

**OPSMGT 370**  
**Operations and Supply Chain Strategy**

**Week 1 - Lecture**

**Introduction to Operations  
Management**

**Systemic Perspective and Operations  
Management Frameworks**

# OPSMGT 370 : Operations and Supply Chain Strategy

## Course Requirements

Prerequisite: OPSMGT 255 or ENGGEN 303

## Capabilities Developed in this Course

- Capability 1: Disciplinary Knowledge and Practice
- Capability 2: Critical Thinking
- Capability 3: Solution Seeking
- Capability 4: Communication and Engagement
- Capability 5: Independence and Integrity
- Capability 6: Social and Environmental Responsibilities

## Assessments

<b>Assessment Type</b>	<b>Percentage</b>	<b>Classification</b>
Assignment 1	7.5%	Individual Coursework
Assignment 2	7.5%	Individual Coursework
Group Project	15%	Group Coursework
Mid Semester Test	20%	Individual Test
Quizzes	5%	Individual Coursework
Final Exam	45%	Individual Examination
6 types	100%	

To gain a pass for this course, students are required to achieve 50% or greater in the course. But the final exam is compulsory.

Module	Topic	Assessment due this period	
<b>Week 1</b>	Introduction to Operations Management, Systemic Perspective and Operations Management Frameworks		
<b>Week 2</b>	Quality Management		
<b>Week 3</b>	Statistical Process Control	Project group sign up on Canvas	Quiz 1
<b>Week 4</b>	Process Design and Facility Layout	Assignment I	
<b>Week 5</b>	Service Design and Facility Location	Confirmation of project company	Quiz 2
<b>Week 6</b>	Mid-Semester test (Weeks 1-5)		
<i>Mid-semester break (29 Aug to 9 Sept 2022)</i>			
<b>Week 7</b>	Supply Chain Strategy		
<b>Week 8</b>	Global Supply Chains	Group project progress report	Quiz 3
<b>Week 9</b>	Matching Supply with Demand	Assignment II	
<b>Week 10</b>	Production Scheduling		Quiz 4
<b>Week 11</b>	Group Project Presentations	Group project presentations	
<b>Week 12</b>	Review and Exam Briefing	Group project final reports	

## Purpose of the Group Project

The aim of the group project is to conduct an investigation on a New Zealand organisation into aspects of operations and supply chain management that are topical to the course. The investigation should comprise at least:

- One primary source of information: an interview with a knowledgeable person in the organisation chosen by each group
- Secondary sources, e.g., company website, NZ business press, published articles, etc.

In this project, you will explore the company with respect to a combination of several topics from this course while maintaining a good balance between depth and breadth of coverage. You are expected to:

- Identify at least one area (of operations and supply chain management) that the organisation needs to improve,
- Discuss the existing problems in the area with supporting evidence and examples,
- Explain why these are important and recommend potential solution(s),
- Justify your arguments with the theories/techniques learned in the course,
- Describe the expected improved picture of the problems and, if possible, report the reflection of the company on your recommendation.

## Teaching staff:

### Dr. Mahdi Mahmoudzadeh

Lecturer

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Backup lecturer

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Tutor

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For more info visit [www.ausa.org.nz/support/class-reps/](http://www.ausa.org.nz/support/class-reps/)  
email [clasreps@ausa.org.nz](mailto:clasreps@ausa.org.nz) or speak to your lecturer



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[www.ausa.org.nz/wp-content/uploads/2019/07/AUSA-CLASS-REPS-AD.mp4](http://www.ausa.org.nz/wp-content/uploads/2019/07/AUSA-CLASS-REPS-AD.mp4)

# Outline

- Operations and Supply Chain Management (OSCM) – Systemic Perspective
- OM Framework I – Transformation
- OM Framework II – Product-Process Matrix
- OM Framework III – From Customers to Customers
- OM Framework IIII – A Holistic View

# Operations and Supply Chain Management (OSCM) – definition review

- A set of activities for creating, implementing, and improving processes that transform inputs (resources) into outputs (goods and services).
- Management of the direct resources required to produce the goods and services provided by an organisation.
- Management of value-adding transformation processes to efficiently integrate resources and achieve specified performance measures toward product/service, process technology, and market goals.
- Design, operation, and improvement of the systems that create and deliver the firm's primary products and services.

