known as
 - a. Win-lose negotiation
 - b. Distributive negotiation
 - c. Win-win negotiation
 - d. Trust-based negotiation
- 6. Negotiation _____ are the actions used to carry out negotiation plans.
 - a. Concessions
 - b. Powers
 - c. Ranges
 - d. Tactics
- 7. A contract is defined as an agreement that:
 - a. Can be enforced in court and is formed by two or more parties, each of whom agrees to perform, or to refrain from performing, an act now or in the future
 - b. Can be enforced in court and is formed by one or more parties, each of whom agrees to perform, or to refrain from performing, some act now or in the future
 - c. Can be enforced in court and is formed by two or more parties, each of whom agrees to perform, and to refrain from performing, some act now or in the future
 - d. Cannot be enforced in court and is formed by two or more parties, each of whom agrees to perform, or to refrain from performing, some act now or in the future
- 8. A typical commercial contract contains a master purchase of goods agreement, which:
 - a. Contains a clear and adequate description of what buyers want providers to do
 - b. Contains the essential legal terms governing the sale and purchase of commercial goods
 - c. Contains a limited description of what buyers want providers to do
 - d. Contains the essential legal terms governing the sale and purchase of services
- 9. Purchasing professionals add value while drafting the statement of work (SOW). The SOW is a clear and adequate description of which activity?
 - a. Providers of goods or services want buyers to do
 - b. Buyers want providers of goods or services to do
 - c. Buyers wants their top management to do
 - d. Engineers use to documents product drawings
- 10. A good practice in contracting is to develop an information system that reports prices paid against contracted or baseline prices. The main objective of this practice is to:
 - a. Facilitate double translation of contracts
 - b. Create a central repository for contracts
 - c. Ensure that suppliers adhere to contracted prices and do not engage in price creep
 - d. Measure real-time supplier performance whenever possible





Learning Block 5: Procurement Execution

Learning Block 5 Description

To support organizational objectives, purchasing groups within organizations must work to ensure that the sourcing process is carried out efficiently and effectively. This learning block includes information about the management of the procurement process and the key enabling technologies and internal procurement processes utilized to purchase goods and services.

Learning Block 5 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Understand the key aspects of procurement contract execution
- Implement the various forms of procurement enablers
- Analyze the key forms of documentation used in procurement
- Evaluate key aspects of managing the procurement process and managing the internal processes involved in procuring goods and services

Unit 1: Executing Procurement Contracts

Purchasing Approval

After suppliers have been selected, evaluated, and approved, procurement departments may choose to utilize those suppliers to provide products and services. This can occur in several ways, depending on the system in place in procurement: awarding a specific PO or a blanket PO, material purchase release, or contract. Developing and awarding POs is an important step because almost all POs include standard legal conditions to which the orders are subject, including the following:

- PO number
- Item description
- Material specifications, including any references to SOWs and engineering drawings
- Quantity requirements
- Quality requirements

- Price
- Delivery due date and method of shipment
- ✓ Ship-to address
- Order due date
- Name and address of purchasing firm
- Payment terms



Purchasing will typically issue a PO for each required item. Depending on the nature of the item and the relative price of the item, negotiations may or may not be required before awarding the PO.

Weighted Scorecard

The weighted scorecard is a tool often used by procurement to perform an objective evaluation of multiple supplier responses for the same item. It also serves as a permanent record to justify a contractual commitment in the form of a purchase order to the highest scoring supplier.

Procurement routinely uses a weighted scorecard process to document key criteria for an item to be purchased and assigns a proportionate value for each criteria. The total of all criteria should add up to 100%.

For example, a company wants to procure an item that will be used in their manufacturing process to assemble an end product. The criteria that are important for this item might be price, delivery, and quality. Percentage values are then assigned for each of the three criteria and several supplier responses are evaluated and compared by populating the weighted scorecard, which defines the comparative value of the criteria.

In developing the weighted scorecard for this example, the criteria (what is important to the company) are defined and listed in the far left column, followed by the weight for each of the criteria. In the example, cost and reliability have equal weight (20%) followed by five lesser-weighted criteria (see *Figure 45*).

As suppliers responses are received, they are scored by entering data into the appropriate columns. These scores are then mathematically calculated into points for each supplier; the points are totaled to determine the award. In the example shown in *Figure 45*, Supplier A scored the highest value at 91.29, followed by supplier C, with supplier B having the lowest score. The purchase order would be awarded to supplier A.

WEIGHTED SCORECARD	Weight	SCORE	SCORE	SCORE	POINTS	POINTS	POINTS
CRITERIA	%	Supplier A	Supplier B	Supplier C	Supplier A	Supplier B	Supplier C
TOTAL Cost	20%	90	85	95	18	17	18
TOTAL COST					(.20×90)	(.20×85)	(.20×95)
Delivery Lead Time	14%	85	95	80	11.9	13.3	11.2
Delivery Variance	11%	90	70	90	9.9	7.7	9.9
Quality	14%	90	95	90	12.6	13.3	12.6
Quality Variance	11%	99	80	95	10.89	8.8	10.45
Reliability	20%	95	85	90	19	17	18
Quality Restrictions	10%	90	90	90	9	9	9
TOTAL	100%				91.29	86.10	<mark>90.15</mark>

Figure 45. Example of weighted scorecard for the selection of suppliers. Supplier A scored highest, and Supplier B scored lowest. Developed by LINCS in Supply Chain Management Consortium.



Blanket Purchase Orders (BPOs)

Blanket purchase orders (BPOs) are typically used when the same materials or services are ordered on a regular basis, whether on a consistent, periodic schedule like cleaning services or on an as-needed basis when quantities fall below desired levels, such as when materials for a manufacturing process run low. When using this type of purchasing arrangement, buyers and suppliers work together to evaluate the anticipated demand for specific items required for a defined period of time and agree on the terms of the agreement. Buyers also reserve the right to cancel BPOs in the case of poor supplier performance or changes in demand.

The BPO is established as a master agreement; buyers subsequently use material release documents at periodic intervals, as necessary and based on usage, to order items covered by the BPO. This material release typically specifies the required part number, quantity required, unit and quantity price, required receipt date, ship-to address, and method of shipment.

Award Purchase Orders

In this step, POs are awarded and released to the supplier, and deliveries are subsequently received by the ordering organization. Many organizations transmit orders electronically through electronic data interchange (EDI); orders can also be transmitted over the Internet. After the award, procurement is also responsible for monitoring the status of open POs, expediting orders, and providing ongoing administration for other tasks.

Goods Receipt

The goods receiving process involves several processes and documents, including a material packing slip, bill of lading, and discrepancy report, each of which is explained further.

Material	
Packing Slip	

The material packing slip accompanies the goods and describes the contents of the shipment. It refers to a specific PO (and release number, if applicable) used to order the goods; it is also used for tracking and auditing purposes. The packing slip is used by the ordering organization to check the actual quantity received against the quantity listed on the packing slip and against the ordered quantity to ensure that they all match. This step determines whether suppliers have either over- or underdelivered items and confirms that the items received are the items that were ordered.

Bill of Lading

Transportation carriers issue a bill of lading, which records the quantity of goods delivered to a location on a specific date. The bill of lading details the number of boxes or containers delivered; other details about the shipment appear on packing slips and are the suppliers' responsibility for recording on this slip. The bill of lading also ensures that carriers are protected against wrongful allegations that they have damaged, lost, or otherwise tampered with the goods they have delivered.





Receiving discrepancy reports are used to record any differences between goods received and goods ordered; discrepancies are recorded by the receiving clerk during the receiving process. Procurement groups use the discrepancy report to follow up and resolve any issues with suppliers.

Evaluate Supplier Post-Purchase Performance

When products and services have been delivered, supplier performance must be evaluated to determine if they have actually met the requirements of the procuring organization. Firms should determine whether suppliers have performed according to requirements by using a system for measuring performance. When supplier performance does not satisfy the requirements of the procuring organization, the discrepancies must be identified and recorded, and corrective actions must be undertaken by working with the supplier.

The precise nature of feedback to suppliers varies among companies, but feedback must occur at a prescribed frequency. This enables procuring organizations to work with suppliers to identify defect trends, implement corrective actions to fix those defects, and to take preventive actions to eliminate recurrences. Some examples of feedback are:



Weekly performance metric reports



Quarterly, mid-level review meetings for supply chain managers between buyers and suppliers



Annual, executive-level meetings about SCM between buyers and suppliers

Figure 46. Feedback must occur at a prescribed frequency. Developed by LINCS in Supply Chain Management Consortium.

Unit 2: Procurement Enablers

A variety of tools and techniques are available to procurement professionals; they can be used to enable and support the sourcing process. This section outlines these tools and techniques, and provides examples of best practices, including the following:

- E-procurement and electronic purchasing
- Procurement cards
- Long-term purchasing agreements
- FD
- Electronic catalogs



E-Procurement and Electronic Purchasing

E-procurement is an Internet process used to make the procurement of goods and services easier, faster, and less expensive for businesses. The overall goal is to streamline the purchasing process so that businesses can focus more management time on earning revenue and serving customers.

According to EPIQ (2014), e-procurement does not work for all items purchased by firms. For instance, items of strategic importance to firms, such as custom-designed engines for a package transportation vehicle, are typically not purchased using e-procurement. However, many noncritical items like stationery are well-suited to be purchased using these types of systems.

Procurement Cards

Procurement cards are essentially credit cards provided for internal users to purchase low-cost items without having to go through procurement's administrative process. Procurement cards work well for low-cost items that are required on an as-needed basis; they are especially helpful when approved suppliers for low-cost items do not exist and where suppliers are not approved by other purchasing systems.

Authorized procurement card holders make the buying decisions, up to the value allowed on the procurement card and within the prescribed budget of the department that is making the purchase. The monetary value of items purchased and covered by procurement cards is typically low, and might consists of brochures for a trade show or conference. In these cases, the cost of involving procurement groups in a supplier search, evaluation, and approval process would typically outweigh the cost of items purchased (Monczka et al., 2005).

Long-Term Purchasing Agreements

Firms enter into long-term agreements with suppliers they plan to work over an extended period of time. Long-term agreements involve base contracts that are generally in place for a year or more. These types of agreements are similar to a BPO process, but are established to cover the purchase of higher-value items over a long period of time, such as specialty packaging supplies, machine maintenance parts, and high-value raw materials. Long-term purchase agreements can reduce transaction costs by eliminating the need for time-consuming renewals of purchases.

In addition, when buyers and suppliers agree on contract terms, material-releasing responsibility can shift to users in many cases. This means that end users arrange directly with suppliers for products required to be delivered without involving procurement at all. Ideally, material releasing is accomplished electronically instead of manually, which saves time and money (Monczka et al., 2005).

Electronic Data Interchange (EDI)

EDI involves a computer-to-computer exchange of information. It can be used to support transactions between buyers and sellers, allowing for greater efficiencies and streamlined communication. This, in turn, can lead to less time and money dedicated to the procurement process.



Electronic Catalogs

Electronic catalogs provide a user-friendly way of accessing information about a supplier's products and services. The chief benefit of using electronic catalogs is their low-cost search capability; if users order directly from these catalogs, cycle times and ordering costs can also be reduced. Pricing is often included as part of the catalogue and is referred to as a published price list. Procuring organizations with higher buying volumes may be offered a percentage discount on the rates from the published price list.

Automation of Bidding

At many firms, entire bid processes have been automated. Bid packages and specifications are made available online from which bidders submit their bids and proposals, and the bid openings and awards are communicated electronically. Cycle-time reductions and other cost savings can be significant if the automated process is efficient.

In online auction situations, potential sources are also prequalified and invited to take part in the online bidding. The auction, or event, is set for a specific date and time period, much like the deadline and bid opening deadlines of offline processes. An auction's success depends, in large part, on the quality of bid specifications and the ability of procurement professionals and processes to prequalify suppliers. In an online environment, bidders can see the actual bid amounts but not who is involved in the bidding.

Unit 3: Procurement Documents

Procurement departments utilize and maintain certain documents for purchases. The types of documentation kept will depend on the organizational requirements and will differ for each organization.

Soliciting Information and Proposals from Sellers

A number of procurement documents are used to obtain information and proposals from prospective suppliers. These include the following:

Request for Information (RFI)

An RFI is a document that companies send to potential suppliers requesting key information, including products or services provided, length of time in business, and markets served.

Request for Proposal (RFP)

A request for Proposal (RFP) is a document that companies send to approved suppliers requesting them to submit a proposal that outlines how they would complete the scope of work along with pricing, quality, and delivery data.

