Chapter 6

PURCHASING DESCRIPTIONS AND SPECIFICATIONS

BA 477 Purchasing and Supply Management

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LEARNING OBJECTIVES

1. Learn how to develop clear descriptions and specifications.
2. Learn about balanced specifications and categories of specifications.
3. Learn how to avoid conflicts in specification development.
4. Understand the difference between standardization and simplification.

PURPOSES OF SPECIFICATIONS

- Communicate what to buy
- Communicate suppliers what is required
- Establish the tangible goods to be provided
- Establish the intangible services to be provided
- Establish the standards for inspections, tests, and quality checks
- Balance the specification goals of individual departments, relevant suppliers, desired product or service performance and cost

CATEGORIES OF SPECIFICATIONS

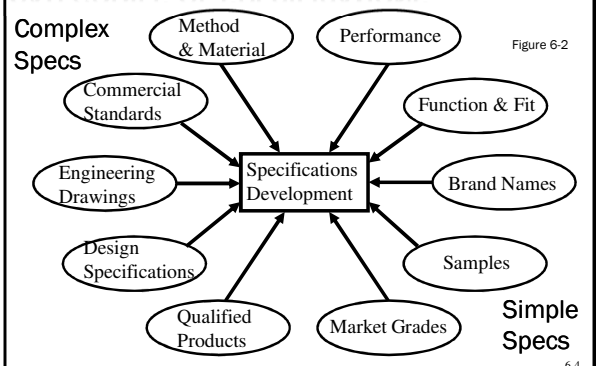

Figure 6-2

SIMPLE SPECIFICATIONS

- Performance Specifications
  - ease of preparing the specifications
  - assurance of obtaining the precise performance desired
- Function and Fit Specifications (similar to above)
- Brand or Trade Names
- Samples
- Market Grades
- Qualified Products

COMPLEX VERSUS SIMPLE SPECIFICATIONS

- Complex or detailed specifications are descriptions that tell the seller exactly what the buyer wants to purchase.
- A simple specification for buying ketchup might be "12 ounce plastic bottle of Heinz tomato ketchup."
- In contrast, ketchup specifications become complex if the actual recipe is given with ingredients and production procedures.
- A complex specification often goes beyond the design of a product, to include specifications regarding methodology, packaging, transport, delivery schedules, warranty and service.

COMPLEX SPECIFICATIONS

- Commercial Standards
- Design Specifications
- Engineering Drawings
- Material and Method-of-Manufacture

APPROACHES FOR DEVELOPING BALANCED SPECIFICATIONS

1. Informal Approach
2. Supply Management Coordinator Approach
3. Early Supply Management Involvement (EPI)
4. Early Supplier Involvement (ESI)
5. Consensus Development Approach
6. Cross-Functional Approach

SUPPLY MANAGEMENT RESEARCH

- Availability of standard products suitable to need
- Terms, conditions, and prices of products
- Applicable trade provisions, restrictions or laws
- Performance characteristics and quality of available products
- Information on the satisfaction of other users having similar needs
- Any costs or problems associated with integration of the item
- The distribution and support capabilities of potential suppliers

WRITING SPECIFICATIONS

- Design and marketing requirements
- Manufacturing (service operations) requirements
- Inspection's requirements to test materials
- Stores' requirement (warehousing) to receive, store, issue material
- Supply management's requirement to procure material
- Production control's and supply management's requirement to substitute materials
- The total firm's requirements for suitable quality at the lowest overall cost
- The total firm's requirement to use commercial and industrial standard material

COMMON PROBLEMS

- Lack of Clarity
- Limiting Competition
- Unreasonable Tolerances

STANDARDIZATION

- A uniform identification that is agreed on is called a *standard*
- *Two types exist:*
  - *Industrial standardization* --- the process of establishing agreement on uniform identifications for definite characteristics of quality, design, performance, quantity, service, ...
  - *Managerial standardization* --- deals with such things as operating practices, procedures, and systems

HISTORY OF STANDARDIZATION

- Eli Whitney
  - Muskets for the U.S. Government
- Henry Ford
  - Assembly line production of automobiles
- Dell
  - Delayed customization through modules

TYPES AND SOURCES OF STANDARDS

- Types
  - International standards
  - Industry or national standards
  - Company standards

TYPES AND SOURCES OF STANDARDS

- Sources (examples)
  - International Organization for Standardization
  - National Bureau of Standards
  - American National Standards Institute
  - American Society for Testing and Materials
  - American Society for Quality
  - Society of Automotive Engineers
  - Society of Mechanical Engineers
  - American Institute of Electrical Engineers
  - Federal Bureau of Specifications
  - National Lumber Manufacturers' Association

SIMPLIFICATION

- Simplification is a corollary of standardization
- Simplification means reducing the number of standard items a firm uses in its product design and carries in its inventory
- Savings result primarily from:
  - + Reduced inventory investment
  - + More competitive prices
  - + Greater quantity discounts
  - + Reduced clerical costs
  - + Reduced handling costs

DEVELOPING A STANDARDIZATION PROGRAM

- Standards Team (engineering, supply, operations, marketing, transportation)
- Importance of Supply Management (duplicate requests for identical or near identical items is visible here)

- Materials Catalog (mainly electronic)
  - + Improved quality (use proven parts)
  - + Reduction in design time (shorten selection time)
  - + Reduction of non-standard parts
  - + Reduction of standard parts (simplification)
  - + Reduction of inventory
  - + Benefits of centralization (pricing leverage)

TAKEAWAYS

- Specifications and standardization help improve quality and value.
- They also assist in resolving the design conflicts.
- Balanced specifications contribute to the viability of the firm's supply chain.
- Standardization helps refine and streamline systems.
- Such refinement leads to the production of products that will be competitive in the global marketplace.