Course of «Operations and audit quality»
Master degree in «Fashion, art and food management»
Parthenope University of Naples

PART ONE: directing the operation

The structure and scope of operations

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A general model of operations management
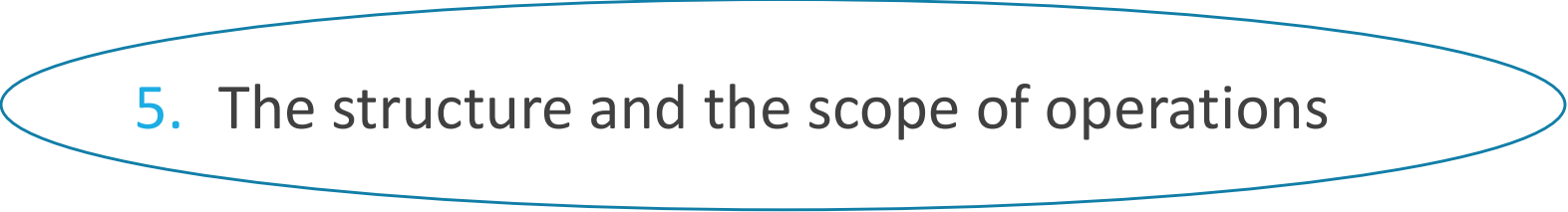
PART ONE: directing the operation

PART TWO: designing the operation

PART THREE: deliver

PART FOUR: development

PART ONE: Directing the operation

1. Operations management

2. Operations performance

3. Operations strategy

4. Managing product and service innovation

5. The structure and the scope of operations

The structure and the scope of operations Key questions (Agenda)

- What is the structure and the scope of operations?

- How should the network be configured?

- What activities should be in-house and what should be outsourced?

Introduction

- No operation exixts in isolation!!!!

- It is part of a larger and interconnected network of other operation, referred to as the supply network

- **Structure decisions** involve deciding the overall configuration of the supply network, the amount of capacity needed within the network and where the opearations should be located

- **Scope decisions** involve deciding the extent to which an operation does the activities performed by network itself, as opposed to requesting a supplier do them on its behalf

What is the structure and scope of operations?

- Understanding network includes the chains of **suppliers** providing inputs to the operation and the chains of **customers** who receive outputs from the operation

- The **structure** of an operation's supply network relates to its shape and form

- The **scope** of an operation's supply network relates to the extent to which an operation decides to do the activities performed by the network itself, as opposed to requesting a supplier to do them
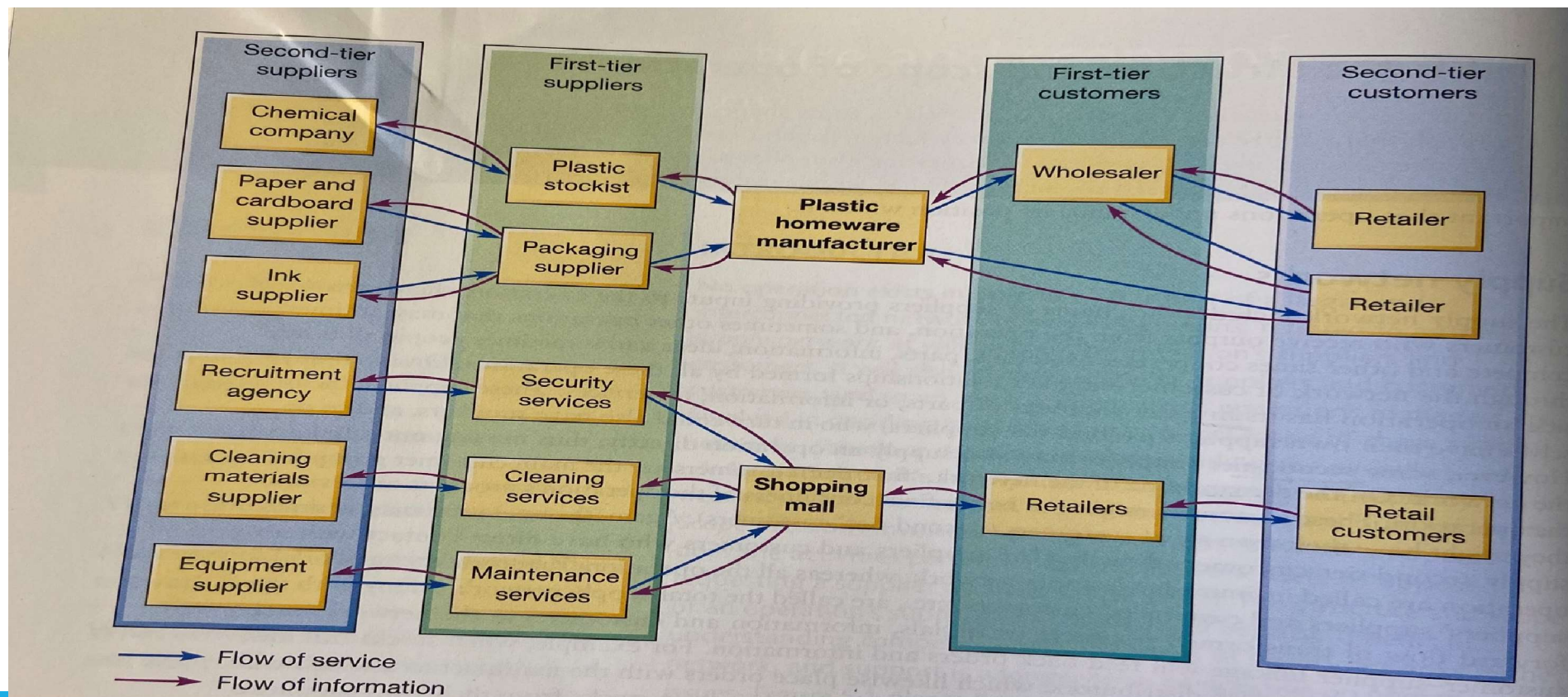
Supply networks