Request for Quote (RFQ)

An RFQ is a document that companies send to approved suppliers requesting price quotations for products or services.



Terminology may vary among industries, and in some organizations, the preparation and use of the previously mentioned documents is a specialized field assigned to certain individuals. Procurement groups typically use standard documents to obtain the necessary information from prospective suppliers.

Commonly Used Procurement Documents

According to Muckstadt, Murray, Rappold, and Collins (2003), a number of documents are commonly used in procurement. These include the following:

Requisition

A requisition is a request outlining requirements for products or services that normally takes the form of a hard-copy or electronic document created by the demand planning organization; after approval, it is forwarded to the specific procurement organization.



An SOW is a formal document that details the work activities and tasks suppliers must carry out, the products or services to be delivered, and a planned timeline for completion. The SOW normally includes highly detailed requirements, prices, terms, and conditions.

Requirement definitions

Requirement definitions are formal, clear definitions of the products or services required and include product specifications, performance requirements, quality specifications, and SOWs.

Sourcing information/justification

These are documents that are used to record the reasons for the procurement method and the types of suppliers used; for example, if the purchase is made from a sole-source supplier, the document explains why no other sources are available.

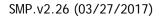
Contract

An agreement between two or more parties with the terms and conditions of the work to be carried out, the products or services to be provided, timing, fees, and deliverables. Contracts can be verbal or written but are usually written documents that involve an offer and the acceptance of an offer.

Bill of materials (BOM)

A BOM is a document that accompanies engineering drawings, in which parts, materials, labor, etc., are listed. A BOM itemizes what is required to manufacture an item; it enables suppliers to price accurately the work on which they are bidding.





Short list



Progress reports



A short list is a list of candidates, normally potential suppliers, who have been selected for further review or for final consideration before actually approving a supplier and awarding a contract.

These are accounts of the advances made in fulfilling the contract or proofs of delivery of goods and services at required times, in required quantities, and at acceptable levels of quality.

Correspondence with contractor



Proof of payment



This comprises all interactions about the work to be carried out or the work being carried out along with the products and services being provided.

The proof of payment indicates that payments have been made to suppliers by buyers' accounts payable departments.

Offers received (technical and financial)



Evaluation report



The offers received (technical and financial) document comprise the various offers received from potential suppliers to a request for tender—a formal, structured invitation to suppliers to bid on supplying products or services—and contain the necessary information about suppliers' technical and financial capabilities and other strengths relevant to the work required by buyers.

The evaluation report is developed based on a review of the information provided by suppliers in response to RFIs, RFQs, or RFPs; it comprises an assessment of potential suppliers' capabilities about the work required or products and services to be provided. This report is also referred to as a weighted scorecard.

Proof of receipt of goods



Receipt and inspection reports



The proof of receipt of goods document is signed by buyers to indicate that they have received the required goods. One copy of this document is normally kept by buyers, while another copy is returned to suppliers.

The receipt and inspection reports are about inspections carried out on goods delivered to buyers and about the quality of the goods received; they detail any issues about quality, quantity, and inconsistency.

Supplier evaluation reports



Amendments to solicitation documents



These reports are normally developed on a scheduled basis; they indicate how well suppliers are performing in their contractual, and other, obligations.

Amendments to solicitation documents list any changes, deletions, or additions to the RFI, RFQ, or RFP, and any other clarifications and correspondence with suppliers.



Amendments to contracts



The amendments to contracts document includes any agreed modification to contracts.

Learning Block 5 Summary

This learning block focused on the tactical aspects of the procurement process to enable the placement and approval of POs with suppliers, the information needed for a comprehensive purchase requirement, the necessary forms and documents, and the necessary elements in the post-award process that must be managed. Additionally, alternate forms of procurement were reviewed, including procurement cards for non-procurement personnel, electronic catalogs for requisitioners, and EDI and bidding automation, both of which used to streamline procurement processes.



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium.

Learning Block 5 Practice Questions

- 1. Usually purchase orders (POs):
 - a. Include numerous non-standard conditions
 - b. Do not include any standard legal conditions
 - c. Specify not exceeding profit percentages
 - d. Include standard legal conditions and terms
- 2. Blanket POs are typically used:
 - a. For high-cost items that are purchased infrequently
 - b. When items are used on a regular basis
 - c. For the purchase of blankets
 - d. Only for items purchased from overseas suppliers
- 3. Which document is commonly used in the process of receiving items procured using a PO?
 - a. A material packing slip
 - b. A copy of the purchase order
 - c. A bill of lading
 - d. Supplier evaluation report



4. Procurement cards can be used:

- a. Specifically for expensive items
- b. Only in emergencies
- c. Only by top management
- d. To purchase low-cost items

5. Bills of lading are used to:

- a. Detail any discrepancies on shipments
- b. Request information from suppliers
- c. Record the quantity of goods delivered to a location on a specific date
- d. Purchase low-cost items

6. The material packing slip accompanies the goods and is used to describe the contents of the shipment. The packing slip:

- a. Is the same thing as a retail price tag
- b. Refers to a specific PO
- c. Defines the negotiating strategy for a contract
- d. Is not used for international shipments

7. Electronic data interchange (EDI):

- a. Is a user-friendly way of accessing information about sellers' products and services
- b. Involves the computer-to-computer exchange of information
- c. Allows for bid packages and specifications to be made available online
- d. Uses the Internet to make it easier, faster, and less expensive to purchase goods and services for businesses

8. A purchase requisition:

- a. Is a list of candidates, normally potential suppliers, who have been selected for further review or for final consideration before awarding a contract
- b. Normally takes form of a hard-copy or electronic document created by the demand planning organization to define product or service requirements
- c. An agreement between two or more parties with the terms and conditions of the work to be carried out, the products or services to be provided, timing, fees, and deliverables
- d. A document signed by buyers to indicate they have received the required goods

9. A request for quote (RFQ) is a document that:

- a. Is prepared by an inventory clerk
- b. Defines which transportation carrier should be used to deliver products
- c. Conveys ownership of property
- d. Procuring companies send to suppliers to request a quotation for products or services



- 10. A document indicating that payment has been made to suppliers is known as a:
 - a. Proof of payment
 - b. Contract
 - c. Receipt and inspection report
 - d. Statement of work (SOW)





Learning Block 6: Supplier Management

Learning Block 6 Description

After companies select and approve suppliers and award POs, the buyers' emphasis shifts to managing the supplier relationship and, when necessary, measuring supplier performance. Measuring supplier performance is especially important when long-term arrangements are in place. This learning block details three topics in supply management and procurement: measuring supplier performance, managing supplier relationships, and supplier development.

Learning Block 6 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Recognize why companies measure supplier performance
- Remember the characteristics of effective supplier scorecard systems
- Understand the different kinds of supplier relationships
- Explain the importance of trust in buyer-seller relationships
- Implement supplier development and its role in supply management and procurement
- Apply the factors that are critical to supplier development success

Unit 1: Measuring Supplier Performance

Measurement is a major part of sound management. According to Monczka et al. (2005), supplier performance measurement involves collecting information about how well suppliers perform over a period of time. The desired outcome from measurement systems about supplier performances is providing buyers with steady streams of information to help identify improvement opportunities.

Why Measure Supplier Performance?

Measurement is an ideal way to help supply managers and procurement personnel base their buying decisions on objective rather than subjective criteria. Measurements are also an excellent way to implement continuous improvement.



Figure 47. Measuring supplier performance. Developed by LINCS in Supply Chain Management Consortium.

There are other reasons for measuring supplier performance. Measurement generally motivates those being measured to act in certain ways. Measurement also helps identify performance areas that are



most in need of improvement. Buyers routinely use the insights gained from their supplier measurement system to identify supplier development opportunities, which are discussed in Unit 3 of this learning block. The measurement process also helps identify trends and changes over periods of time, which assists supply managers in predicting future supply base performance. An effective measurement system can provide a forward-looking perspective.

Supplier Performance Scorecards

Companies often use the term scorecard (see *Figure 48*) to describe the report or system that measures suppliers' performances. Scorecards regularly report results regarding suppliers' costs, quality, delivery timeliness, and any other performance areas of interest. The type of scorecard supply departments use typically falls into one of three categories: categorical, weighted point, or cost-based:

- Categorical measurement systems require simple check-offs that describe suppliers' performances across different categories, including suppliers' costs, quality, and delivery timeliness. For relatively unimportant items like stationery, this may be the only measurement required to evaluate supplier performance.
- Weighted point systems include a variety of performance categories, assign weights to each category, and develop scales to determine suppliers' scores within each category.
- Cost-based systems are the least commonly used of the three systems when measuring supplier performance. This approach quantifies the total cost of doing business with certain suppliers.

Supply departments can also rely on hybrid systems to blend total cost elements with weighted point assessments. Some measurement areas are better suited to a weighted point scheme, while others are most appropriate for the total cost perspective.



		SUPPLIER SCORECARD		4=SUPERIOR 3=MEETS EXPECTATIONS 2=NEEDS IMPROVEMENT 1=UNACCEPTABLE		
SI	JPPLIER					
LO	CATION					
DATE COM	PLETED					
		Criteria	Performance Rating (1 to 4)	Previous Year Rating (1 to 4)		
I.	Α.	Pricing Competitiveness				
Pricing						
_	C.	Innovative cost savings opportunities				
	Α.	Low Occurrences of Rejected Material/Complaints				
II. Quality	В.	Timely response and corrective action to rejections				
Quality		Ability to resolve quality issues				
	A.	Condition of Materials delivered				
III.		Complete and accurate paperwork accompanying deliveries				
Delivery of		Appointments made and kept				
Materials		Delivered the day requested				
	E.	Condition of pallets (if applicable)				
		Customer Service Representation				
	В.	Regional Sales Representation (plant level/DC level)				
IV.		Provides technical support				
Service	D.	Timely feedback to issues				
		Ability to expedite orders				
	F.	Effectiveness of warehouse program				
	Α.	Phone calls and emails returned promptly				
V.	В.	Samples provided timely and accurate				
Technical	C.	Design services offered and provided as requested				
Support	D.	Technical support is offered and provided				
	E. Presents innovative ideas					
	Α.	Current Certificate of Insurance				
VI.	В.	Signed Confidentiality Agreement				
Required	C.	Signed FDA/Hold Harmless Guaranty				
Documents	D.	Signed Adherence to Specifications Agreement and				
		accompanying SOP				
VII.	Α.	Overall satisfaction				
Comments		See Attached				
				<u> </u>		
		Average Ratings				
I. Pricing						
II. Quality						
III. Delivery of Ma	terials					
IV. Service						
V. Technical Support						
VI. Required Documents						
VII. Overall						

Figure 48. Supplier scorecard example. Developed by LINCS in Supply Chain Management Consortium.

Many scorecard systems rely extensively on manually collected data, which is a shortcoming of scorecard systems that can affect the timeliness and quality of data. A few systems are also populated with too many subjective assessments of supplier performance. To avoid these types of drawbacks, scorecard measurement systems should include the following characteristics:

- Supplier management personnel should review and acknowledge scorecards they receive from buyers.
- Measurement systems allow adjustments to categories and weights to reflect the realities of different supply requirements.
- Real-time system data drawn from enterprise systems, such as accounts payable, quality assurance, and inbound transportation.
- Use of data from systems minimizes subjective measurements.
- Alerts from systems about supplier performance problems, such as late deliveries.
- Supplier capability to review their scorecards online and evaluate performance trends.
- System updates when transactions occur for real-time reports.
- ✓ Internal sites at buying companies can evaluate suppliers through web-based input.



Unit 2: Managing Supplier Relationships

Supplier relationship management is a broad-based management methodology describing how firms interact with their strategic supply base. It is a philosophy of supplier relationships that is shared by purchasing departments and supply management professionals in many organizations. This section describes the continuum of supplier relationships, the importance of trust in relationships with suppliers, and the importance of having supplier relationship managers.

Types of Supplier Relationships

When managing suppliers, it is important to appreciate that not all supplier relationships are equally important. Knowing when, where, and how to pursue specific kinds of relationships with particular suppliers is a crucial part of the procurement process. Managing supplier relationships is important because it helps foster a better working relationship aimed at mutual understanding of requirements and capabilities, and it can lead to identifying areas for performance improvement.

Several types of relationships can exist between suppliers and buyers, including counterproductive relationships, competitive relationships, cooperative relationships, and collaborative relationships.

