INTRODUCTION

Chapter One

Strategy, Processes, and Analytics

- Operations and supply chain management involves
 - Product design
 - Purchasing
 - Manufacturing
 - Service operations
 - Logistics
 - Distribution
- Success depends upon
 - Strategy
 - Processes to deliver products and services
 - Analytics to support the decisions needed to manage the firm

What Is Operations and Supply Chain Management?

- The design, operation, and improvement of the systems that create and delivery the firm's primary products and services
- Operations and supply chain management (OSCM)
 is
 - A functional field of business
 - Concerned with the management of the entire production/delivery system

Operations and Supply Chain Processes

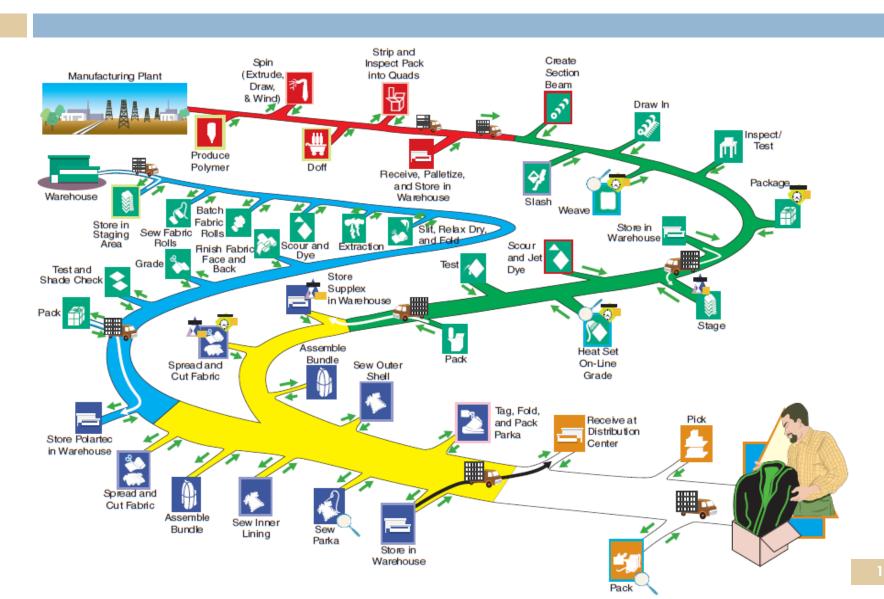
Operations

Manufacturing and service processes used to transform resources into products

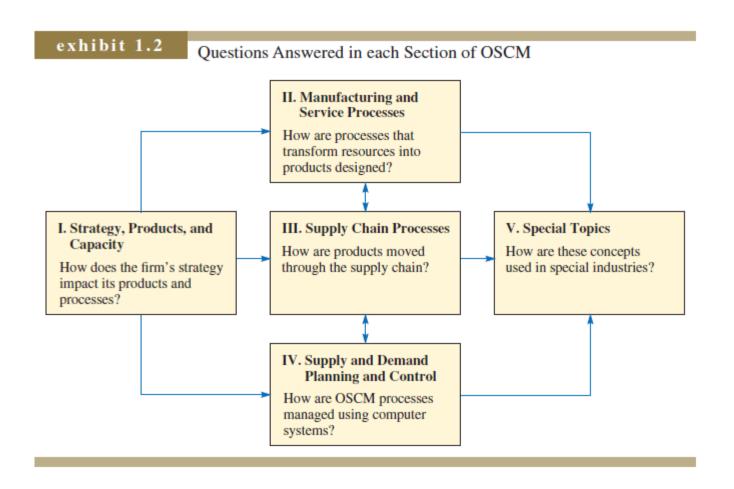
Supply Chain

Processes that move information and material to and from the firm

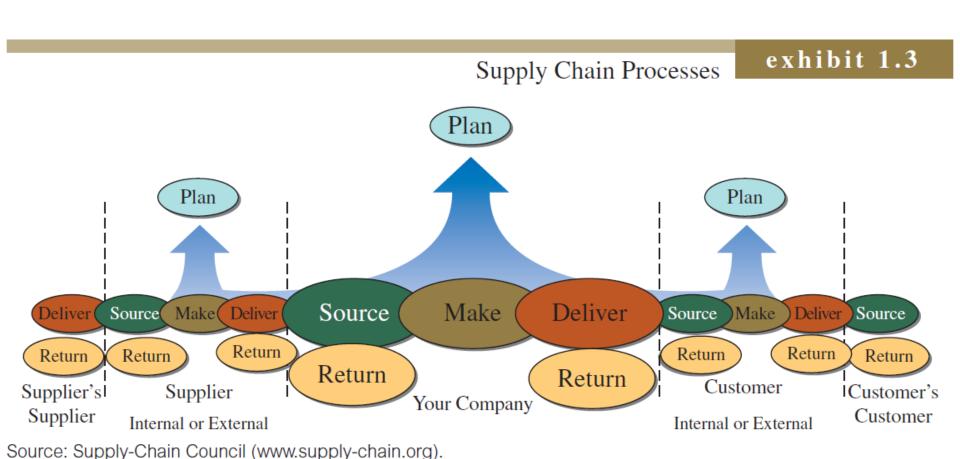
Process Steps for Men's Nylon Supplex Parkas



Each Section of OSCM: What Is Accomplished?



