

## CHAPTER ONE

# Introduction to Managing Operations Across the Supply Chain

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McGraw-Hill/Irwin

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## Where We Are Now

Chapter	Relationships	Sustainability	Globalization	Organizational Culture/Ethics	Change Management	Measurement
<b>Part 1 Supply Chain: A perspective for Operations Management</b>						
<b>1. Introduction to Managing Operations Across the Supply Chain</b>	<b>X</b>	<b>X</b>	<b>X</b>			
2. Operations and Supply Chain Strategy	X	X	X	X	X	X
<b>Part 2 Foundations of Operations Management</b>						
3. Managing Processes and Capabilities	X					X
4. Product/Process Innovation	X	X	X		X	
5. Manufacturing and Service Process Structures	X		X	X		X
6. Managing Quality	X	X	X	X	X	X
7. Understanding Inventory Fundamentals	X		X			X
8. Lean Systems	X		X	X	X	X
<b>Part 3 Integrating Relationships Across the Supply Chain</b>						
9. Customer Management	X					X
10. Supplier Management	X	X	X	X		X
11. Logistics Management	X	X	X			
<b>Part 4 Planning of integrated Operations Across the Supply chain</b>						
12. Demand Planning: Forecasting and Demand Management	X		X			X
13. Sales and Operations Planning	X		X			X
14. Independent Demand Inventory Planning	X					X
15. Materials and Resource Requirements Planning	X		X			X
<b>Part 5 Managing Change in Supply Chain Operations</b>						
16. Project Management	X	X	X	X	X	X
17. Evolving Business Models and Change Drivers in the Supply Chain	X	X	X	X	X	X

1-2

## Objectives

1. Explain operations management and its role in businesses and society
2. Describe operations decisions managers must make
3. Explain the role of processes and 'process thinking'
4. Explain supply chain and viewing operations from a 'supply chain perspective'
5. Identify operations management partners and groups that work together
6. Define operational activities across the supply chain

1-3

## Operations Management (OM) is everywhere

**PRODUCTS:** Everything you wear, eat, sit on or in, use, read, or knock about on a sports field comes to you courtesy of operations.

**SERVICES:** Every book you borrow from the library, every medical treatment you receive, every lecture you attend at a university, every service you receive comes to you courtesy of operations.

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Every organization in every industry must manage their operations and supply chain



Schools



Hospitality



Restaurants



Banks



Construction



Agriculture



Health Care



Sport Teams



Transportation



Military



Municipalities



Manufacturers



Retail



Gov't Services



Not-for-Profit Organizations



Entertainment

1-5

## Definitions

- **Operations Management (OM):** is the management of processes used to design, supply, produce, and deliver valuable goods and services to customers
- **Supply Chain (SC):** the global network of organizations and activities involved in designing, transforming, consuming and disposing of goods and services.
- **Supply Chain Management (SCM):** is management of the processes and relationships in a supply chain

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## Why study OM and SCM?

- OM involves using resources and managing organizational relationships
- When done well, effective OM and SCM can:
  - Use resources more efficiently
  - Improve business processes effectiveness
  - Improve relationships between business entities
  - Help meet strategic goals
  - Increase customer service

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## SCM Decisions

- **What** needs to be done to give customers what they want?
- **How** are we going to do what we need to do, and measure our performance?
- **When** should activities be carried out?
- **Where** should activities occur?
- **Who** should do the activities?



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## Characteristics of Goods and Services



- Tangible
- Can be inventoried
- Little customer contact
- Long lead time
- Often capital-intensive
- Quality easily assured
- Material is transformed

- Intangible
- Cannot be inventoried
- Extensive customer contact
- Short lead time
- Often labor intensive
- Quality harder to assess
- Information or customer is transformed

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## Activity

**Think of the last time you visited an amusement park...**

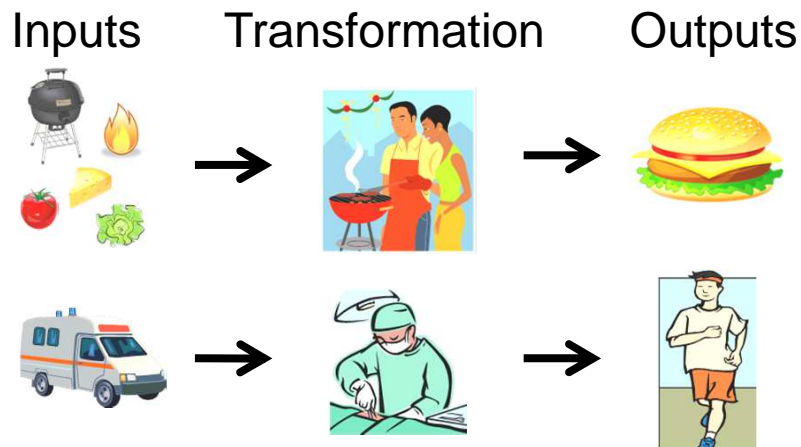
- How many different '*pure goods*' did you encounter?
- How many different '*pure services*' did you encounter?
- How many were both a good and a service?
- How many were pre-prepared or prepared just as you ordered?