Counterproductive Relationships	Counter-productive relationships involve parties working against each other, with neither party feeling any need to take responsibility for what happens in the relationship. This scenario is clearly detrimental to the long-term success of any supplier relationship.
Competitive Relationships	Competitive relationships, also known as win-lose relationships, typically feature parties competing over fixed amounts of value. This contrasts with working jointly to create new opportunities that lead to new value for all parties. Relationships with suppliers should be competitive when many low-value, low-risk items are required by buyers.
Cooperative Relationships	Cooperative relationships are those in which buyers and suppliers work together, often over a long period of time, to achieve common goals. Cooperative relationships with suppliers often involve suppliers and buyers working jointly to reduce costs, improve quality, enhance delivery, and deliver better service, all of which positively affect performance.
Collaborative Relationships	These relationships involve working with limited groups of suppliers that are strategically important to the success of buyers. Both cooperative and collaborative relationships are win-win relationships. This means that both parties, by working together, can increase the amount of value derived from relationships. A key feature of collaborative relationships is sharing risks, rewards, and resources.



The Importance of Trust

Trust is a major predictor of successful supplier relationships. Relationships that lack trust are characterized by lengthier contracts, expensive and time-consuming oversight, and a reluctance to share information. Trust refers to the belief in the character, ability, strength, and honesty of the parties in a relationship.

Different models of trust exist, but simplified perspectives view trust in two primary dimensions: character-based trust and competency-based trust. Character-based trust refers to the ethics and honesty of a company and its representatives. Competency-based trust refers to the demonstrated, technical abilities of a company and its representatives. Examples of trust-building actions and activities include the following:



Figure 49. The importance of trust. Developed by LINCS in Supply Chain Management Consortium.

- Having open and frequent communication across organizations, particularly in face-to-face settings
- Co-locating personnel, which promotes frequent and open communication
- ▼ Following through on commitments
- Acting ethically and legally at all times
- Putting supplier relationships ahead of pure self-interest
- Making the success of the relationship public, giving credit to the roles of both parties
- Treating information and data gathered within relationships as confidential

Importance of Supplier Relationship Managers

Procurement professionals have many different roles in an organization, including supply chain risk managers, financial managers, and supplier relationship managers. Because of the importance of maintaining good supplier relationships, regular face-to-face interaction between buying organizations and suppliers is crucial. In fact, Trent and Zacharia (2012) found that suppliers strongly agree that buying personnel should understand suppliers' products, processes, businesses, and industries.

Additionally, almost every supplier in this research study indicated that they have assigned individuals such as account managers serve as their primary contacts with customers (Trent & Zacharia, 2012). When tasking specific individuals with the responsibility of working with suppliers, it is not sufficient to simply designate someone with that responsibility (Trent & Zacharia, 2012). In the eyes of suppliers, these individuals should understand the suppliers' businesses well.

Unit 3: Supplier Development

Learning Block 3 discussed the importance of supplier selection, evaluation and approval. Supplier approval represents the end of an important process, but it is also the beginning of another process, which is the buyer-seller relationship, which might continue for many years. This relationship cannot last, however, if supplier development is not strong, which takes time, energy, and commitment.



What is Supplier Development?

Supplier development represents buyers' activities or efforts to improve the performance of their suppliers. This process is a major component of the supplier management process. In the past, it was common to work with many suppliers, but the prevailing view today is to work with fewer and fewer suppliers, because it is more efficient to manage and engage in value-creating activities with a comparatively small number of primary suppliers.



Figure 50. Supplier development. Developed by LINCS in Supply Chain Management Consortium.

Most supplier development activities in the U.S. have been reactive, in that suppliers tend to react to problems that require immediate attention after they happen, whether they involve late delivery, poor quality, or increasing supply costs. It is preferable, however, to focus on preventive activities such as identifying quality improvement opportunities on the supplier's side to help prevent those problems from occurring in the first place.

Historically, supplier development has been most often applied to underperforming suppliers. When working with higher-performing suppliers, the objective is primarily to develop additional and advanced supplier capabilities like the ability to design or provide new products and services. Supplier development efforts fall primarily into three broad categories:

- Working with suppliers to improve existing performance capabilities
- Resolving problems with an existing supplier's capabilities
- Working with suppliers to create performance capabilities where none previously existed

Any initiatives designed to improve supplier performance are considered part of supplier development. Examples of development techniques include providing education or training programs, enhancing working relationships with suppliers to promote joint improvement efforts and information sharing, and providing direct financial support. Other types of supplier development include providing suppliers with onsite support personnel, process equipment, and technology.

Supplier development also may introduce risk. These risks can include buyers making financial commitments to suppliers and development efforts failing to produce anything of substance. Another example of risk can occur when buyers work to improve suppliers' performances, but other customers—perhaps even competitors—also benefit from the suppliers' improved performance. For example, benefits derived from improved supplier performance resulting in reduced cost or improved quality



might also be passed on to that supplier's other customers , who could be competitors of the company that invested in the supplier development efforts.

Supplier development, particularly when the focus is on developing new performance capabilities, may also create new and more powerful suppliers that can eventually become competitors. Another example occurs when a supplier's enhanced performance capabilities make it attractive for a takeover by other companies that are not sympathetic to the supplier's current buyers.

Factors Critical to Supplier Development Success

As is true of any initiative, it is critical to identify the key attributes that define success. Here are examples of what critical success factors (CSFs) entail:

Executive Commitment

Major initiatives may fail if they do not have senior-level executive commitment. For supplier development, this also includes commitment from buyers and suppliers. Buyers' executives show their commitment by making resources like funds and personnel available to support development efforts. Suppliers' executives demonstrate their commitment by supporting the goals of the development actions, such as reduced costs, improved quality, and improved delivery timeliness.

Trust-Based Relationships

A number of years ago, a major company began to pursue its own version of supplier development. This involved sending a team to visit a supplier for a week to make plant layout changes. At the end of the week, the buyer demanded double-digit price reductions from the suppliers. Soon, the suppliers began to fear these visits from these buyers. The complete lack of trust that characterized this buyer-seller relationship was a major inhibitor to the success of the development initiatives. As with other processes, supplier development requires trust-based relationships to be successful. Without trust, the probability of openly sharing information diminishes.

Data and Measurement

Financial and other resource constraints ensure that most companies can only engage in a limited amount of supplier development activities. This requires companies to be careful about where they allocate their resources. In making such decisions, buyers must determine which suppliers offer the best development opportunities, which suppliers are not worth the effort and should instead be candidates for replacement, and what performance measures are in place to verify the success of any efforts. Many companies will use their supplier scorecards to help identify development opportunities. In theory, this sounds reasonable, but according to Trent (2010), far too many companies have poorly designed scorecards that are of limited use.

Financial and Personnel Commitments

Supplier development is driven largely by people, so it often relies on process engineers, quality personnel, logistics personnel, and others to be part of development efforts, often working directly at supplier locations. Unfortunately, few organizations have people committed specifically to supplier development activities, which means that supplier development competes for personnel and financial



support with other business endeavors, including employees' regular job responsibilities. Without adequate personnel support, supplier development initiatives are likely to be severely limited or completely unsuccessful. Additionally, supplier development usually requires travel and financial commitments.

Credibility

Buyers that initiate supplier development should have credibility with suppliers, who must perceive that buyers have expertise in their particular subject area. For example, if a supplier provides engineering design services to customers, the buyer may also assign engineering design personnel with skills complementary to those of the supplier.

Power Relationship

Power represents the ability to exert influence over other parties. Supplier development usually features larger buyers working with smaller suppliers, so this size difference usually enables buyers to approach suppliers about supplier development. Smaller customers can also approach larger suppliers, but this is not as common as the converse, because these smaller customers do not have the majority of the power in the relationship, which makes it more difficult to influence larger suppliers with a view to engaging in supplier development efforts.

Learning Block 6 Summary

This learning block focused on three key elements: measuring supplier performance and scorecards, supplier relationships, and supplier development. These three topics may seem to be disparate, but they are critically linked. In order to develop suppliers to provide quality products on time and at the lowest cost, procurement professionals must create and maintain an environment of collaborative relationships and provide honest and timely performance feedback that will enable suppliers to improve continually and providing the best overall value to customers.



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium

Learning Block 6 Optional Supplemental Resources

The optional supplemental resources listed below may be used to reinforce the content covered within this learning block.

Covey, S. M. R. (2008). The Speed of Trust. New York, NY: Simon & Schuster.

Gocke, A., Lang, N., Lee, D., Pandey, A., & Mauerer, S. (2011). Bringing underperforming suppliers up to speed. *Supply Chain Management Review*, 15(1), 38-44. Retrieved from



http://www.scmr.com/article/bringing_underperforming_suppliers_up_to_speed

Gordon, S. R. (2008). Supplier evaluation and performance excellence. Richmond, VA: J. Ross.

Handfield, R. B., Krause, D. R., Scannell, T. V., & Monczka, R. M. (2000). Avoid the pitfalls in supplier development. *MIT Sloan Management Review*, 41(2), 37-49. Retrieved from http://sloanreview.mit.edu/article/avoid-the-pitfalls-in-supplier-development/

Harris, R., Harris, C., & Streeter, R. (2010). Lean supplier development: Establishing partnerships and true costs throughout the supply chain. New York, NY: Taylor & Francis.

Learning Block 6 Practice Questions

- 1. What term best describes the process that measures supplier performance?
 - a. Supplier assessment system
 - b. Supplier scorecard system
 - c. Key performance indicator system
 - d. Supplier performance review system
- 2. After companies approve suppliers and award purchase orders, what becomes buyers' main role with regard to the supplier?
 - a. Management and development
 - b. Measurement
 - c. Negotiation
 - d. Cost justification
- 3. Which of the following is not a reason to measure supplier performance?
 - a. Measurement motivates those being measured to act in certain ways
 - b. Buyers routinely use the insights gained from their supplier measurement system to identify supplier development opportunities
 - c. Effective measurement systems can provide backward-looking perspectives by identifying rates of performance change
 - d. Measurement helps identify performance areas that are most in need of improvement
- 4. Which of the following is not a characteristic of effective supplier scorecards?
 - a. Each supplier site receives a separate scorecard
 - b. Suppliers' executive managers review and acknowledge the scorecard they receive from buyers
 - c. The system uses real-time data drawn from other systems, such as accounts payable, quality control, and inbound transportation, to identify supplier performance
 - d. The system minimizes objective measurement and the need for manual data input



- 5. Which supplier relationship features the sharing of risk, rewards, and resources among parties?
 - a. Competitive
 - b. Collaborative
 - c. Cooperative
 - d. Counterproductive
- 6. Different models of trust exist, but a simplified perspective views trust in two primary dimensions called:
 - a. Character-based and competency-based
 - b. Character-based and performance-based
 - c. Ethics-based and performance-based
 - d. Competency-based and ethics-based
- 7. What is the term that describes how firms interact with their strategic supply bases?
 - a. Supply base management
 - b. Contract management
 - c. Supplier relationship management
 - d. Trust-based management
- 8. What term represents buyers' activities or efforts to improve the performance of their suppliers?
 - a. Vendor management
 - b. Relationship development
 - c. Supplier management
 - d. Supplier development
- 9. Which of the following is not a factor critical to the success of supplier development?
 - a. Credibility
 - b. Legal oversight
 - c. Proper power relationship
 - d. Resources
- 10. Which of the following least accurately describes supplier development?
 - a. Working with suppliers to improve existing performance capabilities
 - b. Working with lowest-performing suppliers to improve their performance
 - c. Working with suppliers to create performance capabilities in which none previously existed
 - d. Resolving problems with existing supplier capabilities





Learning Block 7: Procurement Organizations and Roles

Learning Block 7 Description

This learning block outlines the organizational structures that provide procurement services, presents examples of representative organization reporting alignments, and reviews the types of specific roles and metrics associated with procurement departments. The specific characteristics of an organization and its extended supply chain are important drivers to determining the best procurement department structure.

Learning Block 7 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Understand the key dimensions in defining organizational structures in procurement
- Analyze the key roles or positions in procurement departments
- Evaluate the key roles and metrics within procurement

Unit 1: The Organization of Procurement

Organizational structures can vary from company to company. Perhaps the best way to understand the various potential structures of procurement departments is first to understand the typical characteristics of the supply chain, which may drive firms to organize work efforts in certain ways. Specific goals, priorities, and industry nuances help influence the degree to which each of these dimensions drives procurement department structures. Following is a list of common characteristics that determine the way procurement functions are structured.



Figure 51. Geography.
Developed by LINCS in Supply
Chain Management Consortium.

