

## Section 3.4

# DECISION MAKING TO IMPROVE OPERATIONAL PERFORMANCE

### THIS SECTION OF THE SPECIFICATION COVERS:

- ☐ Setting operational objectives
- ☐ Analysing operational performance
- ☐ Making operational decisions to improve performance: increasing efficiency and productivity
- ☐ Making operational decisions to improve performance: improving quality
- ☐ Making operational decisions to improve performance: managing inventory and supply chains

### 0 1 GIVE ME THREE...

Operational objectives:

<b>1</b>	Added value
<b>2</b>	Speed of response
<b>3</b>	Environmental objectives

Internal and external influences on operational objectives:

	INTERNAL INFLUENCES	EXTERNAL INFLUENCES
<b>1</b>	Nature of the product	Social factors
<b>2</b>	Objectives of other functional areas	Competitors actions
<b>3</b>	Resources available	Pace of technological change

### 0 2 WHAT'S THE FORMULA?

Write down the formula for calculating:

LABOUR PRODUCTIVITY	UNIT COSTS
$\frac{\text{Output per time period}}{\text{Number of employees}}$	$\frac{\text{Total costs}}{\text{Total output}}$
CAPACITY	CAPACITY UTILISATION
$\frac{(\text{Capacity utilisation/ actual output}) \times 100}{100}$	$\frac{\text{Actual output in a given time period} \times 100}{\text{Maximum possible output in a given time period}}$

### 0 3 THE IMPORTANCE OF...

Give two reasons why the following operational areas are important to a business:

#### CAPACITY

1

Determines the total amount a business can produce given its current level of resources; this helps to determine if the business is operating efficiently

2

Operating at a high level of capacity utilisation reduces unit costs, as fixed costs are spread across more units

#### EFFICIENCY

1

Less inputs are required to produce a specific number of units, which reduces unit costs

2

Potential to produce more output in a specific time period giving the business the opportunity to satisfy more customers, leading to increased sales

#### LABOUR PRODUCTIVITY

1

Compares the number of employees to the amount of work they are producing

2

Unit costs can fall if each worker can produce more in the same period of time

### 0 4 BENEFITS AND DIFFICULTIES

Identify two benefits and two difficulties of:

#### OPERATING AT LOW CAPACITY UTILISATION

##### BENEFITS

- Ability to take on new orders
- Last minute orders can be satisfied increasing customer satisfaction and loyalty
- Production is less rushed; quality standards can be more easily maintained

##### DIFFICULTIES

- Idle resources increasing unit costs
- Staff become demotivated; lack of production results in staff concern regarding job security

#### OPERATING AT HIGH CAPACITY UTILISATION

##### BENEFITS

- Unit costs fall as fixed costs are spread across more units
- Increased flexibility in pricing decisions
- Larger profit margin can be achieved

##### DIFFICULTIES

- Lack of downtime restricting preventative maintenance of machinery
- Staff may become stressed and demotivated

## IMPLEMENTING LEAN PRODUCTION

### BENEFITS

- Improves liquidity as less waste
- Multi-skilled staff
- High levels of labour productivity
- Lower unit costs

### DIFFICULTIES

- Resistance to change of implementation
- Issues with the introduction/operation of JIT
- Kaizen creates additional stress on staff, which may increase labour turnover

## INCREASING LABOUR PRODUCTIVITY

### BENEFITS

- Output will be increased using the same number of employees
- Wages/salaries are spread across more units, lowering unit costs giving the business more flexibility on pricing decisions or the ability to benefit from a higher profit margin

### DIFFICULTIES

- Quality may suffer, impacting on the firm's reputation/the volume of reworking increases
- Resistance to change, as employees may feel their jobs are under threat
- Training, to improve staff skills, increases costs and is time consuming
- Employees may demand higher pay

## 0 5 OUTLINE TWO

## WAYS A BUSINESS COULD INCREASE LABOUR PRODUCTIVITY

- 1 Provide staff training
- 2 Re-organise the layout of the workspace

## FACTORS THAT COULD INFLUENCE THE OPTIMAL MIX OF RESOURCES

- 1 Quality level that is looking to be achieved
- 2 Demands of target market

## 0 6 EXAMPLES:

Give an example, with a brief description, of a business which is:

### CAPITAL INTENSIVE

- Large scale manufacturers, whereby a large amount of machinery is used to produce standardised products e.g. car manufacturers, canning factories

## LABOUR INTENSIVE

- Businesses operating in the service sector e.g. hairdressers that rely on employees to provide a service; games console firms which rely on the creativity of staff to come up with a unique, new idea for a game design to differentiate the business from its rivals

## 0 7 GIVE ME TWO:

Identify two ways of:

### USING TECHNOLOGY TO IMPROVE OPERATIONAL PERFORMANCE

**1**

Robots can complete a variety of tasks e.g. jobs that are hazardous to humans, picking stock in warehouses at a fast speed, assembling finished goods with increased accuracy

**2**

Inventory control e.g. EPOS which adjusts stock levels when a sale is made, automatic replenishment when inventory levels reach a certain point, the ability to locate in which stores product lines are situated, ability to offer next or same day delivery in terms of online ordering

## 0 8 GIVE ME TWO...

Benefits of improving quality:

**1**

Improves business reputation and brand image

**2**

Allows the business to charge higher prices/have more flexibility in pricing decisions

Difficulties of improving quality:

**1**

Resistance to change from employees who are unwilling to take on additional workload in relation to quality improvements