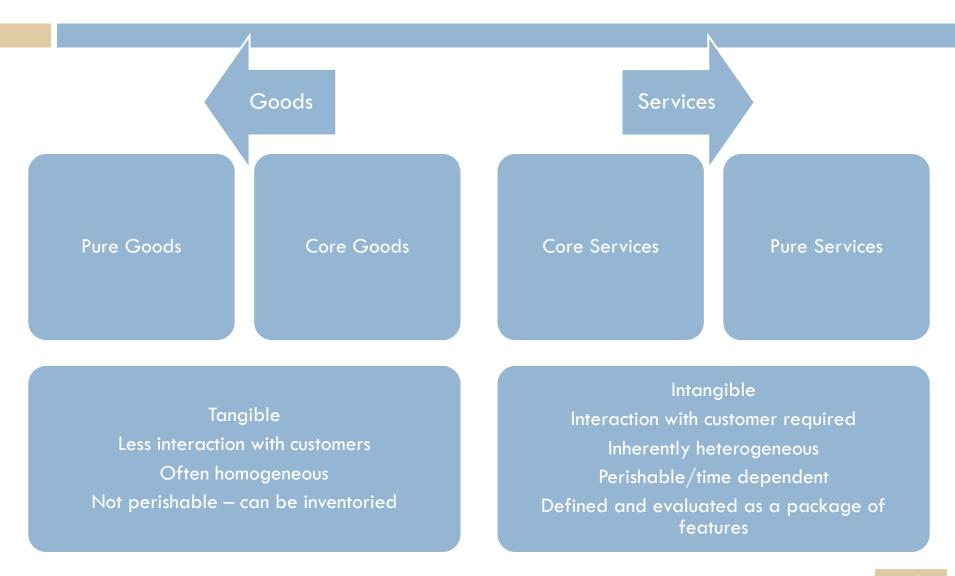
Operations and Supply Chain Processes



Process Activities

- Planning processes needed to operate an existing supply chain
- Sourcing selection of suppliers that will deliver the goods and services needed to create the firm's product
- Making producing the major product or service
- Delivering logistics processes such as selecting carriers, coordinating the movement of goods and information, and collecting payments from customers
- Returning receiving worn-out, excess, and/or defective products back from customers

Goods versus Services



Careers in Operations and Supply Chain Management

Hospital Branch Department Plant manager administrator store manager manager Call center Purchasing Quality control Supply chain manager manager manager manager Lean Business process Production Project improvement improvement control analyst manager analyst manager Chief **Facilities** operating manager officer

Historical Development of Operations and Supply Chain Management

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Manufacturing strategy developed
      Late 1970s
                              Just-in-time (JIT) production
             Early 1980s
                              pioneered by the Japanese
                      Mid 1980s
                                    Service quality and productivity
Total quality management
                               Early 1990s
                                                       Six-sigma quality
(TQM) and Quality certification
programs
                                       Mid 1990s
                                                               Supply chain
              Business process
                                                               management (SCM)
                                                Late 1990s
              reengineering (BPR)
                             Electronic commerce
                                                                          Service science
                                                            Early 2000s
                                                                   Mid 2010s
                                              Business analytics
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Current Issues in OSCM

- Coordinating relationships between members of SC
- Optimizing global network of suppliers, producers, and distributors
- Managing customer touch points
- Raising awareness of OSCM as a competitive weapon
- Sustainability and triple bottom line

Efficiency, Effectiveness, and Value

Efficiency

• Doing something at the lowest possible cost

Effectiveness

 Doing the right things to create the most value for your customer

Value

• The attractiveness of a product relative to its cost

Efficiency and Wall Street

- Comparison of firms is important to investors
 - From an operations and supply chain perspective, the relative cost of providing a good or service is closely related to earnings growth
- Management efficiency ratios
 - Labor productivity
 - Net income per employee
 - Revenue (or sales) per employee
 - Asset productivity
 - Receivables turnover ratio = $\frac{Annual\ Credit\ Sales}{Average\ Accounts\ Receivables}$
 - Inventory turnover = $\frac{Cost\ of\ goods\ sold}{Average\ Inventory\ Value}$
 - Asset turnover = $\frac{Revenue (or Sales)}{Total Assets}$