Geography

National and global organizations should consider how to determine whether a regional presence is needed for supplier management. Organizations that need or want to be near their suppliers may choose to place procurement professionals in decentralized, regional locations to manage their supply bases. Likewise, organizations that require close collaboration with internal customers, such as large and complex automobile factories, may place procurement professionals within manufacturing facilities or regional offices.



Centralization

Figure 52. Centralization. Developed by LINCS in Supply Chain Management Consortium.

Centralization

Large corporations and government operations may find efficiencies of scale by centralizing some or all procurement functions. Centralization may support procurement execution efficiencies by allowing organizations to create specialized, relatively narrowly defined procurement roles that handle high volumes of transactions efficiently. For example, in a centralized procurement department, procurement clerks' roles may be defined so that the clerks' primary responsibility is to issue POs to suppliers. By having relatively narrow responsibilities, clerks can become efficient at very specific tasks. Another benefit of concentrating volumes of transactions is that it may support investments in computer systems, which will drive further efficiencies and associated cost reductions.

Commodities Specialists & Commodity Councils

Figure 53. Commodities specialists and commodity councils. Developed by LINCS in Supply Chain Management Consortium.

Commodities Specialists and Commodity Councils

An alternative approach to organizing the procurement function is to consider the specific commodities procured by a firm and then organize in such a manner that supports commodity-specific efficiencies, with or without large-scale centralization. A common approach taken by multi-divisional and global manufacturers is establishing global commodity councils that share supplier information, contract terms, and specific contracts across firms' global operations while also locating the actual procurement personnel within local operations. In this approach, procurement professionals are tasked with managing well-defined commodity groups for supplier management and are responsible for a geographic, divisional, or facility-specific supplier territory. Procurement professionals who are a part of commodity councils participate in knowledge sharing with procurement professionals who work on procuring similar sets of materials or goods for their firms across the globe.

These procurement and commodity decisions allow for national and global information sharing about suppliers, materials, and services through a matrixed commodity council while also ensuring close collaboration with internal customers. Commodity councils can provide a competitive advantage for large organizations because they provide a mechanism for sharing best practices and leveraging the procurement spend across multiple components of an organization.

Procurement Approach

The procurement approach provides a balance between maintaining local collaboration and leveraging specialized skills where appropriate. Previous learning blocks have outlined the distinctly different components of procurement and how strategic sourcing differs from supplier management and transactional execution. These elements of procurement have different goals and areas of focus:

Strategic sourcing focuses on finding suppliers, negotiating, and contracting, all of which



- require solid knowledge of internal customer requirements, contract development processes, and contract law. Efficiency is desired, but effectiveness is more important; a company may be significantly harmed by entering into bad long-term contracts with vendors, even if they did not require much effort.
- ✓ Procurement transaction execution focuses on efficiently processing transactions that are well-defined by pre-established contract terms.
- Supplier management is usually concerned with measuring and evaluating supplier performance and providing continual feedback to suppliers while also effectively seeking any necessary supplier performance improvements.

Many organizations recognize the differences between these pieces of procurement when defining specific procurement roles and organizational structures. For example, strategic sourcing may be conducted by commodity specialists in a centralized group, while procurement transactions are locally executed by procurement clerks, analysts, or supervisors.

Embedded Versus Shared Services

The term **embedded services** is sometimes used to describe an organizational approach in which the procurement functions and personnel are a part of, and located with, the broader supply chain organization. For example, in a manufacturing firm, an embedded procurement department would likely have procurement professionals operating at the manufacturing plant or in another office located with other supply chain professionals to ensure close collaboration.

The term **shared services** is often used to describe situations in which certain business functions are centralized, including the procurement function. Centralization may be at the overall corporate level or at a lower level, such as a division or geographic area. Shared services may be used when management does not consider the centralized business functions to have substantially different requirements for specific divisional or local operations. An added benefit of shared services is that centralization can eliminate redundant roles and better support business cases for investment in technologies that make operations more efficient.

Direct Spend and Indirect Spend

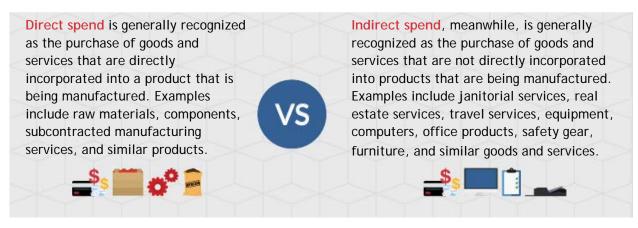


Figure 54. Direct vs. indirect spend. Developed by LINCS in Supply Chain Management Consortium.



In many cases, procuring direct spend goods and services may require specialized skills to understand and communicate detailed requirements. These skills may be necessary because specialized components that are to be procured may be well-defined and require engineering skills or deep knowledge of manufacturing processes to define and communicate material tolerances and specifications to suppliers, such as physical size variances, color range tolerances, or other characteristics that may not be perfect on every purchased item. For example, many electronic manufacturers require direct spend procurement professionals to have degrees in electrical or mechanical engineering. In other cases, specialized skills may not be necessary, but close collaboration with a specific plant may be required.

Indirect spend may also require specialized skills like real estate contract law or services contract nuances, but generalized procurement skills such as negotiation, contract development, and transaction execution are frequently sufficient for a number of indirect procurement roles. For example, purchasing office supplies does not generally require engineering skills.

Organizations often structure procurement teams based on the differences between direct and indirect procurement. Procurement team members who work on sourcing and purchasing direct materials are grouped together and may work closely with manufacturing plants, while those who work on sourcing indirect materials and services may not need to work closely with the manufacturing side of the operation.

Reporting Structures

Reporting structures tend to represent organizational structures by identifying who reports to whom; dozens of reporting structures exist for procurement departments. At times, specific reporting structures are in place due to historical considerations, such as organizational structures that existed prior to a corporate merger. Key components of reporting structures are also driven by the importance of SCM concepts to a given organization.

Organizations that support integrated SCM often employ chief supply chain officers, who are high-level executives and report to chief executive officers or chief operating officers. Supply chain officers have all supply chain functions report to them, and they are usually tasked with optimizing the effectiveness of the overall supply chain. Chief supply chain officers may also have the title of senior vice president, vice president, or chief procurement officer; this top-level position varies from organization-to-organization.

In this organizational structure, procurement executives typically report to senior supply chain executives. Senior procurement executives may also have a title, such as vice president of procurement (or purchasing or sourcing). They may be responsible for elements of the procurement process, from sourcing and contracting with suppliers to efficiently processing individual purchasing transactions. *Figure 55* depicts a representative organizational structure with a senior supply chain executive.



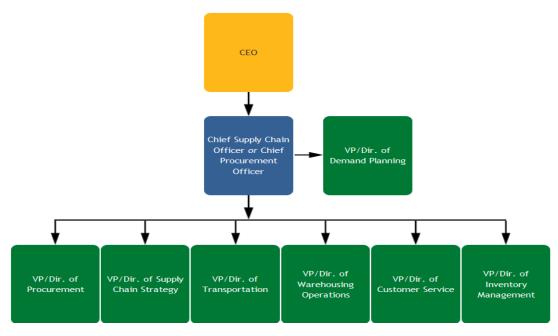


Figure 55. Organizational structure example with a senior supply chain officer reporting to a CEO. Developed by LINCS in Supply Chain Management Consortium.

Unit 2: Roles and Competencies

A major need in procurement is finding and hiring personnel who have the right knowledge, skills, and abilities for this industry. For most companies, developing procurement and supply management personnel is a significant challenge. This unit outlines the key procurement roles and competencies.

The Organization Roles of Procurement

Below the executive level, and regardless of the precise organizational structure, a number of specific roles exist for procurement professionals. To understand the types of roles and jobs that are available in procurement departments, it is helpful to consider the specific components of the procurement process. As discussed before, elements of procurement include supplier identification, supplier management, and contract development, so many roles are defined within these elements, though there are also others. Here are examples of the specific roles and how they are aligned with the procurement process:

- Strategic sourcing managers and analysts typically research the market, identify alternative suppliers, and analyze organizational spending.
- Commodity managers and analysts may focus on one or more well-defined commodities to support sourcing and supplier management activities.
- Procurement or purchasing managers, supervisors, coordinators, and clerks typically focus on the transactional elements of procuring, receiving, and paying for goods and services.
- Buyers and planners forecast demand for given materials, determine purchasing quantity and timing, execute procurement transactions, and sometimes manage supplier relationships.



Organizational Competencies and Talent Development

Another key to understanding the progression of roles in procurement is to understand the nuances in the skills required and the specific responsibilities across the hierarchy of positions. *Figure 56* portrays examples of typical skills and talents required to be successful at various levels of responsibility. As it makes clear, PO commitment authority typically increases from entry level through Director/VP level.

Analyst or Entry Levels	Buyer/Sr. Buyer	Manager/Sr. Manager	Director/VP
 Financial/Economic Analysis Computer Analytical Skills Problem Solving Financial Acumen Communication (written and verbal) Organizational Skills TCO Knowledge ERP/Database Knowledge Project Management Word, Excel, Access Ethics/Integrity 	 Business/Financial Acumen Communication and Presentation Skills Relationship Mgt. Strategic Thinking Problem Solving Solid Negotiations Skills Detail Orientation Total Cost of Ownership Skills Issue Resolution Project Management Time Mgt. and Organizational Skills Ethics/Integrity 	 Strategic Thinking Business/Financial Acumen Relationship Mgt. Sourcing Expertise Risk Management Total Cost of Ownership Skills Issue and Conflict Mgt. Communication and Presentation Skills Advanced Negotiations Skills Decision making Diplomacy Influencing Skills Team Leadership/People Mgt. (if Direct Reports) Ethics/Integrity 	 High Level Procurement Competency Strategic Thinking Influence and Strong Leadership Skills High-level Business and Financial Acumen Comfort around highest levels of leadership in all areas Complex Negotiation Skills Decision Making Conflict Resolution Relationship Mgt. Team Leadership Rick Mgt. Customer Focused Ethics/Integrity

Figure 56. Representative skills associated with roles in procurement. Developed by LINCS in Supply Chain Management Consortium.

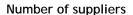
Unit 3: Procurement Metrics

Performance metrics are essential in determining the efficiency and effectiveness of procurement departments over time and indicating how their performances align with strategic organizational goals. Sample procurement metrics include:



Cost savings over time

This measurement shows the savings that procurement has achieved over time, both by commodity and in total.



This measures the effectiveness of strategic sourcing and supplier management efforts.

On-time delivery percentage

This metric is defined by the number of vendor orders that are received at the time they were expected; it also indicates supplier quality.

% of overall organizational spend managed by procurement

Percentage of overall organizational spend managed by procurement indicates the level of compliance with procurement policies and the perceived value of procurement functions among other parts of organizations.

PO cost

ш

This is a holistic cost that takes into account the labor and systems costs associated with all elements of creating, managing, and closing out POs, divided by the total number of POs; it typically serves as a process efficiency metric.

Procurement cycle time

This metric is also a process efficiency metric and may be defined in a number of ways, such as the average time it takes between requisition submission and PO placement or as the combination of administrative lead time and production lead time, in order to measure the time between requisition submission and material receipt.

Contract compliance

This measurement indicates suppliers' degree of following contract terms.

Defect rates

A defect rate is the percentage of materials received from given vendors that do not meet agreed-upon standards; it also indicates supplier quality.

пI

Learning Block 7 Summary

This learning block focused on the organizational structures of procurement, roles of personnel, and examples of metrics that can facilitate optimization and performance excellence within an organization. Numerous models for procurement and supply chain organizations are defined by the type of business, geographical locations of the business elements, location of key suppliers and distribution, warehouse, logistics,



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium.



and transportation functions. There are no absolutely right or wrong organizational models, as long as the model is designed to achieve the mission, charter, and goals of the overall business entity.