• The supply networks includes the chain of suppliers providing inputs to the operation, the chains customers who receive outputs from the operation, and sometimes other operations that may at times compete and other times corporate

• Materials, parts, information, ideas and sometimes people all flow through the network of customer-supplier relationships formed by all these operations

• On its **supply side** an operation has **its first-tier** suppliers of parts, or information or services. These suppliers themselves have their own suppliers (**second-tier suppliers**) who in turn could also have suppliers, and so on.

• On the **demand side** of the network, «**first-tier» customers** are the main customer group for the network. These customers might not be the final consumers of the operation's products or services ; they might have their own set of customers (**second-tier customers»)**

Example
Total supply network for 2 operations

Second-tier suppliers: Chemical company, Paper and cardboard supplier, Ink supplier, Recruitment agency, Cleaning materials supplier, Equipment supplier

First-tier suppliers: Plastic stockist, Packaging supplier, Security services, Cleaning services, Maintenance services

Plastic homeware manufacturer

Shopping mall

First-tier customers: Wholesaler, Retailers
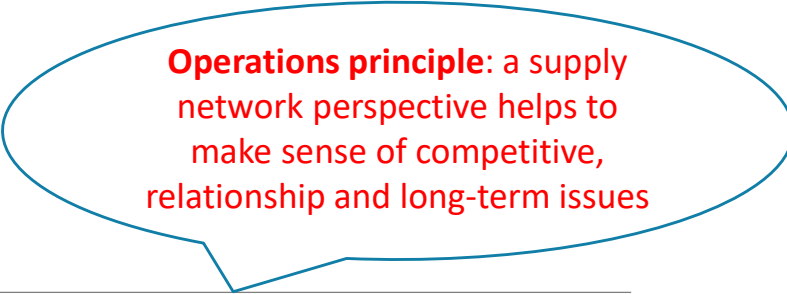
Second-tier customers: Retailer, Retailer, Retail customers

Flow of service
Flow of information

The importance of Supply network perspective

Operations principle: a supply network perspective helps to make sense of competitive, relationship and long-term issues

- Understanding the nature of supply network and the operations role within it is critical in:

1. understanding competitiveness;

2. identifying significant links in the network;

