# **Business Operations and production**

Operations is the business function that organises, produces and delivers goods and services.



Production methods

# JOB PRODUCTION

When items are made individually and each item is finished before the next one is started

# <u>Advantages</u>

- One off or bespoke products
- Focus on customer needs / individual service
- High Profit margins

# <u>Disadvantages</u>

- Specialist skilled workers = increased costs
- Can only do one job at a time
- Long production process

# BATCH PRODUCTION

Groups of items are made together. Each batch is finished before starting the next one.

# <u>Advantages</u>

- Products made in batches
- Lower unit costs than Job production
- Some flexibility (e.g. different flavours)
- Semi-skilled workforce (cheaper than job)

# <u>Disadvantages</u>

- Lower Productivity (switching equipment)
- Machinery can be expensive
- Overproduction could lead to wastage

# FLOW PRODUCTION

Where identical, standardised items are produced on an assembly line.

# <u>Advantages</u>

- Lots of products made at the same time
- Increased productivity
- Lower unit costs = lower prices
- Standardised product

# <u>Disadvantages</u>

- Setting up machinery can be expensive
- Low profit margins
- Can't meet individual customer needs

# Impact of technology on production

Technology used in business operations include;

- Computer aided design (CAD)
- Electronic point of sale (EPOS)
- 3D printing
- E-commerce

# The impact of technology on operations

- Speeds up the production process
- Keeps businesses in touch with customers
- Can increase productivity\*
- Lowers production costs
- Ensures fewer mistakes and defects
- Can be initially expensive
- Can become obsolete quickly
- Requires employees to be trained = higher costs



# <u>Productivity</u>

# Productivity is output per worker.

The number of products an average worker produces over a period of time.

# Greater productivity leads to lower costs and greater competitiveness in the market.

Productivity can be increased by:

- Employing more technology.
- Motivating the workforce.
- Training the workforce.

# Factors affecting the use of technology

When choosing what technology to use a business needs to balance several factors:

- Productivity
- Cost
- Flexibility
- Quality

(Examples)

Technology that improves productivity may have a negative impact on quality.

Investing in new technology to increase productivity could have a negative impact on costs

#### The Sales process

The sales process identifies the key stages of buying a product or service

The sales process may differ from product to product but it usually follows the same model



# 1. Customer interest can be achieved by:

- Marketing techniques e.g. advertising, branding
- Product knowledge of good sales people

## 2. Speed and efficiency can be achieved by:

- Ensuring the sales process is quick and easy
- Ensuring products are delivered quickly
- Making websites easy to use

## 3. Customer engagement can be achieved by:

- Building a relationship with the customer
- Providing high levels of customer service

# 4. Post-sales service can be achieved by:

- Dealing with complaints quickly
- Offer after sales support
- Offering free warranty or servicing
- Using customer satisfaction surveys

# 5. Customer loyalty can be achieved by:

- Offering loyalty schemes
- Informing customers about new products
- Offering exclusive promotions





Customer service is very important in attracting and retaining customers

# Good customer service leads to:

- Satisfied and loyal customers
- Positive reputation and brand image
- Differentiated products
- Ability to charge premium prices (Added value)
- Competitive advantage

Poor customer service leads to:

- Low customer loyalty
- Poor brand image and reputation
- Falling sales and revenue

# Impact of logistics and supply decisions

Suppliers and logistics can have a significant impact on the operations of a business.

A business needs to be able to trust their suppliers

# Three main impacts

# <u>COSTS</u>

Well organised logistics can...

- Reduce transport and packaging costs
- Reduce the amount of damaged stock

# **REPUTATION**

Well organised logistics can ...

- Help provide a fast and efficient service
- Can gain a reputation for reliability
- Can attract and retain customers

# CUSTOMER SATISFACTION

Well organised logistics can ...

- Enable a business to meet customer needs
- Can result in repeat purchases
- Can develop high degrees of customer loyalty

## Managing Stock

Stock relates to materials, work in progress and finished goods.

## Stock control diagrams



## **Buffer stock**

Buffer stock is the minimum level of stock a business will hold. It is a safety net in case there is a surge in demand

## **Re-order level**

The level of stock at which new stock will be ordered

## Maximum stock level

The maximum level of stock that a business can or is willing to hold

#### Lead Time

The time it takes for an order to arrive.

#### **Benefits of holding stock**

- Any surges in demand can be met
- Damaged goods can be replaced
- Businesses can get bulk buying discounts
- Limited risk of running out of stock

## Drawbacks of holding stock

- Increased storage costs
- Money tied up in stock -> cash flow issues
- Opportunity cost -> cash could be used somewhere else

#### **Procurement and Suppliers**

Procurement refers to the process of managing a business's purchases.

Suppliers have a significant impact on a business's success.

#### What makes a good supplier?

- A good price
- Flexible deliveries
- Reliable deliveries
- Discounts for large orders
- High quality supplies
- Availability of products (short lead times)

#### Just in Time Stock Control

- A stock control system where stock is delivered only when it is needed by the production system.
- No stock is kept by a business
- To operate JIT a business needs good relations with their suppliers

## <u>Benefits</u>

- 1. Lower storage costs due to no stock being held
- 2. Can improve business competitiveness

#### **Drawbacks**

- 1. Increased risk of running out of stock
- 2. Businesses won't benefit from bulk buying discounts

## Managing Quality

Quality refers to a product being 'fit for purpose'

## Impact of good quality

- A premium price can be charged
- Can help build a strong brand image
- Meeting customer needs can boost sales
- Can differentiate the product

## Costs of good quality

• Can increase costs (e.g.) more costly materials

#### Methods of managing quality

#### **QUALITY CONTROL**

This is seen as a stage of the production process

Products are only checked at the end of production

#### Features of Quality control

- Focuses on identifying faulty goods
- Finds and eliminates problems
- Responsibility of the Quality control team
- Quality Control is focused on the product

## QUALITY ASSURANCE

Involves focusing on quality at every stage of the production process

The aim is to achieve zero defects

#### Features of Quality Assurance

- Focuses on improving the production process
- Establishes a good quality management system
- Every one of responsible for quality
- Quality assurance is focussed on the process