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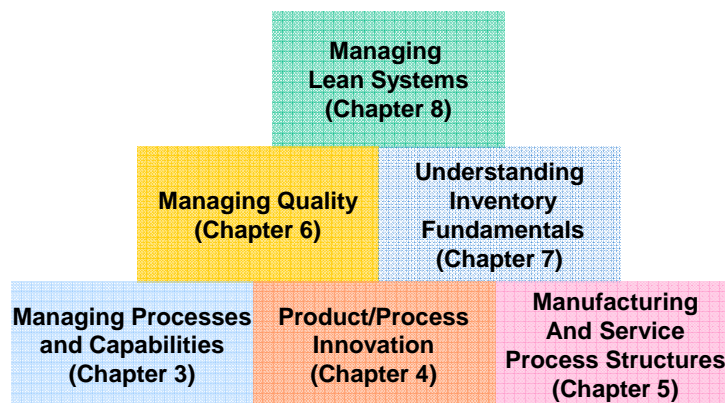
## OM is a process oriented discipline

- A **process** is a system of activities that transforms inputs into valuable outputs.



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## Foundational concepts of SC and OM



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## From OM to SCM

- Changes in the following have moved us from an OM to a SCM focus:
  - **Technology and Infrastructure:** especially in communications and transportation
  - **Barriers to trade:** shifting economies, governmental control and societal expectations
  - **Core capabilities:** organizations focusing on their unique skills that create competitive advantage
  - **Collaborative networks:** greater influence of, and reliance upon, business partners

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## OM Partners

- **Customers** use or consume output
- **Suppliers** provide inputs
- **Stakeholders** have an interest in organizational well being and performance

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## SC Partners and Functional Activities