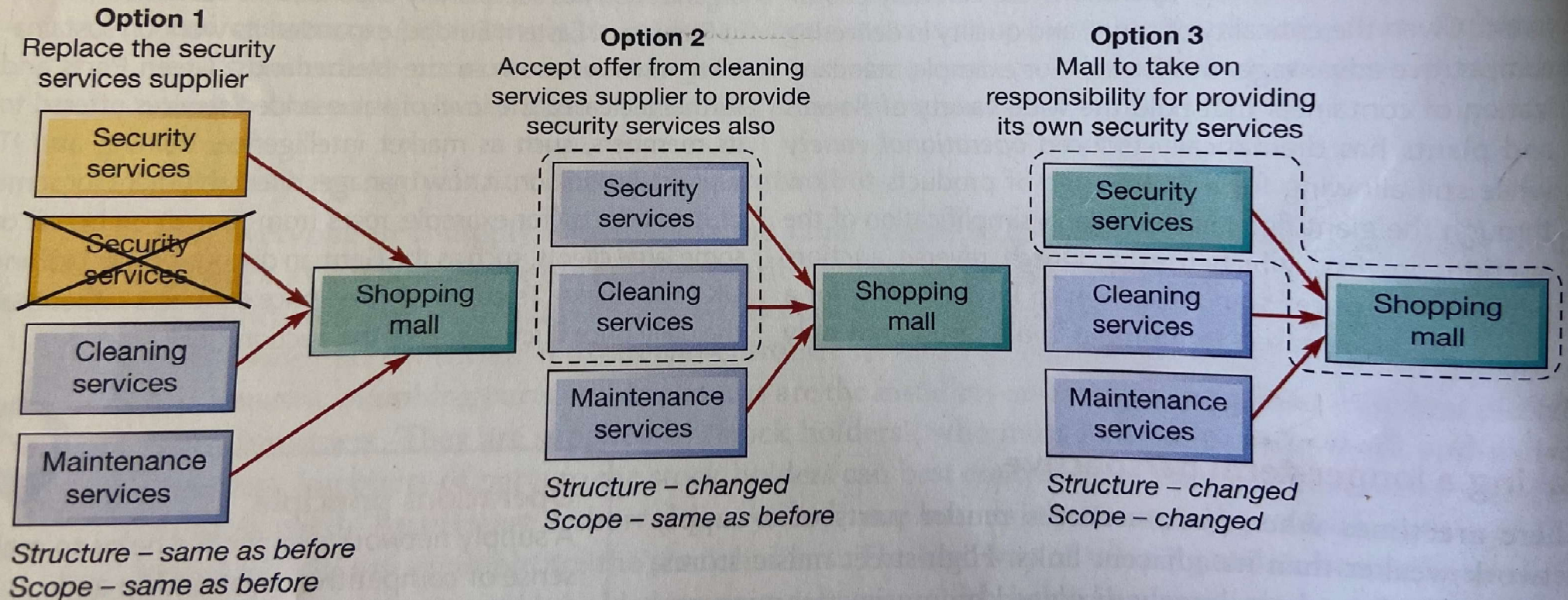3. shift towards a longer-term perspective.

Structure and scope

The first point to make is that….

1. Structure and scope are strongly related

Three options for the shopping mall's supply network

Option 1
Replace the security services supplier

Security services

~~Security services~~

Shopping mall

Cleaning services

Maintenance services

Structure – same as before
Scope – same as before

Option 2
Accept offer from cleaning services supplier to provide security services also

Security services

Cleaning services

Shopping mall

Maintenance services

Structure – changed
Scope – same as before

Option 3
Mall to take on responsibility for providing its own security services

Security services

Cleaning services

Shopping mall

Maintenance services

Structure – changed
Scope – changed

Structure and scope

1. Structure and scope are strongly related

The second point to make is that….

2. Both structure and scope decisions actually comprise a number of other «costituent» decisions. These are shown in the next slide.

The **structure** of an operation's supply network is determined by three sets of decision:

❑ How should the network be configured?

❑ What physical capacity should each part of the network have?

❑ Where should each part of the network be located?

The **scope** of an operation's activities is determined by two decisions:

