COUNCIL OF SUPPLY CHAIN MANAGEMENT PROFESSIONALS

CSCMP

THE DEFINITIVE GUIDE TO SUPPLY MANAGEMENT AND PROCUREMENT

Principles and Strategies for Establishing Efficient, Effective, and Sustainable Supply Management Operations

Council of Supply Chain Management Professionals and

Wendy L. Tate

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Council of Supply Chain Management Professionals
Wendy Tate

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I would like to dedicate this book to my two daughters, who are always supportive of the things that I do. They helped me think through some of the issues associated with purchasing and supply chain management that I would never have considered. Whitney and Tayler Tate make my job more interesting. I'd also like to acknowledge the support of my immediate family in generating ideas for this book: Jeff Crow, Brent Crow, Sharon Crow, Julie Barry, Brooke Arnone, Dennis Crow, and Ruth Sykes.

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ABOUT THE AUTHOR

Wendy L. Tate, Ph.D. (Arizona State University, 2006) is an Associate Professor of Supply Chain Management in the University of Tennessee Department of Marketing and Supply Chain Management. She joined the faculty in August of 2006. She teaches both undergraduate and MBA students strategic sourcing and manufacturing and service operations. She has an interest in the cost impacts of business decisions across the supply chain. She is active on the UT campus and serves on many committees. She served for five years as the faculty advisor of the Council of Supply Chain Management Professionals (CSCMP), an active student-run professional organization for supply chain managers. She has published in both academic and practitioner top-rated journals in supply chain management. She enjoys research and takes a special interest in translating academic work into classroom learning activities.

Her research focuses on two primary business problems. The first is in the area of services purchasing, including outsourcing and offshoring. The second is on environmental business practices and trying to understand how these initiatives can be diffused across a supply chain and a supply network. She presents at many different venues including both academic- and practitioner-oriented conferences.

Wendy has two girls, Whitney and Tayler, who are both students at the University of Tennessee in the business college. Wendy enjoys the time she spends with them. She also enjoys gardening (she is currently working on a Landscaping Certification), traveling, hiking, and reading. She frequently attends cultural and sporting events. She also interacts with the literacy program in Knoxville and enjoys teaching students at all levels how to read and especially how to understand written problems so that they can potentially obtain college or technical degrees.

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THE ESSENTIAL CONCEPTS OF PURCHASING AND SUPPLY MANAGEMENT

The chapter discusses the roles and objectives of procurement in an organization and in supply chain operations, describes the different types of spending and buying methods, and defines key terminology. Supply management is an important business function that makes a significant contribution to both the top and the bottom line of the organization. The supply chain starts with finding, selecting, and managing effective and efficient suppliers of materials, equipment, and services. The capabilities of these suppliers are an important asset to the organization in terms of innovation and customer value.

Learning Objectives

After completing this chapter, you should be able to:

- Understand the differences and appreciate the evolution from tactical purchasing to strategic supply management.
- Understand the purpose and goals of the supply management organization and its contribution to profitability and the bottom line.
- Identify the relationship between the purchasing function and other functional areas.
- Identify the activities that are part of supply management.
- Understand the different categories of purchasing spend.

Introduction and History of Purchasing

Purchasing is one of the basic processes common to all organizations. It is the process of acquiring goods, services, and equipment from another organization in a legal and ethical manner.[1] Purchasing was initially a tactical contributor to the organization, focusing on transactional relationships and low price (Table 1-1). However, over time the role of the purchaser, and the purchasing department, has changed significantly and the function has become strategic to organizational competitiveness.

Table 1-1 History of Purchasing[2]

Period	Status
Late 1890s	Purchasing rarely used as a different department except in the railroad.
Early 1900s	Purchasing considered clerical work.
World War I and II	Purchasing function increased in importance due to the importance of obtaining raw materials, services, and supplies to keep the mines and factories running.
1950s and 1960s	Continued to gain stature, processes more refined, and more trained professionals. Still considered order placing clerical in a staff-support position.
Late 1960s–early 1970s	Integrated materials systems introduced, materials became part of strategic planning, and importance of department increased.
1970s	Oil embargo and shortages of basic raw materials turned the focus of the business world to purchasing.
1980s	Advent of just-in-time with an emphasis on inventory control and supplier quality; quantity, timing, and dependability made purchasing a cornerstone of competitive advantage.
Early 1990s	Value proposition of purchasing continued to increase; cost-savings became the buzzword.
Late 1990s	Purchasing evolved into strategic sourcing, contracts were more long term, and supplier relationship building and supplier relationship management started.
2000s	Purchasing shifted its myopic focus on cost to much broader terms. Some of the widely used developments: spend analysis, low-cost country sourcing, procurement technology evolved (ERP, e-sourcing), procurement outsourcing evolved (P2P), total cost of ownership, data mining and benchmarking, and lean purchasing.

Globalization has forced companies to improve their internal processes, such as supply management, to remain successful. The level of competition in the marketplace expanded to include both domestic and international markets. Purchasers no longer discuss "lowest price" but share information, collaborate, and talk to their suppliers about total costs, life-cycle costs, and cost reductions. This requires a focus on process improvements instead of short-term relationships and price reductions.

