

Operations Management

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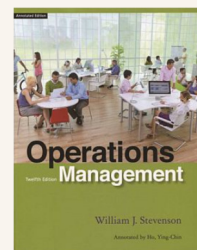
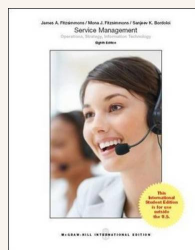
Textbook

Stevenson, “**Operations Management**”, 12th ed., McGraw-Hill.

Fitzsimmons and Fitzsimmons, “**Service Management**”,
8th edition, McGraw-Hill.

Supplements

新聞報導與企業案例



Course Outline

簡介 Introduction
競爭力與績效 Competitiveness

Stevenson

Chapter 1

Chapter 2

服務設計 Service Design

Fitzsimmons

Chapter 3

需求預測 Demand Forecasting
產能規劃 Capacity Planning

Stevenson

Chapter 3

Chapter 5

流程規劃 Process and Layout Design

Stevenson

Chapter 6

Course Outline II

服務接觸 Service Encounter
服務品質 Service Quality

Fitzsimmons

Chapter 4

Chapter 6

總合計劃 Aggregate Planning
企業資源規劃 MRP and ERP

Stevenson

Chapter 11

Chapter 12

庫存管制 Inventory Control

Stevenson

Chapter 13

營收管理 Revenue Management

Fitzsimmons

Chapter 11

Grading

案例閱讀	30%	
案例報告	20%	投影片與書面報告
Final Exam	30%	可攜帶講義與案例資料
Participation	20%	出席與上課討論

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Previous Topics for Team Report

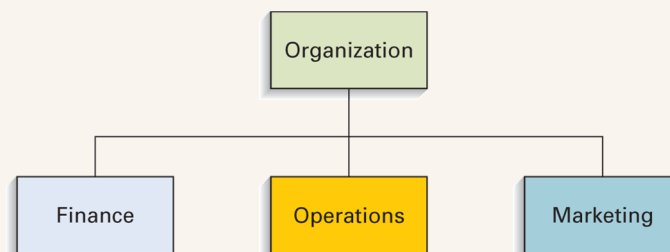
New Balance	競爭力、製造策略
Tessei	員工動機、作業改善
Executive Shirts	產能規劃、設施佈置
Shangri-la	海外拓展、員工訓練
Shouldice Hospital	服務設計、服務品質
Zara	營運模式、訂單管理

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Chapter 1 Introduction

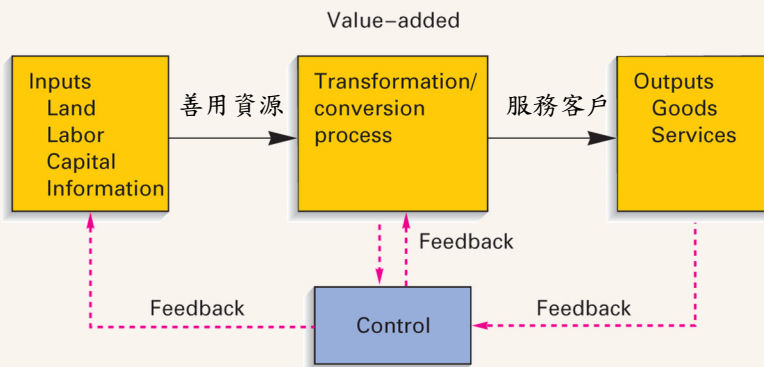
- OM的範疇
- 製造業與服務業的差異
- OM的歷史發展
- 企業的發展趨勢

Three Basic Functions of All Business Organizations



The management of systems
or processes that create
goods and/or provide services

Operations Management



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The essence of the operation function is to add value during the transformation process.

Transformation = Production = Operation

Physical: manufacturing

Location: transportation

Exchange: retailing

Storage: warehousing

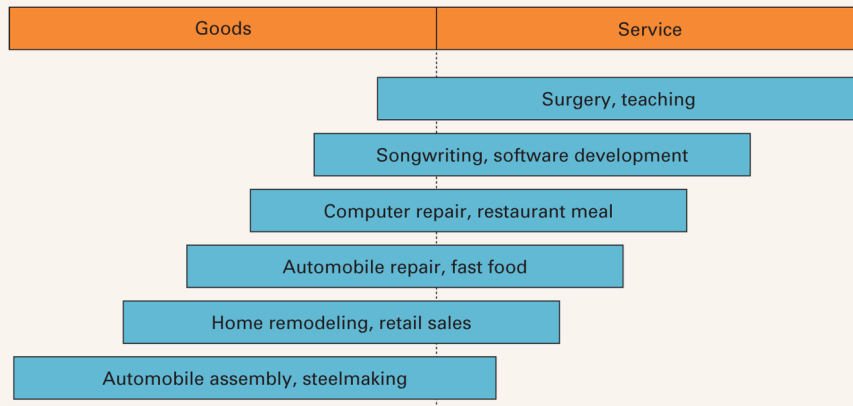
Physiological: health care

Informational: telecommunications

Where is value added ?