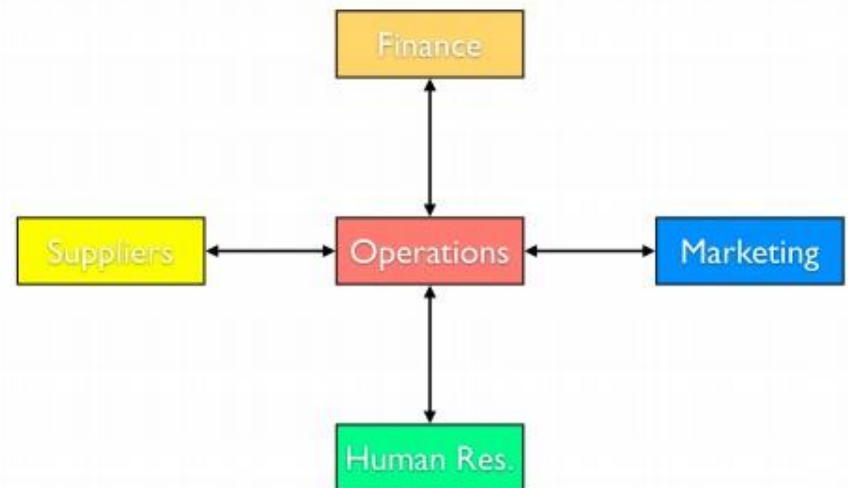
# Operations and Supply Chain Management (OSCM) – definition review

“Operations management **designs, operates,** and **improves** productive **systems** - systems for getting work done.”

*Russell & Taylor, Operations and Supply Chain Management textbook*

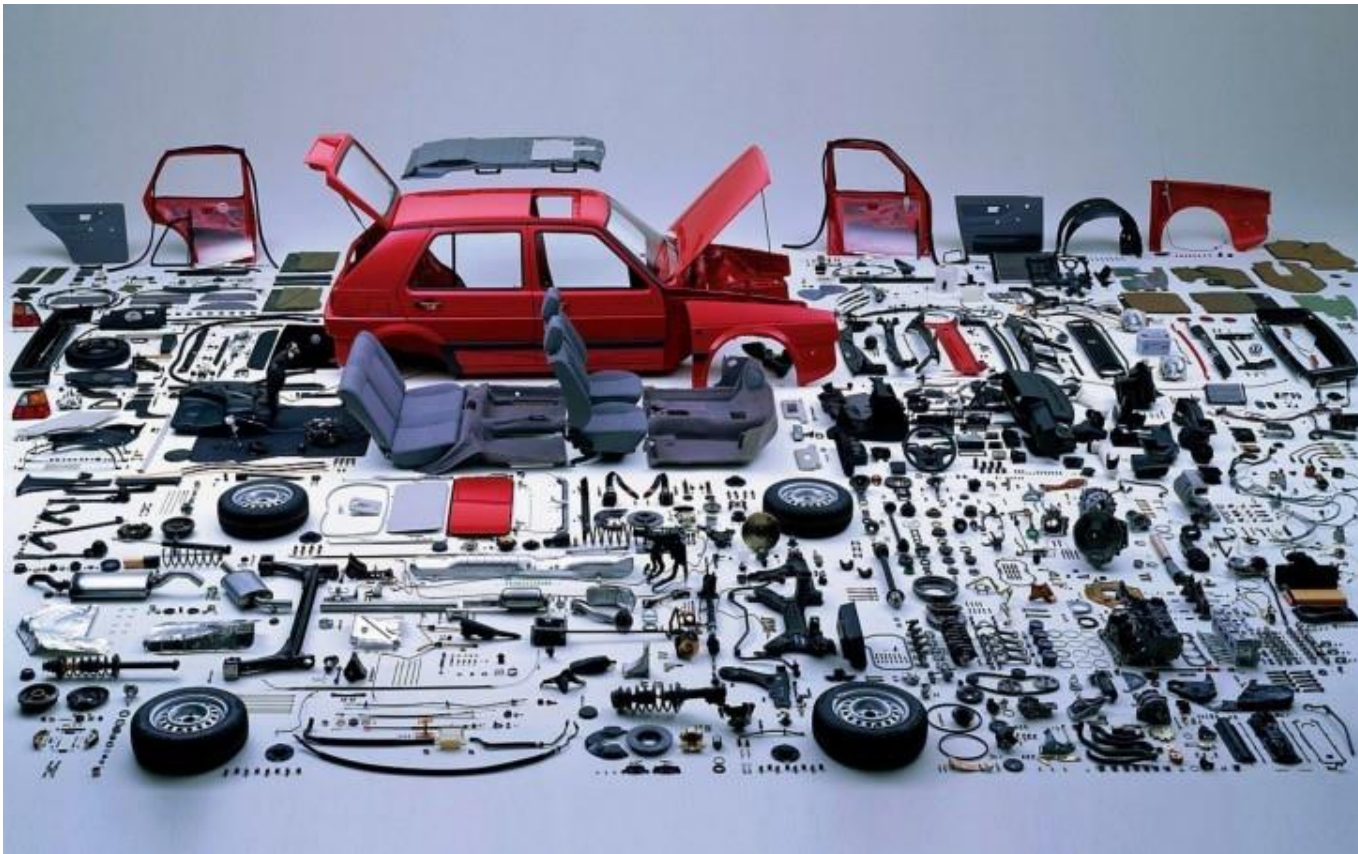
# Viewing a business organisation as a system