The primary goal of the purchasing organization is to purchase the right item or service, in the right quantity, at the right price, and at the right time. An abundance of competitors and seasoned customers demand higher quality, faster delivery, and products and services customized to their needs, at the lowest total cost. These demands are made at an even greater speed because of the influx of technology and social media into business-to-business applications. Information and data flow between supply chain members are increasing, making it challenging for organizations to continuously adapt to the ever-changing needs of the customer.

Getting products to customers at the right time, place, cost, and quality constitutes an entirely new type of challenge. Technology and an improved logistics network have opened up a world of opportunity to better enable competition through an expanded, globally oriented network of suppliers. The availability of low-cost labor and other alternatives in emerging countries has led to unprecedented shifts toward outsourcing and offshoring (discussed further in Chapter 5). China has become a major world competitor, introducing even more challenges for United States organizations in both the manufacturing and services sectors. The services sector now accounts for approximately 70 percent of the Gross Domestic Product (GDP), introducing more opportunity for effective supply management involvement in this sector[3] (Table 1-2). In the manufacturing sector, the vast majority of materials are purchased from sources outside the firm. Because of this, the supply management function has grown in importance and in complexity.

Table 1-2 U.S. GDP and Private Services-Producing Industries[4]

Millions of Dollars	2008	2009	2010	2011	2012
U.S. Gross Domestic Product	$14,291,543.00	$13,973,681.00	$14,498,922.00	$15,074,667.00	$15,684,764.00
Private Service-Producing Industries	$ 9,715,905.00	$ 9,609,550.00	$9,968,918.00	$10,357,395.00	$10,778,324.00
	68.0%	68.8%	68.8%	68.7%	68.7%

Case in Point—Finding the Right Suppliers

Purchasers must locate the right suppliers for their products and services. The issue is not so much about locating suppliers, with so many suppliers located in a variety of regions around the world, but about ensuring that they can meet your business requirements. Over time, these business requirements have changed significantly and purchasers have had to adapt their selection process to include criteria that often are difficult to truly assess. For example, recently apparel manufacturers in Bangladesh were lacking fire escape doors (a safety feature), leading to the deaths of many employees. Companies have entered into contracts with suppliers in some regions that tried to "bribe" officials into paying additional money to manufacture their goods. There are many instances in which the threat of Intellectual Property (IP) theft caused companies to eliminate certain regions of the world from supplier consideration and manufacturing location consideration. There are many other highly publicized examples in which the wrong supplier was selected because the quality of the supplier was difficult to assess. Purchasers have to know what to look for and have to ask suppliers some potentially difficult questions.

All these changes and challenges have helped propel supply management to the forefront of strategic decision making. The importance of appropriate management of suppliers that provide materials and services has become a key consideration for executives. There are many instances seen daily in which companies have received negative publicity due to the actions of suppliers, the location of suppliers, or the performance of suppliers. Competition is now between supply chains.[5] The companies that configure the best supply chains, with a highly performing supply base, will be the market winners and gain competitive advantage.

Why Is Purchasing Important?

Historically, purchasing has played a key role in "getting the lowest possible price." This was often at the expense of a positive relationship with the supplier and usually a trade-off with quality. However, over time, the role of purchasing evolved into a cost-saving function in which supplier relationships and contracts were developed with cost-savings in mind. These cost-savings often came through process improvements, product improvements, or supplier development efforts.

Today, purchasing is recognized as having an overwhelming impact on the bottom line of the organization. It has a direct impact on the two forces that drive the bottom line: sales and costs. Purchasing is becoming a core competency of the firm, finding and developing suppliers and bringing in expertise that is highly valued by the organization. Purchasing is generally responsible for spending more than 50 percent of all the revenues the firm receives as income from sales. More money is often spent for purchases of materials and services than for any other expense, and the spend in services is rapidly increasing.[6] Often, the cost of materials is 2.5 times the value of all labor and payroll costs and nearly 1.5 times the cost of labor plus all other expenses of running the business.[7] In the area of services, millions of dollars are spent on marketing and advertising, legal, information technology, logistics, temporary labor, and other categories. Although the involvement of purchasing in the services area is different than in a typical purchase of materials, there is significant opportunity for most organizations to save money by involving purchasing in this area of spend.

Figure 1-1 shows how supply management can drive sales up and costs down. The impact on net income and return on investment (ROI) have a major influence on shareholder value. The cost impacts are easily understood because cost reduction is typically considered a "purchasing job." Purchasing works with internal customers to help improve processes and drive down costs. Purchasing also works with suppliers to improve processes, look at alternative materials, and look at different locations or transportation modes. Focusing on cost improvement is a core competency of purchasing professionals.