Learning Block 7 Practice Questions

- 1. An appropriate metric for measuring supplier quality is:
 - a. Contract compliance
 - b. Number of suppliers
 - c. Defect rate
 - d. PO cost
- 2. Strategic sourcing managers are typically involved with:
 - a. Generating POs
 - b. Identifying suppliers and analyzing organizational spend
 - c. Developing organizations' strategies
 - d. Janitorial services
- 3. Procurement is a valued function in which paradigm?
 - a. Supplier organizational structure
 - b. Supply chain management
 - c. Sales and marketing
 - d. Financial management
- 4. Examples of indirect spend may include all of the following, except:
 - a. Janitorial services
 - b. Furniture
 - c. Office supplies
 - d. Raw materials
- 5. A centralized procurement organizational structure may be best for:
 - a. Situations in which close collaboration is required between manufacturing plants and procurement functions
 - b. Situations in which close collaboration is not required between manufacturing plants and procurement functions
 - c. Companies that do not use computers to process POs
 - d. Organizations with more than three procurement clerks



6. The procurement cycle time metric is:

- a. A measure that quantifies cost reduction efforts
- b. Useful in identifying defects
- c. Measured as the time between the start of sourcing requests and signatures on contracts
- d. A way to measure contract compliance

7. Select the position that is most likely focused on well-defined commodity groups:

- a. Commodity manager
- b. Production engineer
- c. Purchasing manager
- d. Purchasing clerk

8. Shared services is an organizational structure that:

- a. Relies on decentralized procurement services
- b. Uses a central procurement function for recurring requirements across the business units
- c. Is not allowed in the United States
- d. Is a computer program used in Europe

9. Examples of direct spend may include:

- a. Janitorial services
- b. Furniture
- c. Raw materials for manufacturing operations
- d. Customer service

10. A de-centralized procurement organization structure may be best for situations in which:

- a. Close collaboration is required between manufacturing plants and procurement functions
- b. Close collaboration is not required between manufacturing plants and procurement functions
- c. International sourcing does not exist
- d. The law permits it





Learning Block 8: Applications of Law and Ethics in Procurement

Learning Block 8 Description

Commercial law and ethics are important to purchasers in all industries and companies. A primary responsibility in procurement is to negotiate and manage supplier contracts, so it is crucial that procurement managers clearly understand legal systems and how to develop contracts with suppliers. This includes an understanding of commercial law, particularly agency and contract law. Additionally, ethical dilemmas often arise, given the amount of funds involved in the purchasing function. This learning block addresses important topics about commercial law and ethics in procurement.

Learning Block 8 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Recognize the basic understanding of commercial law, particularly agency law and contract law
- Understand the importance of the Uniform Commercial Code (UCC) and the Convention on the International Sale of Goods
- Explain the difference between law and ethics
- Compare the risks to individuals and organizations of unethical behavior
- Analyze different types of unethical behavior in purchasing
- Evaluate how to promote ethical behavior in the workforce
- Establish corporate social responsibility

Unit 1: Commercial Law

It is an ethical and professional responsibility to adhere to laws, regulations, and trade agreements that apply to supply management, including national and international requirements. The Institute for Supply Management is a professional body that offers guidelines for understanding and complying with applicable laws, regulations, and trade agreements. Many categories of laws and regulations exist that procurement professionals should be understand, but this unit focuses on agency law and contract law. These two areas comprise the major areas of interest to purchasers under the broad domain known as commercial law.



Agency Law

Laws about agency govern the relationship between parties in which one party, the agent, agrees to represent or act for another party, the principal. According to Arbuckle (2015), the agent has the authority to act on behalf of another person or a group of people. For example, shareholders in a company will typically appoint a chief executive officer to act as an agent on their behalf. The principal is the person (or group of people) who authorizes agents to act on their behalf. For example, an overseas purchasing agent might have the legal authority to purchase goods and services on behalf of a buying principal in the US.



Figure 57. Agency law. Developed by LINCS in Supply Chain Management Consortium.

Contract Law

According to Scheuing (1989), contract law refers to how business firms enter into contracts with each other, execute those contracts, and remedy problems that may arise in the process. Contracts can be oral, but written contracts are the best evidence of the underlying contractual relationship. A PO is among the most basic forms of a written contract. These are the conditions that must be followed when using contract law:

- Offer and acceptance: An offer is a proposal of a contract, relationship, or work to be done, while the acceptance is an agreement to the offer.
- Consideration: In consideration, each party must agree to give up something of value during the compliance and performance of the contract.
- Legality of subject matter: Contracts must only cover topics that are legal.
- Legal capacity: Only individuals who are legally or mentally qualified to enter into a contract may do so; in purchasing, this deals with legal agency.

Contracts are made up of four major concepts and legal aspects: indemnification, terms and conditions, breach of contract, and intellectual property (IP), each of which is described as follows:

- To indemnify is to protect against and compensate for any damage, loss sustained, or expense incurred.
- Terms and conditions are the general and special arrangements, provisions, requirements, rules, specifications, and standards that form an integral part of an agreement or contract (WebFinance 2015)
- Breach of contract involves the failure, without legal excuse, to perform the obligations of a contract.
- Intellectual property includes property resulting from intellectual and creative process, including patents, trademarks, and copyrights.

Domestic Contract Law: The Uniform Commercial Code

The Uniform Commercial Code (UCC), according to the Duke University College of Law, is a comprehensive code addressing most aspects of commercial law and is generally viewed as one of the most significant areas of U.S. law (Duke University, n.d.). The UCC is a model code, so states do not



have to follow the code unless UCC provisions are enacted by their legislatures as state statutes. Additionally, the UCC only applies to U.S. domestic contracts. The UCC is written and updated by experts in commercial law.

The parties to a contract are not obligated to adhere to every part of the UCC. They can negotiate language that differs from the UCC, as long as all parties agree to the change. The UCC is designed to facilitate and streamline contracts and commerce, not serve as the absolute final word on what a buyer-seller contract should contain. For example, the UCC clearly states the responsibility of each party when shipping goods from suppliers to buyers using the designation Free On Board shipping point; the buyer pays transportation charges. If the contract states Free On Board shipping, the UCC default is that the title or ownership of goods will transfer from suppliers to buyers when the goods leave the shipping point at suppliers' facilities. The parties can modify the shipping term to say Free On Board shipping point, title transfers at destination. Here, buyers would not own the inventory until it arrives at their facilities.

International Contract Law: Convention on the International Sale of Goods

Not all commercial transactions are between firms in the same country. However, a convention on the international sale of goods exists to help ensure the integrity of contracting when conducting international business. The United Nations Convention of Contracts for the International Sale of Goods provides a uniform legal text for the international sale of goods, much as the UCC provides a uniform text of law for domestic commerce in the United States. The entire Convention on the International Sale of Goods can be found at http://www.uncitral.org/pdf/english/texts/sales/cisg/V1056997-CISG-e-book.pdf.

Unit 2: Purchasing Ethics

Ethics, according to Merriam-Webster (2015), are about the fairness, justness, rightness, or wrongness of an action. They are the set of moral principles, or values, that guide our behavior. Ethical behavior plays a major role in procurement because procurement influences and controls significant financial resources through the awarding of purchase contracts. This may result in unscrupulous sellers trying to gain an unfair advantage with buyers by offering kickbacks or other financial incentives.



Figure 58. Ethics play a major rule in procurement. Developed by LINCS in Supply Chain Management Consortium.

One of the challenges surrounding ethics is that no international agreement exists about what constitutes ethical behavior on a global

scale. For example, according to the *Greek Reporter*, the Greek Parliament declared that the traditional method of passing bribes in small envelopes may not be unlawful because they are a way of expressing gratitude for favors (Onti, 2013). However, in many countries, passing bribes in small envelopes could result in a jail sentence.



Unit 3: Types of Unethical Behavior in Purchasing

Organizations can manage ethical behavior in their workplaces by creating an ethics management program and using their corporate governance to train their employees on what their expected behavior should be. Unethical behavior cannot be condoned by these organizations; however, different forms of unethical behavior still exist due to the constant growing demand for low cost products, competition, availability of counterfeit products etc. Here are a few examples of the types of unethical buying that exist in procurement.



Personal Buying

This situation arises when buyers or purchasing departments purchase goods or services for personal rather than organizational needs. Examples include purchasing gym memberships or using dry cleaning services for employees, which potentially creates conflicts of interest. The rules in this area may differ in certain companies but most have a zero tolerance approach to this practice.



Financial Conflicts of Interest

Awarding business based on personal financial gain is an ethical violation. This, in effect, means that business is awarded to suppliers not on merit, but on for the financial gain of the buyer. Examples include taking direct bribes and awarding business to companies based solely on their ownership by close family members. Many companies' employees write an annual statement declaring that neither they nor their family members have financial interests in entities that do business with the company, or declaring clearly any such relationships that do exist.



Accepting Supplier Favors

This category involves the acceptance of gifts and favors from suppliers. Examples include dinners, golf outings, free travel, tickets to sporting events, and even cash. A major problem with supplier favors is that their objective is to get buyers to make a purchase decision based on factors other than the merits of the supplier's performance. It is important for procurement professionals to understand the specific rules and regulations in place regarding supplier favors.



Sharp Practices

This is a broad category of behaviors that are designed to trick or deceive suppliers, often with lies or misinformation. The following are examples of sharp practices:

- Soliciting bids from unqualified suppliers to drive prices lower
- Exaggerating purchase volumes to receive a lower cost per unit, then ordering lower volumes
- Expecting suppliers to perform services but not compensating them for doing so
- Taking advantage of suppliers in financial distress





Reciprocity

This behavior gives preferential treatment to suppliers who are also customers of the buying company. Reciprocity could also be present when buyers maintain that they will not do business with suppliers unless they purchase the buyers' products in return.

Figure 59. Unethical behaviors. Developed by LINCS in Supply Chain Management Consortium.

Unit 4: Supporting Ethical Behavior or Practices in Purchasing

Organizations have a variety of ways to promote ethical behavior and practices. If the organization is quite large, their goal is to develop a corporate code of ethics to guide each department and all employees must see the ethics program being driven by management. The codes of ethics and codes of conduct is dictated by the organization's culture and all employees must be aware of and act in full accordance with policies and procedures. This unit outlines how that goal can be accomplished.

Means of Supporting Ethical Behavior in Purchasing

Top management must work to establish a culture that reinforces ethical behavior and does not tolerate ethical lapses. Executive management must also lead by example and not look the other way or, worst of all, act unethically themselves. When employees do act unethically, management should respond appropriately. This can include taking direct and immediate disciplinary action against such employees.

Companies should also develop written corporate and supplier codes of conduct that clearly describe how buyers and suppliers are expected to act ethically. These codes should be distributed to internal participants and to suppliers. They are distributed to suppliers because suppliers are also expected to abide by the codes of conduct laid out in such documents. Overall, organizations are encouraged to develop and enforce policies that support ethical principles and standards.

The following are additional examples of how companies can support ethical behavior among their procurement employees:

- Organizations have corporate compliance programs and training that are mandatory for employees.
- Buying organizations may choose to rotate procurement personnel to avoid buyers becoming too comfortable with specific groups of suppliers.
- A beneficial way to promote ethical behavior is to designate a corporate ombudsman, who investigates and attempts to resolve complaints, problems, and concerns.



Professional Principles and Standards of Ethical Conduct

The Institute for Supply Management is the leading professional association for purchasing managers and supply managers; it has developed the comprehensive document *Principles and Standards of Ethical Supply Management Conduct* (Institute for Supply Management, 2014). This document recognizes the important role that ethics plays in the procurement profession. The Institute has developed a set of overarching principles and the standards that support those principles.

Policies developed and followed by companies must be well understood and enforceable. The ethics policies, in particular, should be shared with employees, including those outside the supply department, and suppliers. Additionally, training must be ongoing and comprehensive. The codes of conduct must clearly state the repercussions for unethical behavior and should be closely linked with company actions. This might be accomplished by linking unethical behavior to, for example, disciplinary action that ranges from reprimands to termination where that is necessary.

Social Responsibility

Social responsibility and business ethics are usually regarded as the same concepts. However, social responsibility is one aspect of business ethics. The social responsibility awareness began with the increased public consciousness about the role of business and their ethical practices in society. These are the actions of firms that contribute to social welfare, which are classified as Corporate Social Responsibility (CSR). Big corporations make CSR an important element of their strategic management plan and a legitimate business function with the role of corporate social performance, socially responsible investing, and global corporate citizenship. (McWilliams, 2015).

Learning Block 8 Summary

This learning block focused on understanding the laws, codes, ethics, and the importance of ethical behavior in all aspects of procurement. All businesses are faced with some level of compliance with laws and regulations. It is important to achieve fairness and equity in all aspects of business dealings, especially between buyers and sellers. Business entities can ill afford the occasional stiff penalties for non-compliance with laws and codes and have their names in the media, likely hurting future revenues and profits. Procurement professionals must thoroughly understand the laws and codes that pertain



Figure 20. Supply management and procurement. Developed by LINCS in Supply Chain Management Consortium.

to their specific businesses and must ensure that this information effectively flows down throughout and is also communicated to the supplier network.



Learning Block 8 Optional Supplemental Resources

The optional supplemental resources listed below may be used to reinforce the content covered within this learning block.