✓ the extent and nature of the operation's vertical integration

✓ the nature and degree of outsourcing it engages in

What determines an operation's structure and scope?
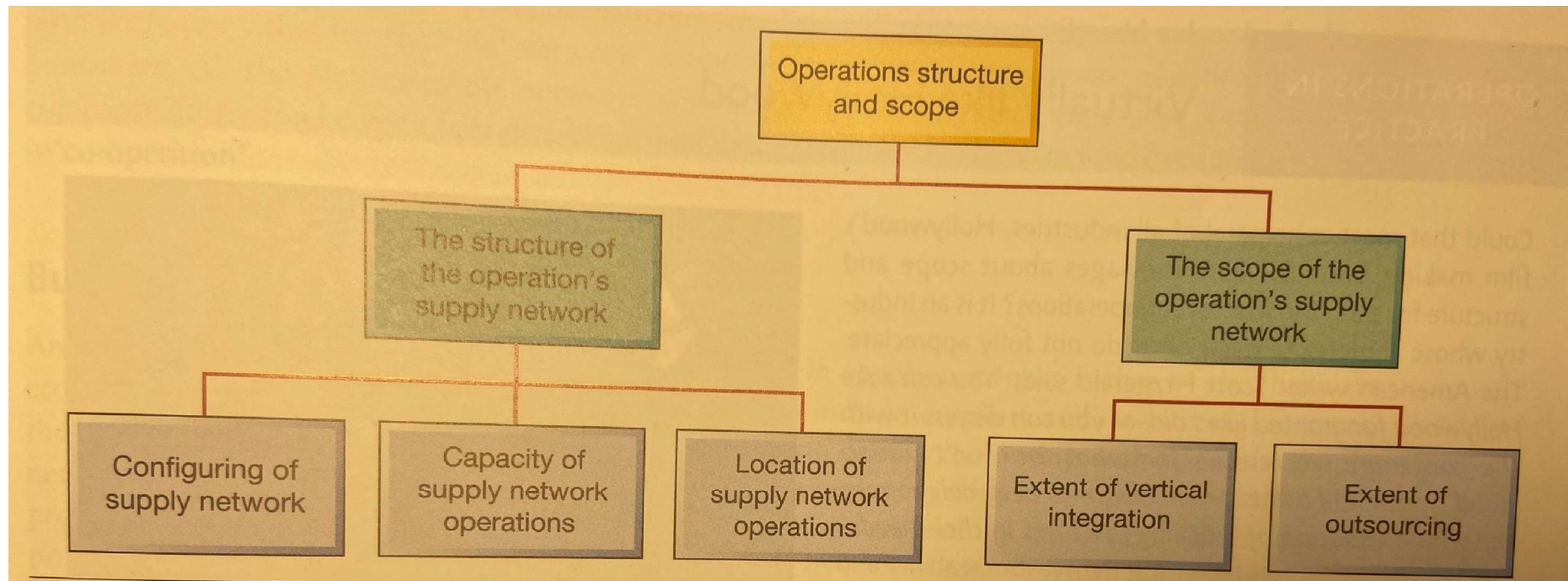
Structure and scope- third point

What do we mean by the structure and scope of an operation's supply network?

1. Structure and scope are strongly related

2. Both structure and scope decisions actually comprise a number of other «costituent» decisions. These are shown in the next slide

The third point to make is that….

3. The structure and the scope decisions are strategic! Different approaches to the structure and scope of operations define how different organizations do businesses even when are in similar markets. There are few decisions that are more strategic than which other businesses you are going to trade with (structure) and how much of the total activities in the supply network you are going to take responsibility for (scope).

How should the network be configured?

- Configuring a supply network means determining its overall **pattern**, **shape** or **arrangement of the vaurois operations** that make up the supply network

- Reconfiguring a supply network sometimes **involves parts of the operation being merged-** not necessarily in the sense of a change of ownership of any parts of an operation, but rather than in the way responsibility is allocated for carrying out activities

- The most common example of network reconfiguration is the trend over the last decade to reduce the number of direct suppliers that organizations work with

- Other configuration trends include the DISINTERMEDIATION of some parts of the network, and a greater tollerance of other operations being both competitors and complementors at different times (CO-OPETITION), the development of BUSINESS ECOSYSTEMS

What activities should be in-house and what should be outsourced?
How in-house and outsourced supply may affect an operation's performance objectives

Performance objective	'Do it yourself' In-house supply	'Buy it in' Outsourced supply
Quality	The origins of any quality problems are usually easier to trace in-house and improvement can be more immediate but can be some risk of complacency.	Supplier may have specialized knowledge and more experience, also may be motivated through market pressures, but communication more difficult.
Speed	Can mean synchronized schedules which speeds throughput of materials and information, but if the operation has external customers, internal customers may be low priority.	Speed of response can be built into the supply contract where commercial pressures will encourage good performance, but there may be significant transport/delivery delays.
Dependability	Easier communications can help dependability, but if the operation also has external customers, internal customers may receive low priority.	Late delivery penalties in the supply contract can encourage good delivery performance, but organizational barriers may inhibit communication.
Flexibility	Closeness to the real needs of a business can alert the in-house operation to required changes, but the ability to respond may be limited by the scale and scope of internal operations.	Outsource suppliers may be larger and have wider capabilities than in-house suppliers and more ability to respond to changes, but may have to balance conflicting needs of different customers.
Cost	In-house operations do not have to make the margin required by outside suppliers, so the business can capture the profits which would otherwise be given to the supplier, but relatively low volumes may mean that it is difficult to gain economies of scale or the benefits of process innovation.	Probably the main reason why outsourcing is so popular. Outsourced companies can achieve economies of scale and they are motivated to reduce their own costs because these directly impact on their profits, but transaction costs of working with a supplier need to be taken into account.