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Product packages are a combination of goods and services. 客戶需要有形的產品與無形的服務



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Differences between Manufacturing & Service

Characteristic	Manufacturing	Service
Customer contact	Low	High
Uniformity of input	High	Low
Labor content	Low	High
Uniformity of output	High	Low
Product	Tangible	Tangible & Intangible
Performance Measurement	Easy	Difficult
Quality Control	High	Low
Inventory	Much	Little or Perishable

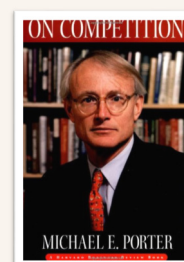
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Economy	農牧	製造	服務	體驗	
Economic Offering	Food	Packaged goods	Commodity service	Consumer services	Business services
Function	Extract	Make	Deliver	Stage	Co-create
Nature	Fungible	Tangible	Intangible	Memorable	Effectual
Attribute	Natural	Standardized	Customized	Personal	Growth
Method of Supply	Stored in bulk	Inventoried	Delivered on demand	Revealed over time	Sustained over time
Seller	Trader	Producer	Provider	Stager	Collaborator
Buyer	Market	Customer	Client	Guest	Collaborator
Expectation	Quantity	Features	Benefits	Sensations	Capability

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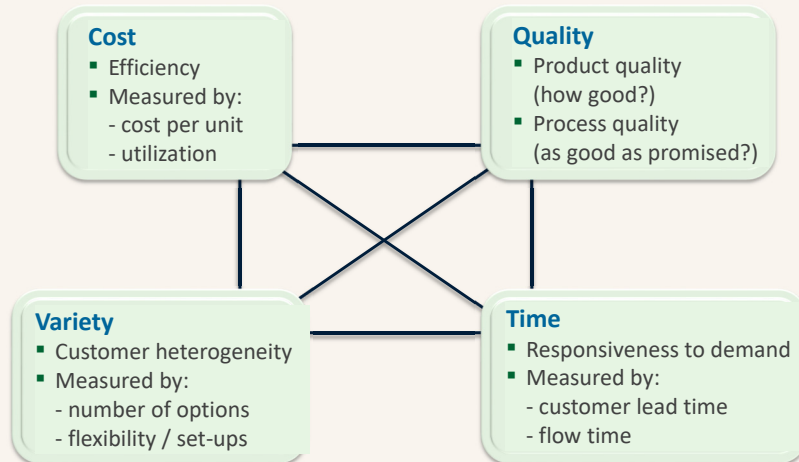
How Can OM Improve a Service?

- ▣ Low Cost with Same Quality?
- ▣ Fast Delivery with Same ...?
- ▣ Quality Service with Same ...?
- ▣ Better Selection with Same ...?
- ▣ More Revenue with Same ...?



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Four Dimensions of Tradeoffs



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Process Improvement



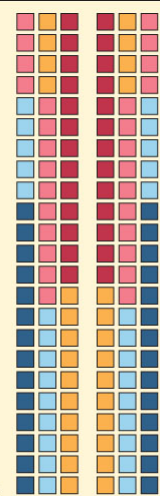
**Speed and Convenience
for Passengers!**

Creating Order

America West's reverse pyramid system boards coach-class passengers in back-row window seats first.

Order of boarding

First Last



Source: Interfaces, May/June 2005, p. 194.

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Cost vs. Variety and Speed



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Service Encounter and Service Quality

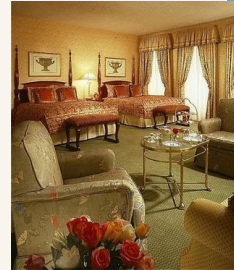


- On April 9, 2017, O'Hare airport police forcibly removed a passenger from the aircraft, after he refused to give up his seat to make room for four airline employees who needed to travel to the destination.

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Revenue Management

- The Park Hyatt Hotel has 118 rooms.
- Regular fare is **\$225** targeting business travelers.
- Empty rooms do not create any profit.
- Hyatt offers **\$159** discount fare for a mid-week stay targeting leisure travelers.



Choice 1: Accept low fare reservations without any limit.

Choice 2: Do not accept low fare reservation. Hope that high fare customers will eventually show up.

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History of Operation Management

1770s Craft production & Industrial Revolution

1800s Adam Smith and Eli Whitney
division of labor, interchangeable parts

1910s Scientific Management
Frederic Taylor, Frank and Lillian Gilbreth
time study, motion study, industrial psychology

1910s Henry Ford and mass production
moving assembly line
<https://www.youtube.com/watch?v=cTZ3rJHHSik>



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1930s Elton Mayo and Hawthorne Studies
worker motivation

1950s Maslow, Herzberg, and McGregor
Theory X vs. Theory Y

1970s McDonald
service quality and productivity

1980s Japanese Manufacturing Management
Quality and lean production (JIT)

2000s Amazon, Apple
e-commerce, supply chain management

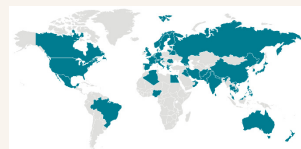


Taiichi Ohno

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Key Issues for Business Operations

- Global economic conditions
- Product and service innovations
- The Internet, e-commerce, e-business
- Quality problems
- Global competition
- Environmental concerns
- Ethical conduct
- Management of supply chains



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What is this Course?

- 在製造業盛行的時代，它被稱為生產管理。當服務業興起後，有人改稱為作業管理。我認為更適合的名稱是營運管理。
- 這是關於製造業與服務業如何發展出善用資源與服務客戶的策略與方法。
- 產銷人發財
這不是研發，但是要了解顧客重視甚麼。這不是行銷，但是要滿足顧客要求。這不是財務，但是要監控成本。這不是人資，但是要求工作訓練。

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Epilogue: Operation is Heart of Business

- ❑ Managers need to perform and make decisions in all functions.
- ❑ Operations account for 60 to 80% of the direct expenses that burden a firm's profit.
- ❑ Operations directly affect customers and are essential to the competitiveness of the firm.



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