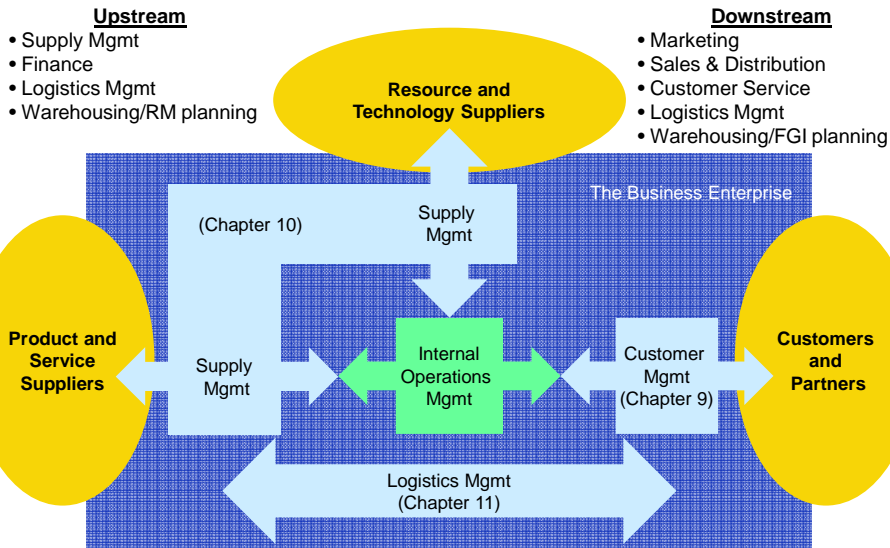


Figure 1-2

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## OM Relationships

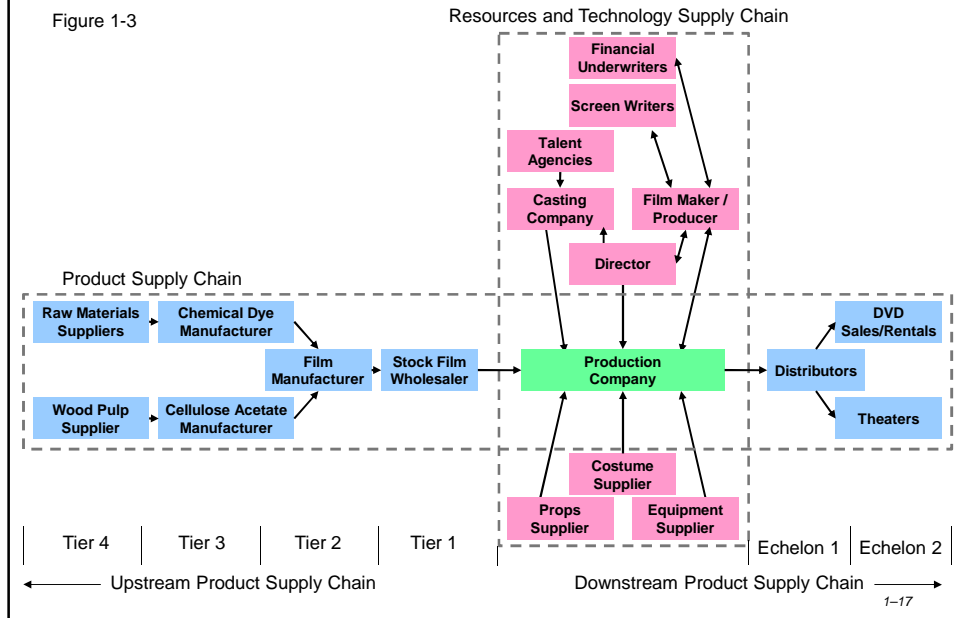
- **Customer Management:** interfaces with customers and order processing and fulfillment
- **Supply Management:** processes to identify, acquire and administer inputs
- **Logistics Management:** movement of materials and information within, into and out of the firm

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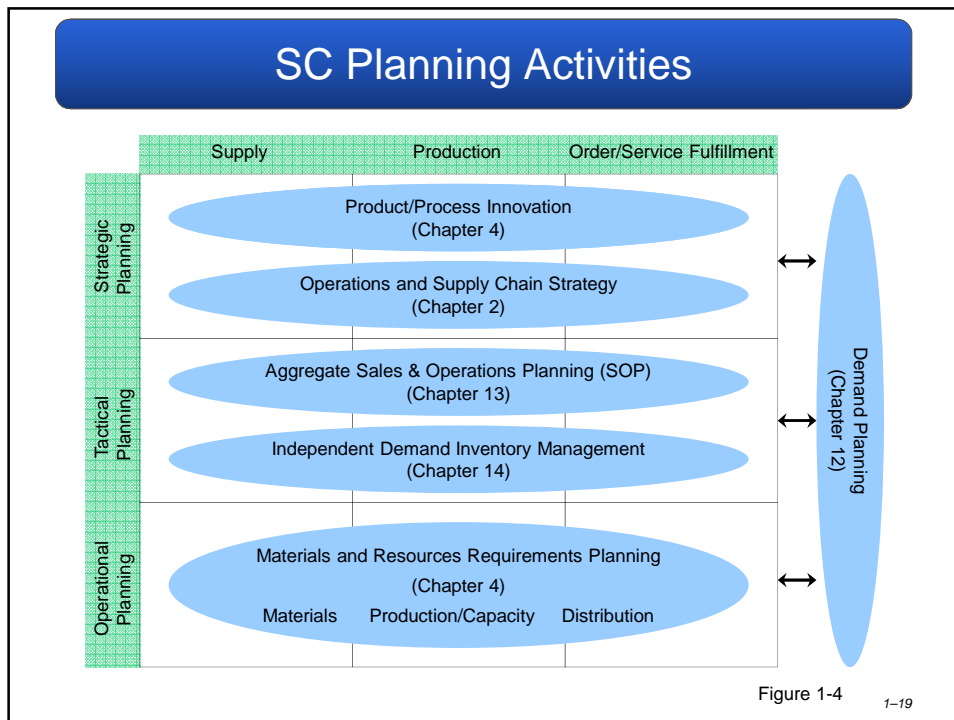
## Supply Chain Network Example

Figure 1-3



## Levels of Planning

- **Strategic Planning:** long term decisions defining the objectives and capabilities
- **Tactical Planning:** intermediate term decisions defining how capacity is used to meet demand
- **Operational Planning:** short term priorities and schedules for resource allocation



- ## Introduction to Operations Management Summary
1. Operations helps deliver superior products to a firm's targeted customers.
  2. Operations manages inputs through transformation processes into outputs. OM systems include customer relationship management, internal OM, supply management and logistics.
  3. OM's partners include customers, suppliers, stakeholders and other business functions within the firm.
  4. OM decisions determine firm capabilities and success
  5. OM is managing processes, SCM is managing flow and relationships
  6. OM is dynamic
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