However, there are also many opportunities to help drive up market share. For example, strong relationships with the right suppliers might allow for early supplier involvement in new product development. Therefore, the supplier is prepared for the actual launch and can also contribute and make changes if appropriate to facilitate an easier and less costly production launch. In 1998, for example, suppliers were involved in the product development process and actually helped by providing inputs into the design of the Honda Accord. These inputs were both material in nature and process-oriented. This early involvement in the product development stages helped to save more than 20 percent of the cost of producing the car.[8] In the casting industry, it was found that early involvement of suppliers in product development saved time and cost, and improved the quality of the parts. [9] The request for quote process (RFQ) is reduced significantly in this industry because suppliers are more aware of what is required, long before it is needed.

As you will begin to understand from the information presented in this book, the supply base is a source of innovative opportunities and the supply manager is trained to be aware of these supply market opportunities. Having the appropriate supply base and relationships with the suppliers is like having thousands of additional people thinking of the next great idea or innovation. There is a famous and highly publicized quote about suppliers and the supply base by Dave Nelson, who was an award-winning purchaser who worked at Honda, John Deere, and Delphi—he is considered a "guru" of supply chain.[10] Nelson said, "If you develop the right relationship with your supply base, you can have 10,000 additional brains thinking about ways to improve your product and generate cost-savings."[11] There is a lot of power resting in the hands of supply managers, if they can harness the strength and the capabilities of the supply base.

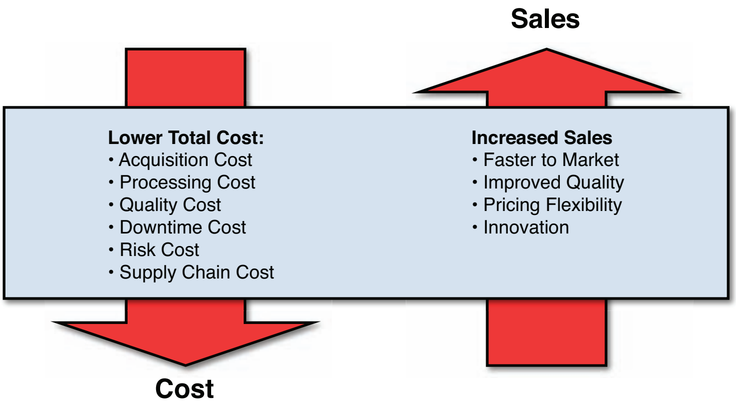

Figure 1-1 Supply Management's impact on both top and bottom line

How Can the Appropriate Relationships with Suppliers Create Value?

Purchasing can use its relationship with suppliers in many ways to help improve organizational value. This function has the capability to develop the appropriate relationships with suppliers that then become a competitive advantage for the firm.

Building Relationships and Driving Innovation

As purchasing continues to evolve as an important contributor to organizational success, the traditional approach of driving a hard bargain for price reductions has changed into a more relational approach with suppliers. This means that purchasing develops strong relationships with suppliers to jointly pull costs out of the product or service. This may be in the form of material changes to the product, process changes at the supplier's facility, raw material changes, or potentially process-oriented changes in transport.

It is this joint effort between the buying firm and supplying firm that maximizes the benefit. The expectations for suppliers continue to evolve as well. For example, suppliers are expected to, and generally are measured on their ability to, contribute innovative ideas, such as process improvement or cost reduction, which continually add value to the firm's products and services. Buyers are constantly searching to attract, retain, and maintain the best suppliers from around the globe.

Case in Point—Suppliers Driving Innovation

A supplier to a furniture manufacturer saw an opportunity to reduce waste and save on material costs. The change involved saw blades at the cutting station. The supplier suggested that the manufacturer reduce the width of the saw blade by 1/16". This decreased the amount of waste (sawdust) that was created from each cut. There were a number of other calculated savings from this small change given that the amount of raw lumber that was cut annually was significant. The same supplier also developed some alternative uses and sources for the waste material. Some of the material was sent to a manufacturer of particle board by developing a system that transported it directly from the cutting line into a rail car. Other smaller pieces of wood were basically glued back together and sold as "fingerjoint;" at one point, an entire line of furniture was produced using this fingerjointed (or waste) lumber.

Improved Quality and Reputation

Organizations are focusing on core competencies and their own areas of specialization. Because of this, outsourcing is increasing on both materials and services to find suppliers with core competencies that complement the firm. The relationships among purchasing, suppliers, and quality is becoming even more important than it was previously. These important relationships cross multiple tiers of suppliers, and lapses in managing supplier quality can tarnish a firm's reputation. The appropriate level of supplier quality can help to improve market share and increase sales.

Case in Point—Quality and Reputation

There were several different recalls involving pet food in 2013.[12] The first was a recall by a supplier of poultry feed. The danger was that the poultry feed had too high of levels of calcium and phosphorus, requiring the feed manufacturer to voluntarily recall its products.[13] The chickens and turkeys that consumed this feed were poisoned, and many died. The poultry farmers were advised on how to manage the problem and what to look for, but in some cases the expense and loss of inventory was challenging.

Another recall in August was issued for Iams and Eukanuba brand dry dog and cat food.[14] The food that was recalled was potentially harmful to both pets that ate the food and humans that handled the food. Pet owners were concerned, especially after the recall scare a few years ago that killed a number of their beloved animals. The food was possibly contaminated with salmonella.