- American Law Institute and the National Conference of Commissioners on Uniform State Laws. (2012). Uniform Commercial Code. *Legal Information Institute*. Retrieved from https://www.law.cornell.edu/ucc
- Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2014). *Business ethics: Ethical decision making & cases* (10th ed.). Independence, KY: Cengage Learning.
- Johnson, C. E. (2012). *Organizational ethics: A practical approach* (2nd ed.). Los Angeles, CA: Sage.
- United Nations Commission on International Trade Law. (2010). *United Nations convention on contracts for the international sale of goods*. Retrieved from
 - http://www.uncitral.org/pdf/english/texts/sales/cisg/V1056997-CISG-e-book.pdf
- Velasquez, M. G. (2014). Business ethics: Concepts and cases (7th ed.). New York, NY: Pearson.

Learning Block 8 Practice Questions

- 1. It is an ethical and professional responsibility for procurement professionals to:
 - a. Acquire property, plant or equipment, goods, works, and services at the lowest cost
 - b. Adhere to laws, regulations, and trade agreements that apply to supply management, including international requirements
 - c. Understand all aspects of company law, not only those that pertain to procurement
 - d. Develop suppliers
- 2. In the US, virtually anything is legally negotiable in contracts, as long as they:
 - a. Satisfy certain conditions
 - b. Are in written form
 - c. Have been signed by all parties concerned
 - d. Have not been documented
- 3. The four major concepts related to the legal aspects of contracts are:
 - a. Indemnification, terms and conditions, breach of contract, and intellectual property
 - b. Indemnification, reciprocity, breach of contract, and intellectual property
 - c. Indemnification, terms and conditions, breach of contract, and low-cost sourcing
 - d. Obligations, terms and conditions, breach of contract, and intellectual property
- 4. The Uniform Commercial Code (UCC):
 - a. Relates to the types of uniforms worn by workers
 - b. Does not apply to procurement personnel
 - c. Is called a model code, in which states must follow the code
 - d. Is a comprehensive code addressing nearly all aspects of commercial law



5. One of the challenges surrounding ethics is that:

- a. Companies conducting business overseas are unethical
- b. No international agreement exists about what constitutes ethical behavior globally
- c. Ethical conduct cannot be defined in the U.S.
- d. Procurement personnel are exempt from ethical behavior

6. Sharp practices:

- a. Are a broad category of behaviors that are designed to trick or deceive a supplier, often with lies or misinformation
- b. Involve the acceptance of gifts and favors from suppliers
- c. Award businesses based on personal financial gain
- d. Give preferential treatment to suppliers who are also customers of the buying company

7. Financial conflicts of interest are mainly concerned with:

- a. Giving preferential treatment to suppliers who are also customers of the buying company
- b. Purchasing goods or services for personal rather than corporate needs
- c. Accepting gifts and favors from suppliers
- d. Awarding business based on personal financial gain

8. Organizations that are committed to ethical behavior will almost always have:

- a. Supplier development programs in place
- b. Programs in place to make suppliers aware of discounts provided
- c. Corporate compliance programs and training available to employees
- d. Procurement personnel who are dedicated to certain suppliers full-time

9. The ethics policy:

- a. Must be well understood but not enforceable
- b. Should be shared with employees but not with suppliers
- c. Should be shared with suppliers but not with employees
- d. Should be shared with suppliers and employees (including those outside the department)

10. Social responsibility is defined as:

- a. The ability to meet current needs without hindering the ability to meet the needs of future generations in terms of economic, environmental, and social challenges
- b. The ability to meet current needs while hindering the ability to meet the needs of future generations in terms of economic, environmental, and social challenges
- c. The ability to meet the needs of future generations, but not necessarily to meet current needs, in terms of economic, environmental, and social challenges
- d. The inability to meet current needs and the inability to meet the needs of future generations in terms of economic, environmental, and social challenges



References

- Arbuckle, D. (2015). The definition of principal vs. agent. *Houston Chronicle*. Retrieved from http://work.chron.com/definition-principal-vs-agent-14381.html
- Dominick, C. (2008). Buyers ask: What is market intelligence? Next Level Purchasing Association. Retrieved from http://www.nextlevelpurchasing.com/articles/what-is-market-intelligence.html
- Duke University. (n.d.). Uniform commercial code (UCC). J. Michael Goodson Law Library. Retrieved from https://law.duke.edu/lib/researchguides/ucc
- Dwyer, F. R., & Tanner, F. T. (2009). *Business marketing: Connecting strategy, relationships, and learning* (4th ed.). New York, NY: McGraw-Hill.
- EPIQ. (2014). Electronic procurement. Retrieved from http://www.epiqtech.com/Electronic-Procurement.htm
- Ethic. (n.d.). In *Merriam-Webster's online dictionary*. Retrieved from http://www.merriam-webster.com/dictionary/ethic
- Fill, C., & Fill, K. E. (2005). Business-to-business marketing: Relationships, systems and communications. Harlow, UK: Pearson Education Limited.
- Fottrell, Q., & Scheck, J. (2009, January 8). Dell moving Irish operations to Poland. *The Wall Street Journal*. Retrieved from http://www.wsj.com/articles/SB123141025524864021
- Institute for Supply Management. (2014). Principles and standards of ethical supply management conduct. Retrieved from http://www.ism.ws/files/SR/PrinciplesandStandardsGuidelines.pdf
- Kale, P., & Singh, H. (2009). Managing strategic alliances: What do we know now, and where do we go from here? Academy of Management Perspectives, 23(3), 45-62. Retrieved from http://connection.ebscohost.com/c/articles/43479263/managing-strategic-alliances-what-dowe-know-now-where-do-we-go-from-here
- McWilliams, A. 2015. Corporate Social Responsibility. Wiley Encyclopedia of Management. 12:1-4.
- Monczka, D., Trent, R., & Handfield, R. (2005). *Purchasing and supply chain management* (3rd ed.). New York, NY: McGraw-Hill.
- Muckstadt, J. A., Murray, D. H., Rappold, J. A., & Collins, D. E. (2003). The five principles of supply chain management: An innovative approach to managing uncertainty. Retrieved from http://www.deltasw.com/English/Articoli/5%20Principles%20of%20Supply%20Chain%20Manage ment.pdf.
- Onti, N. M. (2013, April 15). Greece legalizes envelope bribes. *Greek Reporter*. Retrieved from http://greece.greekreporter.com/2013/04/15/greece-legalizes-envelope-bribes/
- Scheuing, E. E. (1989). Purchasing management. Upper Saddle River, NJ: Prentice Hall.



- Supply management. BusinessDictionary.com. Retrieved from BusinessDictionary.com website: http://www.businessdictionary.com/definition/supply-management.html
- Terms and Conditions. (n.d.). In BusinessDictionary.com. Retrieved from http://www.businessdictionary.com/definition/terms-and-conditions.html
- Trent, R. J. (2010). Creating the ideal supplier scorecard. *Supply Chain Management Review*, 14(2), 24-29. Retrieved from http://www.scmr.com/article/creating_the_ideal_supplier_scorecard
- Trent, R. J., & Roberts, L. R. (2009). *Managing global supply and risk: Best practices, concepts, and strategies.* Plantation, FL: J. Ross.
- Trent, R. J., & Zacharia, Z. (2012). The wisdom of becoming a preferred customer. *Supply Chain Management Review*, 16(6), 10-18. Retrieved from http://connection.ebscohost.com/c/articles/83432261/wisdom-becoming-preferred-customer
- Wallace, W., & Xia, Y. (2015). Purchasing, procurement, and strategic sourcing. In Delivering customer value through procurement and strategic sourcing: A professional guide to creating a sustainable supply network (pp. 5-18). Upper Saddle River, NJ: Pearson Education.



Practice Questions Answer Key

Learning Block 1
1. A
2. B
3. B
4. B
5. A
6. B
7. C
8. D
9. D
10. C

Learning Block 4
1. C
2. D
3. A
4. B
5. C
6. D
7. A
8. B
9. B
10. C

Learning Block 7
1. C
2. B
3. B
4. D
5. B
6. C
7. A
8. B
9. C
10. A

Learning Block 2
1. A
2. A
3. C
4. C
5. D
6. D
7. B
8. B
9. C
10. B

<u>Learning Block 5</u>
1. D
2. B
3. A
4. D
5. C
6. B
7. B
8. B
9. D
10. A

	Learning Block 8
-	1. B
:	2. A
;	3. A
4	4. D
ļ	5. B
(6. A
•	7. D
8	8. C
(9. D
	10. A

Learning Block 3
1. D
2. C
3. B
4. C
5. D
6. B
7. B
8. A
9. C
10. A

Learning Block 6
1. B
2. A
3. C
4. D
5. B
6. A
7. C
8. D
9. B
10. B



Supply Management and Procurement Certification Track Glossary

*: Indicates terms coming, in part or in whole, from the Supply Chain Management Terms and Glossary from August 2013.

<u>A</u>

Acceptance: The second important phase of creating a contract after the offer phase. The receiver of the offer must accept the offer in order to move forward with creating a contract in the consideration phase.

Accessory Equipment: Products used to facilitate production; includes products such as personal computers, hand tools, desktop printers, and toolboxes.

Administrative Lead Time: The period or interval, usually measured in days, from the receipt of a requirement in procurement through purchase order award.

Aftermarket*: A market for parts and accessories used in the repair or enhancement of a product. A secondary market created after the original market sales have concluded.

Agency Law: Agency law is concerned with any principal-agent relationship. This involves a relationship in which one person has legal authority to act for another.

Amendments to Contracts: Includes any agreed-upon changes to contracts.

Amendments to Solicitation Documents: Any changes, additions, or deletions to an RFI, RFQ, or RFP, as well as any other clarifications and correspondence with suppliers.

R

Benchmarking*: The process of comparing performance against the practices of other leading companies for the purpose of improving performance. Companies also benchmark internally by tracking and comparing current performance with past performance.

Best Practices*: A specific process or group of processes that have been recognized as the best method for conducting an action. Best practices may vary by industry or geography, depending on the environment being used. Best practice methodology may be applied with respect to resources, activities, cost object, or processes.

Bidding Automation: Occurs when bid packages and specifications are made available online, bidders submit their bids and proposals online, and the bid opening and award are communicated electronically. Cycle time reductions and other cost savings can be significant if the automated process is efficient.

Bill of Lading*: A transportation document that is the contract of carriage containing the terms and conditions between shippers and carriers.



Blanket Purchase Orders (BPOs)*: An order that customers place with suppliers that contains multiple delivery dates scheduled over a period of time, sometimes at predetermined prices. It is normally used when there is a recurring need for expendable goods.

BPOs*: See Blanket Purchase Orders.

Breach of Contract: Involves the failure, without legal excuse, to perform the obligations of a contract.

Business Unit Strategy: The guiding principles and planned objectives set by management to be followed by an autonomous division of a company.

C

Capital*: The resources, or money, available for investing in assets that produce output.

Categorical Measurement Systems: These systems require simple check-offs that describe a supplier's performance across different categories.

Centralization: When procurement functions are centralized, this may support procurement execution efficiencies by allowing for the creation of well-defined commodity groups supported by commodity-specific professionals who handle large-dollar spend amounts from narrow sets of materials, services, and suppliers.

Classification*: An alphabetical listing of the commodities, the class or rating into which the commodity is placed, and the minimum weight necessary for a rate discount; used in the class rate structure.

Coercive Power: A type of negotiation power that involves the use of punishment that can lead to failed negotiations. This is seen most commonly in the buyer-seller relationship, but can be a feature of other types of negotiation. It is the power to punish.

Collaborative Relationships*: Involve working with a limited group of suppliers who are strategically important to the success of the buying firm. A willingness to work jointly to identify better ways to operate or compete is characteristic of a collaborative relationship. Collaborative relationships should, by definition, be win-win.

Co-Located: Occurs when two or more groups in a firm share the same office space.

Commercial Law: The branch of study that handles how businesses enter into contracts with each other, execute contracts, and remedy problems that may arise between the firms.

Commodity*: Any physical item that is traded in commerce. The term usually implies an undifferentiated product that competes primarily on price and availability.

Commodity Councils: Cross-organizational entities established to leverage a firm's purchasing power. Councils manage a well-defined set of goods or services and include the sharing of information, such as supplier information, contract terms, and even specific contracts across the firm's global operations.

Commodity Families: Used to facilitate the development of tailored procurement strategies by grouping materials or services by one or more common characteristics.

Commodity Profile Information: Identifies the type and nature of a product or service, manufacturing or service delivery process, and quality requirements or standards.