- How do business organisations conform to the definition of Systems?
- Are “Suppliers” a part of a business organisation? How do you define the scope of a system?

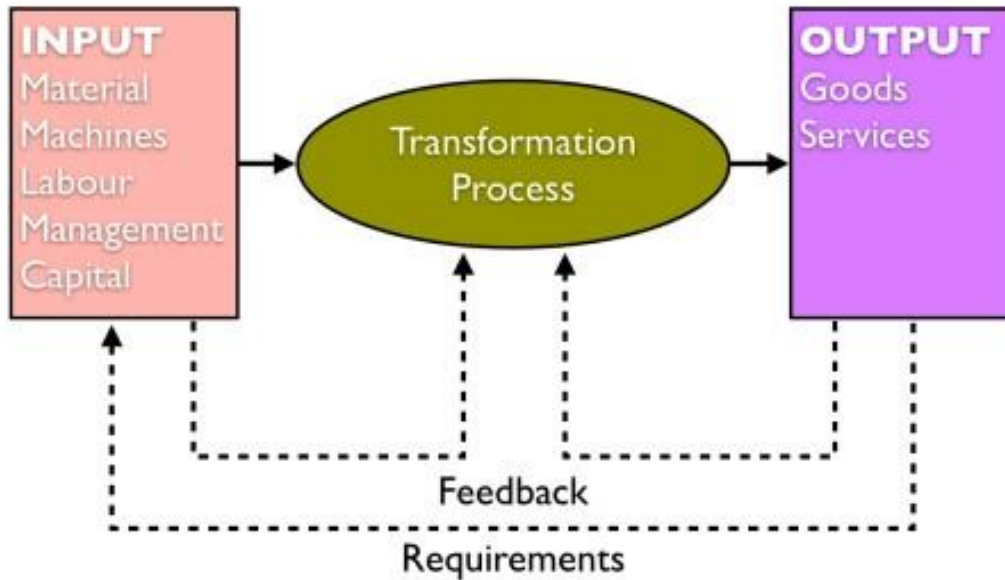


(adapted from textbook Fig. 1.2)

“A system is more than the sum of its parts.  
A system is the product of its parts’ interactions.”

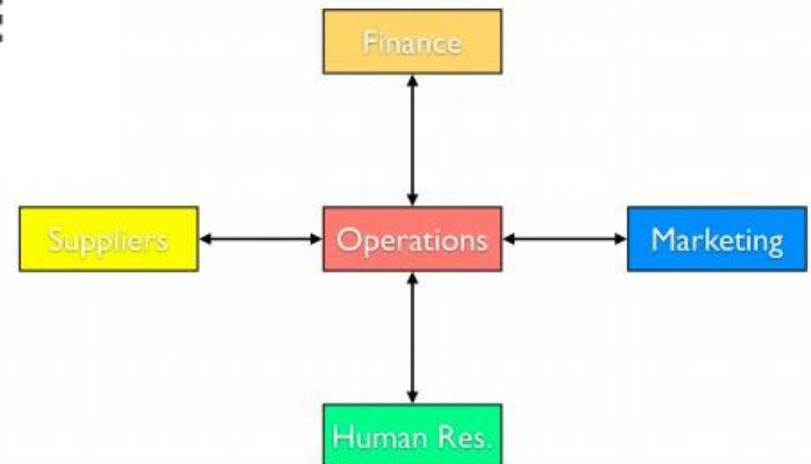


# A traditional view of OM



(textbook Fig. 1.1)