**2**

Recognising and acting on the fact there is a quality problem

Consequences of poor quality:

**1**

Increased costs through reworking/wastage

**2**

Lower sales volume/less repeat business

### Methods of improving quality:

<b>1</b>	Quality control
<b>2</b>	Quality assurance

### Reasons why quality is important:

<b>1</b>	Creates a USP
<b>2</b>	Provides a competitive advantage

## 0 9 WHAT IS MEANT BY?

Write a definition for the following key terms:

MASS CUSTOMISATION	OUTSOURCING	SUPPLY CHAIN
Combines mass production techniques with the ability to change a product to meet specific customer needs	Using a third party to carry out specific business activities	All the steps involved in the manufacturing and distribution of products

## 1 0 INFLUENCES ON

Identify two influences on each of the following:

AMOUNT OF INVENTORY HELD BY A BUSINESS	
<b>1</b>	Nature of the product
<b>2</b>	Lead time

CHOICE OF SUPPLIERS	
<b>1</b>	Flexibility
<b>2</b>	Payment terms

## 1 1 GIVE ME THREE...

Ways of matching supply to demand:

**1**

Outsourcing

**2**

Using temporary/part-time staff

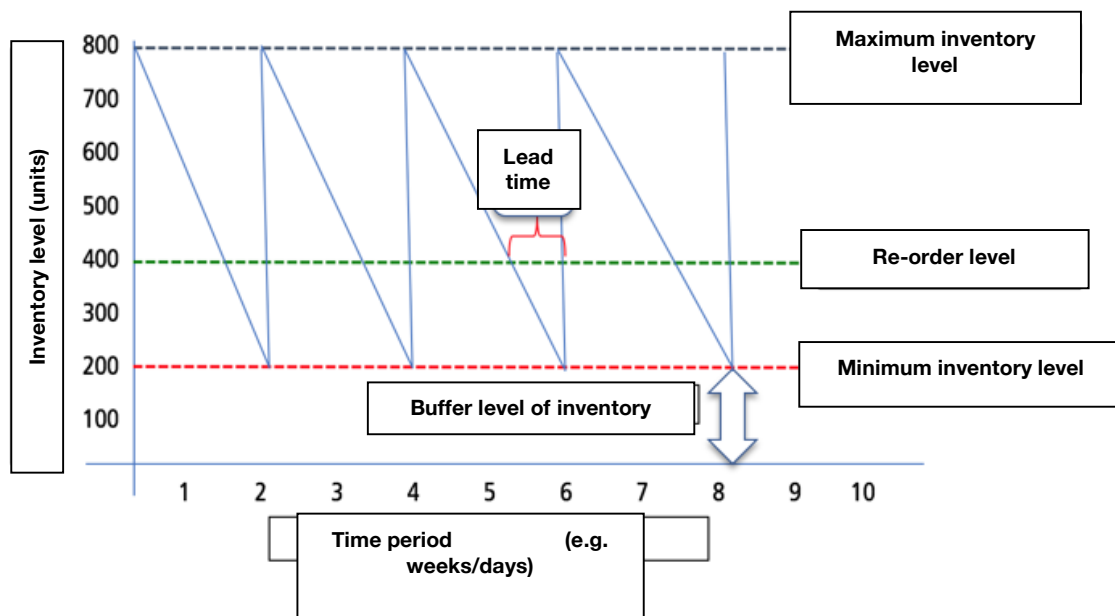
**3**

Produce to order

## 1 2 LABEL THE DIAGRAM

Complete the diagram:

### INVENTORY CONTROL CHART



## 1 3 TELL ME

The value to a business of:

### OUTSOURCING

#### Advantages:

- Allows the business to focus on its core activities leading to increased efficiencies
- Enables the business to increase its capacity without having to commit to acquiring non-current assets itself

#### Disadvantages

- Difficulties in establishing and maintaining required quality standards
- Business will be accountable for the actions of its outsourcing partner(s) which could damage the business's reputation

<b>MANAGING SUPPLY TO MATCH DEMAND</b>	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>➤ Producing to order ensures the product matches the exact requirements of the customer</li> <li>➤ Lowers costs, as fewer idle resources</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>➤ Producing to order results in customers having to wait longer for their products</li> <li>➤ Potentially lower motivation and commitment to the business when using temporary staff</li> </ul>
<b>MANAGING THE SUPPLY CHAIN EFFECTIVELY</b>	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>➤ Fair prices are paid for products</li> <li>➤ Products arrive on time at the correct locations, in the correct quantities and of the required quality standards</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>➤ Poor management of the supply chain can result in products not being delivered as expected e.g. KFC experienced significant issues with its supply chain in 2018 resulting in many of its stores having to close</li> <li>➤ Actions of suppliers can tarnish the image of a business; choice of suppliers would need to be considered carefully to ensure that they fit in with the corporate/operational objectives of the firm</li> </ul>
<b>IMPROVING FLEXIBILITY / SPEED OF RESPONSE</b>	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>➤ Increased customer loyalty resulting in repeat business</li> <li>➤ Provides the business with a competitive advantage</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>➤ May increase costs which may not fit in with the business model</li> <li>➤ Assurance required that quality standards can be maintained</li> </ul>
<b>IMPROVING DEPENDABILITY</b>	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>➤ Increases reputation of the business leading to increased sales</li> <li>➤ Adds values therefore higher prices can be charged</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>➤ Increased costs through training or investment in new systems or business processes</li> <li>➤ Time invested in establishing and maintaining close supplier relationships</li> </ul>