Commodity Strategies*: Commodity strategies (sometimes referred to as commodity sourcing strategies) are purchasing strategy plans that refer to items or groups of items procured by an organization.

Commodity Teams: Teams of procurement professionals dedicated to the procurement of a specific commodity or groups of commodities. A commodity team is often formed from employees from across the business who are familiar with the commodity being procured.

Communication: Communication involves the transfer of information among people and places. There are various methods of communication; more than one may occur at a time. Communication involves sending and receiving information through different methods: written communication, verbal communication, nonverbal communication, and visual communication.

Competitive Advantage*: The value created by a company for its customers that clearly distinguishes it from the competition and provides its customers a reason to remain loyal.

Competitive Analysis: An assessment of the strengths and weaknesses of current and potential competitors. This assessment provides a firm with insights regarding their comparative positioning with competitors, suppliers, and potential suppliers in support of developing or reviewing a procurement strategy.

Competitive Bidding*: A price or service offering by a supplier that must compete with offerings from other suppliers.

Competitive Relationships: Also known as win-lose relationships, they typically feature parties competing over a fixed amount of value. This contrasts with working jointly to create new opportunities that lead to new value for the parties. For many low-value, low-risk items required by a buyer, the relationship with suppliers should be competitive.

Components*: Material that contributes to a finished product but is not the finished product itself. Examples include tires for an automobile, the power supply for a personal computer, or a zipper for a ski parka. Components for manufacturers may be considered finished products by their suppliers.

Concessions: A demonstrated willingness to move away from a given position. Parties involved in a negotiation must be willing to be flexible. Without a willingness to make concessions or find alternative solutions, parties to a negotiation may become deadlocked.

Consideration: A form of mutual obligation in which all parties are bound by contracts to perform at a certain level and agree to carry out their responsibilities. Considerations can hold value and give contracts legal validity.

Constraint*: A bottleneck, obstacle, or planned control that limits throughput or the utilization of capacity. Constraints are things over which the manager has little or no control.

Container*: 1) A box, typically 10 to 40 feet long, that is primarily used for ocean freight shipments. For travel to and from ports, containers are loaded onto truck chassis or railroad flatcars; 2) The packaging, such as a carton, case, box, bucket, drum, bin, bottle, bundle, or bag, in which an item is packed and shipped.

Contingency Plans*: Preparations to deal with calamities like floods and non-calamitous situations such as strikes before they occur.



Contract*: A legally binding agreement between two or more parties to provide specific products or services.

Contract Law: The body of law that refers to how businesses enter into contracts with one another, execute contracts, and remedy problems that arise in the process (Scheuing, 1989).

Contract Management: The process of ensuring and verifying that the parties to a legally agreed-upon contract fulfill the requirements, expectations, terms, and conditions of the agreement.

Contract Relationship Manager: A manager, typically from within the procurement department, assigned to monitor the ongoing performance of the execution of a given contract.

Convention on the International Sale of Goods: Documents maintained by the United Nations that provide a uniform text of law for the international sales of goods.

Cooperative Relationships: Relationships in which buyers and suppliers work together, often over a long period of time, to achieve common goals. They often involve both supplier and buyer working together to reduce costs, improve quality, improve delivery, and improve service, all of which affect performance.

Core Competencies*: Specific factors that a business sees as being central to the way it, or its employees, works. Core competencies provide consumer benefits, are not easy for competitors to imitate, and can be leveraged widely across many products and markets.

Cost Structure: Suppliers' total costs, including those associated with capital investment, raw materials, manufacturing, quality, storage, transportation, duties, export control, inventory carrying, taxes, insurance, port of entry, supplier development, energy, overhead, and profit.

Counterproductive Relationships: Involve the parties working against each other. In this kind of relationship, neither party feels any need to take responsibility for what happens in the relationship.

Critical Quadrant: Includes goods and services that have a high value and consume a large relative proportion of overall supply spend. Products in this quadrant are essential to the function of a service or product, or the end customer highly values the differentiation offered by the good or service.

Critical Success Factors (CSF)*: The necessary conditions for success that can be measured quantitatively for effectiveness, economy, and efficiency. Describes those few areas where satisfactory performance is essential in order for a business to succeed. Characteristics, conditions, or variables that have a direct influence on a customer's satisfaction with a specific business process. The set of things that must be done correctly if a firm's vision is to be achieved.

Cross-Functional Sourcing Team: Teams comprised of individuals from multiple business functions that have a vested interest in the successful sourcing of materials or services.

CSF*: See Critical Success Factors.

Customer*: 1) In distribution, the trading partner or reseller. 2) In direct-to-consumer, the end customer or user.

Customer Order Fulfillment*: The typical business process that includes receiving and processing customer orders through delivery.



D

DC*: See Distribution Center.

Deadlock: The inability to come to an agreement during a negotiation.

Defect Rate: An indicator of supplier quality. An item is defective when it does not perform within a predefined set of specifications. To calculate a defect rate, divide the number of defective units (or service occasions) by the total amount of units (or service occasions) purchased.

Demand*: What customers or users actually want. It is typically associated with the consumption of products or services, as opposed to a prediction or forecast.

Direct Spend: Generally recognized as purchases of goods and services that are directly incorporated into a product being manufactured. Examples include raw materials, components, and subcontracted manufacturing services.

Discrepancy Report: A document that details any discrepancies on a shipment or shipments noted by the receiving department of the buyer organization. The procurement group or inventory management personnel often become involved in following up on, and resolving, discrepancies with the selling organization.

Distribution Center (DC)*: The warehouse facility that holds inventory from manufacturing pending distribution to the appropriate stores.

Domestic Supplier: A supplier that can serve any location within a country. The database must note the country or countries that the supplier can competitively serve.

Domestic Supply Base: Characterizes a firm's set of suppliers located in the same country as the firm.

Ε

EDI*: See Electronic Data Interchange.

Electronic Catalogs: Provide a user-friendly way of accessing information about a seller's products and services. The key benefit of using electronic catalogs is their low-cost search capability; if users order directly from these catalogs, perhaps with a procurement card, cycle times and ordering costs can also be reduced.

Electronic Data Interchange (EDI)*: Intercompany, computer-to-computer transmission of business information in a standard format.

Embedded Services: Term used to describe an organizational approach in which the procurement functions and personnel are part of, and located with, the broader supply chain organization.

End Customer: The final consumer who purchases the product.

E-procurement and Electronic Purchasing: A way of using the Internet to make it easier, faster, and less expensive for businesses to purchase goods and services. The overall goal is to streamline the purchasing process so businesses can focus more management time on earning revenue and serving customers.



Evaluation Report: Developed based on a review of the information submitted by suppliers in response to an RFI, RFQ, or RFP; it comprises an assessment of potential suppliers' capabilities in relation to the work required or products or services to be provided.

Executive Sourcing Manager: An upper-level manager with sourcing responsibilities.

Expert Power: A source of power in negotiations that comes from an expert in a particular field, who may also be acknowledged by others as being an expert in this field.

External Customers: External customers tend to be consumers of products and services that a company sells.

F

Financial Managers: Procurement professionals, in some contexts, who are tasked with conducting transactions that require a substantial amount of a firm's finances.

Finished Goods*: Products that have been completely manufactured, packaged, stored, and ready for distribution.

Fulfillment*: The act of fulfilling customer orders, fulfillment includes order managing, picking, packaging, and shipping.

G

Gap Analysis*: The process of determining and documenting the variance, or gap, between goals and current performance.

Global Commodity Councils: See Commodity Councils.

Global Sourcing: Procurement strategies that utilize suppliers from a variety of countries.

Goal: An observable and measurable end result that has one or more objectives to be achieved within a relatively fixed timeframe.

Growth*: In this stage, the sales of products or services are expanding. Changes to product design, manufacturing processes, and quality are all evolving to maximize this revenue stream. Additionally, the supply chain is monitored and evaluated to make sure production capacity can be maintained or even expanded.

Τ

Indemnify: To compensate for any loss or damage that has already occurred, or to guarantee through a contractual agreement to repay another party for loss or damage that occurs in the future.

Indirect Spend: Generally recognized as purchases of goods and services that are not directly incorporated into a product being manufactured. Examples include janitorial services, real estate services, travel services, equipment, computers, office products, safety gear, and furniture.

Informational Power: A source of power in negotiations that uses facts and data.

Institute for Supply Management: The leading professional association for purchasing and supply managers; it provides guidelines for understanding and complying with applicable laws, regulations,



and trade agreements. Many categories of laws and regulations exist of which procurement professionals should be aware, but agency law and contract law are especially important.

Intellectual Property (IP)*: Property of an enterprise or individual that is typically maintained in a digital form. IP may include software program codes, digital documents, music, videos, etc.

Internal Customer*: An individual or department that is internal to companies, as opposed to the companies' external customers.

Internet*: A computer term that refers to an interconnected group of computer networks from all parts of the world (i.e., a network of networks). Accessed via a modem and an online service provider, it contains many information resources and acts as an enormous electronic message routing system.

Introduction: The summation of many months or years of market evaluation, product designs, testing, and packaging. This also requires designing and setting up the supply chain.

Inventory*: Components, raw materials, work in process, finished goods, and supplies required for the creation of goods and services. It can also refer to the number of units or value of the stock of goods held by a company.

Inventory Management*: The process of ensuring the availability of products through inventory administration.

Invoice*: A detailed statement showing goods sold and amounts due for orders. The invoice is prepared by sellers and serves as the document that buyers use to make payments.

IP*: See *Intellectual Property*.

J

Just-in-Time (JIT)*: An inventory control system that controls material flow into assembly and manufacturing plants by coordinating demand and supply to the point where desired materials arrive just in time for use. An inventory reduction strategy that feeds production lines with products delivered just in time. Developed by the auto industry, it refers to shipping goods in smaller, more frequent lots.

K

Kickback: A payment or gift made to someone who has facilitated an illicit or otherwise improperly conducted transaction.

L

Legitimate Power: The source of power in negotiations that involves the organizations' individual positions. For example, a vice president at a supplier would have legitimate power to make decisions or commitments during a negotiation with a buyer.

Leverage Quadrant: Includes items in which consolidating purchase volumes and reducing the size of the supply base should lead to a range of benefits. This quadrant features the extensive use of long-term contracts.

Local Supplier: A local supplier serves only a limited number of sites or buying locations (often only one) within a country. The database should include information about the country and the specific sites within that country that the supplier is capable of serving.



Logistics*: The process of planning, implementing, and controlling the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements.

Long-Term Purchasing Agreement: Involves contracts that are generally put in place for a year or more. These types of agreements are established to cover the purchase of higher-value items over an extended period of time. Long-term purchase agreements can reduce transaction costs by eliminating the need for time-consuming renewal for each purchase or group of purchases.

M

Maintenance, Repair, and Operating Materials (MROs)*: 1) Any activity—such as tests, measurements, replacements, adjustments, and repairs—intended to retain or restore a functional unit to a specified state in which it can perform its required functions; 2) a category of software designed to support asset maintenance and management.

Manufacturing: The phase of the product life cycle in which a prototype is built and tested, after which the mass production of the product is completed.

Market Information: Part of market intelligence that identifies supply and demand price drivers, capacity utilization, and other factors that determine price and availability for the commodities in question, along with market size and predicted growth rate.

Market Intelligence*: The process of gathering and analyzing information about companies' markets to understand customers' wants and needs more accurately and to identify possible threats and opportunities.

Market Quadrant: Includes standard items or services that have an active supply market with items that are of medium or low value. Any negotiation that occurs in this quadrant is lower level and focuses on price and delivery.

Master Purchase of Goods Agreement: A key part of commercial contracts that contains the essential legal terms governing the sale and purchase of commercial goods. It usually cannot be modified without the approval of the legal department.

Master Service Agreement: Similar to a master purchase of goods agreement, but applies instead to services.

Material Packing Slip: Travels with goods and used to describe the contents of shipments.

Material Re-Work Costs: Standard or actual cost of correcting defective materials or work that increases overall operating costs. Material re-work costs are preventable costs.

Material Release: Often used to provide visibility to the supplier ahead of forecast material requirements as well as actual requirements. It specifies the required part number, quantity required, unit and quantity price, required receipt date, ship to address, and method of shipment.

Model Code: In reference to the UCC, this means that states do not have to follow the code unless UCC provisions are enacted by their legislatures as state statutes.

Multi-Regional Supplier: A supply classification that can competitively serve two or more regions.



Ν

Negotiating Tactics: The plans and actions used to carry out a negotiation plan. An understanding of tactics is important, particularly because the other party has likely thought about its tactics during its negotiation planning.