**Systemic?? Analytical??**



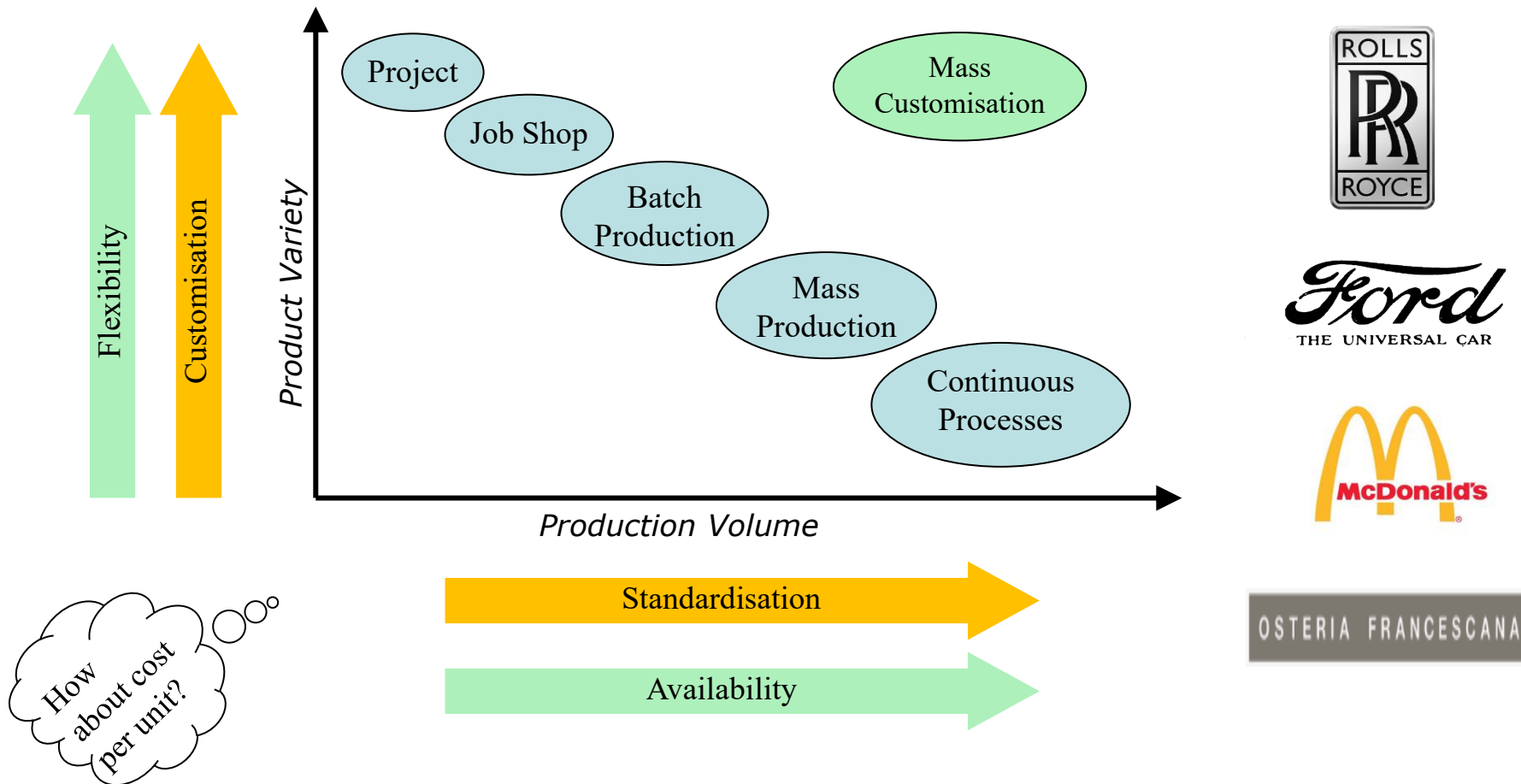
(adapted from textbook Fig. 1.2)

# Some examples

	Input Resources	Transformation Process	Outputs
Airline	Aircraft Pilots and aircrew Groundcrew Passengers and freight	Move passengers and freight around the world	Transported passengers and freight
Dentist	Dental surgeons Dental equipment Nurses Patients	Check and treat teeth Give preventative advice	Patients with healthy teeth and gums
Frozen food manufacturer	Fresh food Operators Food-processing equipment Freezers	Food preparation Freeze	Frozen food



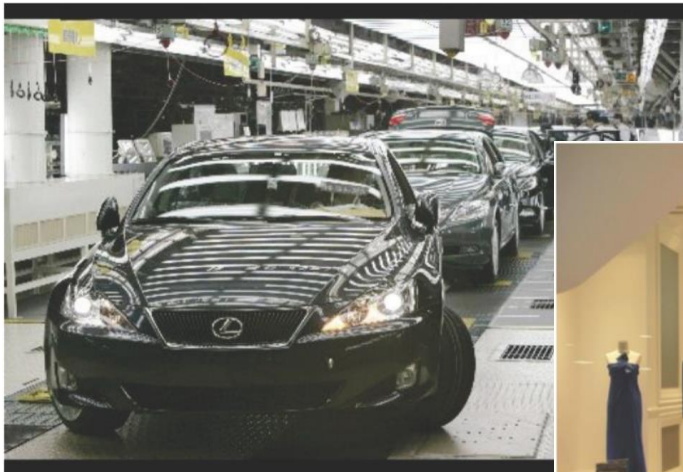
# The "Product – Process Matrix"



# Example: Manufacturing Processes



Identify the type and compare the characteristics of these processes.



Think about inventory and layout.



# Operations Strategy Formulation

- Three-level Framework
  - **Mission** (Organisational, Business Unit)
  - **Competitive Dimensions** (Performance Objectives)
  - **Management Levers** (“Operations Strategy Decisions”, “Decision Areas”, “Operations Policy Areas”, “Sub-strategies”, “Operations Tasks”, “Strategic Decision Categories”, “Policies”)