Negotiation: A counteroffer to an individual's or group's original offer.

0

Objective: The goal that the manager is ultimately interested in achieving for the company.

OEMs*: See *Original Equipment Manufacturers*.

Offer*: A document that describes a business transaction to be performed. An example would be a request to a carrier to pick up goods for shipment.

Offers Received (Technical and Financial): These comprise the various offers received from potential suppliers to a request for tender; they contain the necessary information on the technical and financial capabilities and strengths of a supplier or suppliers in relation to the work required by the buyer.

Ombudsman: A person who investigates and attempts to resolve complaints, problems, and concerns.

Operations: The planning and manufacturing (conversion) of goods.

Organizational Spend: The total value of products, materials, and services purchased by a firm in a given timeframe (typically a year).

Original Equipment Manufacturers (OEMs)*: The rebranding of equipment and selling it under another name, or as a component of another product. OEM formerly referred to the company that made the products (the original manufacturer), but with the growth of outsourcing, eventually became widely used to refer to the organization that buys the products and resells them.

Outsourcing*: To utilize a third-party provider to perform services previously performed in-house. Examples include manufacturing of products and call center and customer support.

Ρ

Performance Measures*: Indicators of the work performed and the results achieved in an activity, process, or organizational unit. Performance measures should be both financial and non-financial. Performance measures enable periodic comparisons and benchmarking.

PO*: See Purchase Order.

Portfolio Analysis: Recognizes that an effective supply department must apply a variety, or portfolio, of strategies and approaches to the various products or services procured that is based on the value of those products or services, including the number of qualified suppliers able to deliver those products or services.

Portfolio Matrix: A tool presented in a 2x2 format that recognizes that an effective supply department must apply a variety, or portfolio, of strategies and approaches different supply requirements.

Postponement*: The delay of final activities (e.g., assembly, production, and packaging) until the last possible moment. A strategy used to eliminate excess inventory in the form of finished goods which



may be packaged in a variety of configurations and to maximize the opportunity to provide a customized end product to the customer.

Power: The ability of those involved in negotiation to influence the position of others.

Price Creep: Price creep refers to the practice of suppliers who gradually increase prices over time outside of agreed contract terms.

Principles and Standards of Ethical Supply Management Conduct: Set of guiding principles from which the professional body—the Institute of Supply Management—has derived the standards of supply management conduct.

Process*: A series of time-based activities that are linked to complete a specific output.

Procurement*: The activities associated with acquiring products or services. The range of activities can vary widely between organizations to include all of parts of the functions of procurement planning, purchasing, inventory control, traffic, receiving, incoming inspection, and salvage operations.

Procurement Cards: A card provided for internal users to purchase low-cost items without going through the procurement group or other formal process.

Procurement Cycle Time: A process efficiency metric that may be defined a number of ways, such as the average time it takes between requisition submission and purchase order placement.

Procurement Executive: The highest level of management within the procurement function of a firm.

Procurement Function: The function within an organization concerned with the acquisition of goods, services, or works from an external source.

Procurement Lead Time: The combination of administrative lead time and production lead time.

Procurement Officers: Individuals or roles in the procurement function who have authority to enter into contracts with suppliers.

Procurement Spend: The amount of the total corporate spend that the procurement department actively controls or influences.

Production Lead Time: The period or interval (usually measured in days) from the placement of the purchase order through receipt of the material.

Progress Reports: Details progress made in fulfilling contracts or proofs of delivery of goods and services at the required times, in the required quantities, and at acceptable levels of quality.

Project Procurement: The systematic process of identifying and procuring goods and services for a project.

Proof of Payment: A document indicating that payment has been made to a supplier or suppliers.

Proof of Receipt of Goods: A document signed by the buyer to indicate that goods have been received. One copy of this document is normally kept by the buyer and another is returned to the supplier.

Purchase Agreement: It contains the essential legal terms governing the sale and purchase of commercial goods. This usually cannot be modified without the approval of the legal department.

Purchase Contract: See Purchase Agreement.



Purchase Order (PO)*: The purchaser's authorization used to formalize a purchase transaction with a supplier, or the physical form or electronic transaction that buyers use when placing orders.

Purchasing*: The functions associated with buying the goods and services required by the firm.

Purchasing Agent: A role within the procurement function that assists in the selection and purchase of goods and services by gathering and screening information about suppliers and their products or services.

Purchasing Group: This section of an organization must work to ensure that the sourcing process is carried out efficiently and effectively.

R

Raw Materials*: Crude or processed material that can be converted by manufacturing, processing, or both, into new and useful products.

Receipt and Inspection Reports: These reports relate to inspection of goods delivered to the buyer by the supplier and describe the quality of the goods received.

Referent Power: A source of power in negotiations with at least one attribute that attracts another party.

Regional Supplier: A supplier that competitively serves many countries within a single region. Examples of regions include North America, Latin America, Asia-Pacific, and Europe. Some suppliers may also serve only a portion of a region.

Regulation: An important guideline that must be followed in transportation industries in order to remain lawful, conduct business smoothly, and keep everyone in the transportation industry safe.

Reporting: Occurs when TMS helps a shipping manager by tracking carrier performance, customer service, cost, and other measures of carrier quality.

Reporting Structures: Defines the authority relationships in a company, describing who reports to whom.

Repository: A place that stores a large quantity of an item. In the procurement industry specifically, a repository is an IT-based system that stores contracts electronically.

Request for Information (RFI)*: A document used to solicit information about vendors, products, and services prior to a formal RFQ or RFP process.

Request for Proposal (RFP)*: A document that provides information concerning a manufacturer's needs and requirements. It is created in order to solicit proposals from potential suppliers.

Request for Quote (RFQ)*: A formal document requesting vendor responses with pricing and availability of products. RFQs are typically solicited from a broad group of suppliers from which a narrower group will be selected and asked to provide a more detailed request for proposal.

Requirement Definitions: A formal document that presents clear definitions of the products and services required and includes, for example, product specifications, performance requirements, and quality specifications.



Requisitioner: Along with procurement professionals, requisitioners confirm that the material and service specifications in requisitions have been captured correctly.

Return: Material that has been rejected by customers or buyers' inspection departments and is awaiting shipment back to the supplier for repair or replacement.

Reward Power: A source of power in negotiations in which one of the parties involved is able to offer something of value to the other party, such as offering a purchase contract.

RFI*: See Request for Information.

RFP*: See Request for Proposal.

RFQ*: See Request for Quote.

Risk: A cost consideration in transportation that sometimes increases the cost of shipping for products that are at higher risk than other products of being damaged in transit.

<u>S</u>

SCM: See Supply Chain Management.

Scorecard*: A performance measurement tool used to capture a summary of the key performance indicators of a company. Metric scorecards should be easy to read and usually have indicators to flag when a company is not meeting the targets for its metrics.

Shared Services*: Consolidation of a company's back-office processes to form a spinout—a separate shared services unit that is run like a separate business—that provides services to the parent company and sometimes to external customers. Shared services typically lower overall costs due to consolidation and may improve support as a result of focused activities.

Short List: A list of candidates, normally potential suppliers, who have been selected for further review or for final consideration prior to awarding a contract.

Shipping*: 1) The act of conveying materials from one point to another; 2) The functional area that prepares the outgoing shipment for transport.

Social Responsibility*: The continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families along with the local community and society in general.

Sourcing: The process of purchasing or procuring products and services.

Sourcing Manager: The position in which the main role is to continually research the market, identify alternative suppliers, and analyze organization spend.

Sourcing Process: The process used to identify users' requirements, identify and qualify suppliers, choose suppliers for bidding, negotiate with and select suppliers, approve purchases, release and receive purchase requirements, and monitor and measure supplier performance.

SOW*: See Statement of Work.

Spare Parts Procurement: The procurement of interchangeable parts that are kept in inventory and used for repairing or replacing failed units or machinery.



Spend Analysis: Entails identifying what products and services each business unit is buying and spending on these products and services.

Statement of Work (SOW)*: A document that details and acknowledges mutual agreement on the work activities, deliverables, and timeline that a vendor will execute in performing work for a customer. Detailed requirements and pricing are usually specified in a statement of work, along with various other terms and conditions.

Stock-Out*: A situation in which no stock is available to fill a customer or production order during a pick operation. Stock-outs can be costly, including the profit lost for not having the item available for sale, lost goodwill, substitutions, or lost customers.

Strategic Alliance*: Business relationship in which two or more independent organizations cooperate and willingly modify their business objectives and practices to help achieve long-term goals and objectives.

Strategic Sourcing*: The process of determining long-term supply requirements, finding sources to fulfill those needs, selecting suppliers to provide the services, negotiating purchase agreements, and managing suppliers' performance.

Sub-Assemblies: Units comprised of multiple components that are designed to be incorporated with other units into a larger manufactured product.

Summary Supplier Evaluation Matrix: A matrix used to compare the merits of alternative potential suppliers. Specific criteria are listed and weighted according to their perceived relative merits. Companies are then evaluated in each of the criteria and weighted scores are tallied across criteria to determine the best potential supplier.

Supplier*: An individual or an organization who supplies goods or services to companies; sometimes also referred to as a vendor.

Supplier Development: Represents any activity or effort on the part of a buying firm to improve the performance of its suppliers. Working with existing suppliers through supplier development activities is a logical way to pursue continuous improvement.

Supplier Evaluation: The process of reducing risk and maximizing overall value.

Supplier Performance Measurement: Collecting information on how well a supplier is performing over a period of time in a structured way (Monczka et al., 2005).

Supplier Relationship Management: A broad-based management methodology describing how a firm interacts with its strategic supply base.

Supply Base Information: Current and potential suppliers, their characteristics, and country location.

Supply Chain*: Starting with unprocessed raw materials and ending with the final customer using the finished goods, the supply chain links many companies together. The material and informational interchanges in the logistical process, stretching from acquisition of raw materials to delivery of finished products to the end user.

Supply Chain Management (SCM)*: The design and management of all activities involved in sourcing and procurement, conversion, and logistics management activities. It also includes coordination and



collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers.

Supply Chain Risk Managers: Describes the various roles in supply chain management, including the procurement function, that impact the amount of risk involved in the overall supply chain and a firm's ability to respond to adverse situations.

Supply Management: The process of obtaining and managing products or services needed to operate a business.

Supply Market Intelligence (SMI): The result of obtaining and analyzing information relevant to a company's current and potential supply markets with the objective of supporting effective decision-making.

Т

Tender*: The document that describes a business transaction to be performed, such as a request to a carrier to pick up goods for shipment.

Terms and Conditions*: The provisions and detailed requirements of a contract.

Total Quality Management (TQM)*: A management approach in which managers regularly communicate with organizational stakeholders to emphasize the importance of continuous quality improvement.

TQM*: See Total Quality Management.

Transaction Quadrant: The quadrant with an overall lower value of goods and services. Reducing the cost of the purchase transaction is important in creating value here, usually through electronic systems or procurement cards. Even when an item has many potential suppliers, the cost of supplier research to compare prices outweighs the value of that research. Any price analysis that occurs is typically not carried out in great depth.

Transportation: The physical movement of people and goods between origin and destination points, thus creating time and place utilities.

U

UCC: See Uniform Commercial Code.

Uniform Commercial Code (UCC): Provides the legal basis for the terminology used in domestic U.S. transactions between parties in a transaction.

User Function: The special purpose or activity for which a thing exists or is used as defined by the user.

V

Value Analysis*: The systematic effort to improve upon cost and performance of products and services purchased or produced through examining the materials, processes, information systems, and the flow of materials involved in order to determine if a product or item can be produced using less expensive materials while maintaining the same quality and functionality.



W

Warranty*: An obligation or guarantee that a product or service sold is as factually stated or legally implied by the seller. Oftentimes, warranties provide a specific remedy, such as repair or replacement, in the event that the product or service fails to live up to the warranty.

Win-Lose Negotiation: Occurs when the parties to a negotiation compete over how to divide a value that is fixed. It features adversarial or competitive relationships played out at the negotiation table.

Win-Win Negotiation: By cooperating or collaborating, rather than trying to beat the other parties, the amount of value derived from a negotiation and business relationship can increase.



Notes Page

Addendum

The previous document version was V2.24 (file name LINCS.SMP.v2.24.09062016).

Current version is v2.26 (file name LINCS.SMP.v2.26.03272017) and contain the following updates:

- Replaced all CanStockPhoto images
- Replaced all unnecessary instances of "above" and "below".
- The abstract page was corrected to match all other tracks