# Competitive Dimensions/Priorities (also called Performance Objectives)

Price

- Make the product or deliver the service cheap

Cost

Quality

- Make a great product or delivery a great service

Quality

Delivery Speed

- Make the product or deliver the service quickly

Delivery

Delivery Reliability

- Deliver it when promised

Coping with Changes in Demand

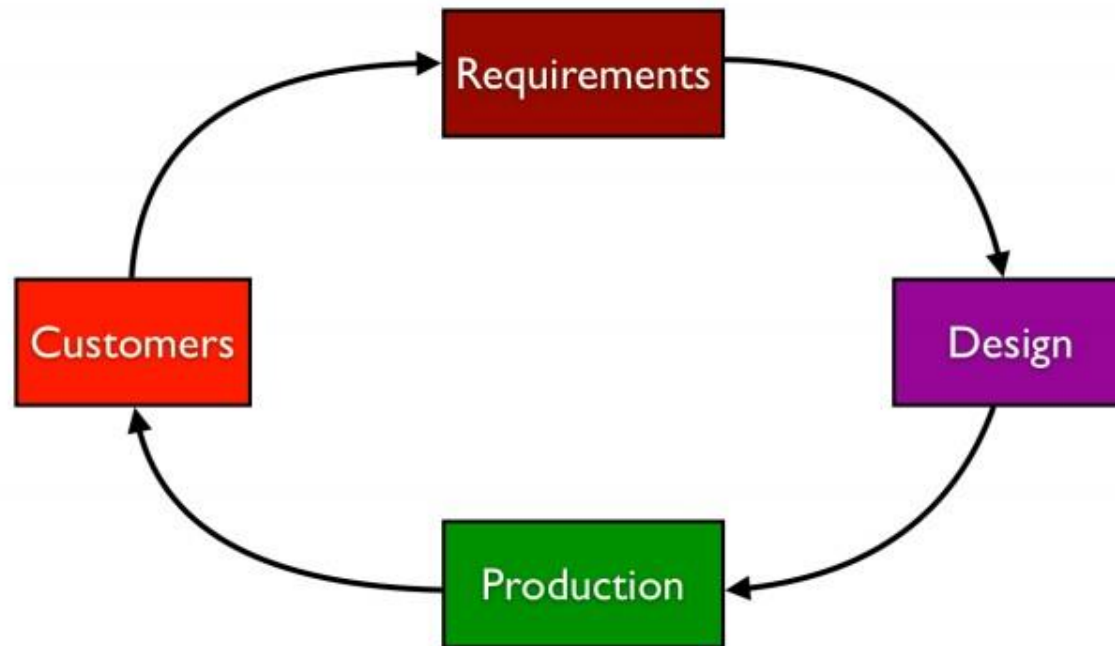
- Change its volume

Flexibility

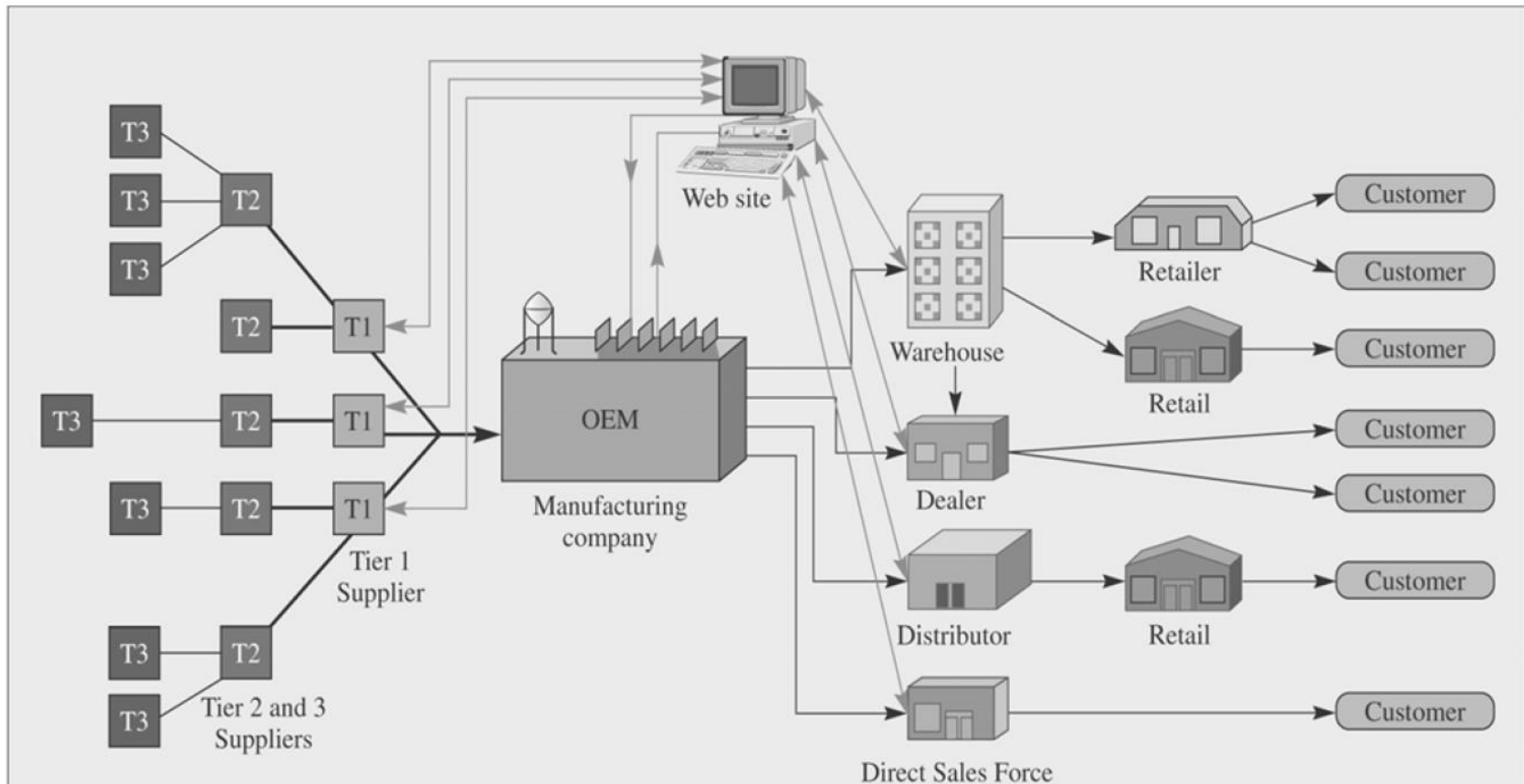
Flexibility and New-Product Introduction Speed

- Change it

# “From Customers to Customers” model

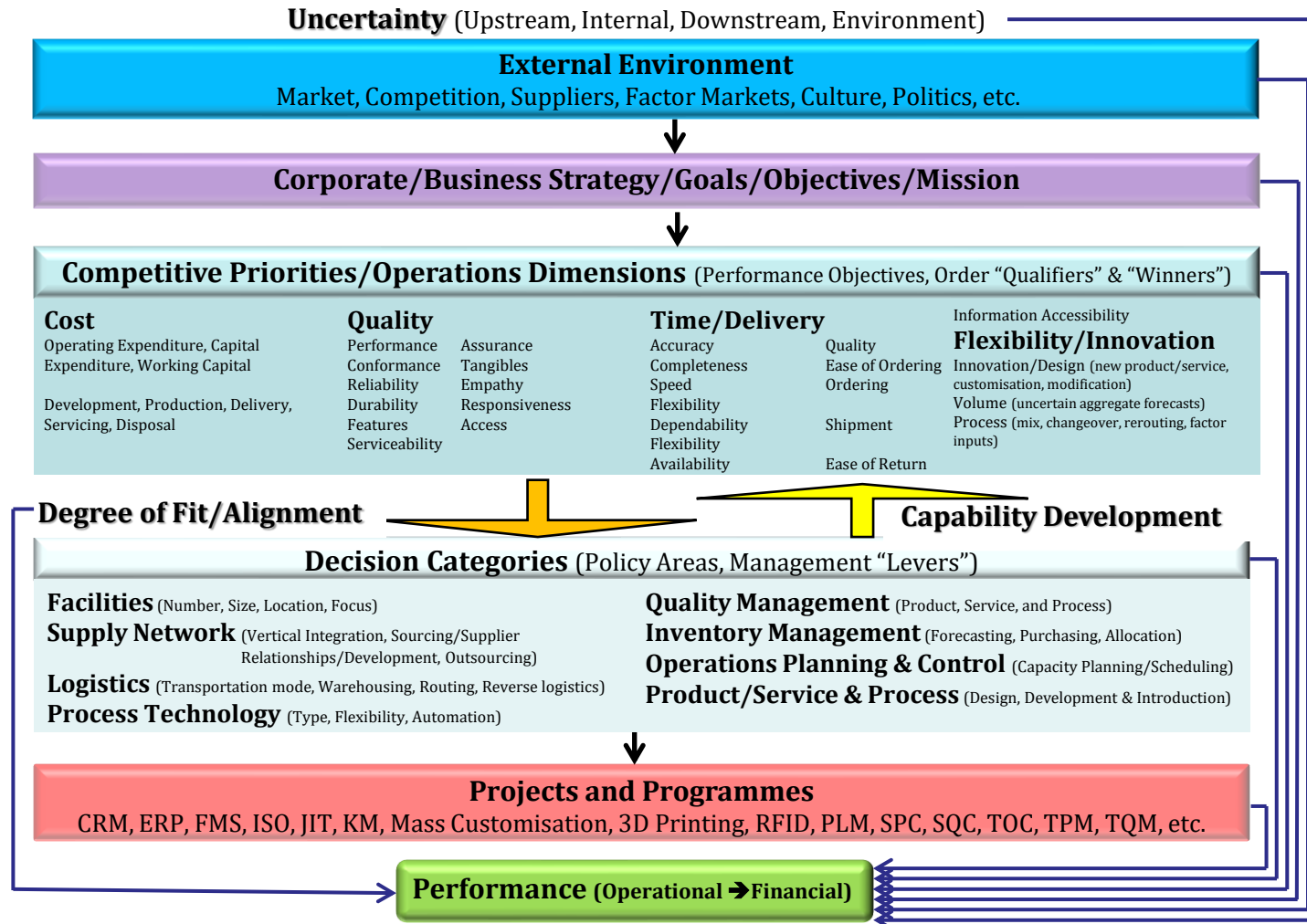


# Operations in a (broader) supply chain context



*As this schematic suggests, a value chain is not a simple linear series of connections. It typically involves a complex series of business interactions and channel configurations. The Web is a key technology enabling efficient communication throughout the chain.*

# Operations and Supply Chain Management Framework – A Holistic View



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email [clasreps@ausa.org.nz](mailto:clasreps@ausa.org.nz) or speak to your lecturer



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