

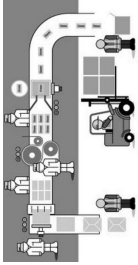
3.3.1 - Production processes



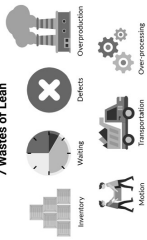
Job production is the production of a **one-off** product made to order. It is used where the **variety** in output needs to be **high** but the **volume** in output of the product is **low**. Often, this leads to **high costs of production**.

Higher costs in terms of higher skills (**specialisation**), and longer **lead times**, result in **higher prices**, meaning products are **not price competitive**, meaning job production is used for **premium, highly customized large products**. E.G Houses, Bespoke Wedding Cakes.

Flow production is the continuous, mass production of a **standardized, uniformed** product. The product is moved from one stage to another, often on a **production line**. It is most suitable when there is **low variation** in the quantity being produced, and the **volume** of output needs to be **high**. It results in **low costs of production**. However, there are **higher initial set up costs** in land and capital to create the production line, but the **product** moves through a sequence of often automated stages, meaning **lower staff costs**, and **higher, continuous output**. E.G Plastic Bottles, Laptops.



7 Wastes of Lean



Lean production is an approach that aims to **minimise waste** in order to increase **efficiency** – i.e. doing more with less. It does this by using a range of tactics:

- Quality assurance** is ensuring quality issues do **not happen** by perfecting the production process, rather than **quality control** which deals with mistakes **after they happen**.
- Kaizen** (Japanese for **continuous improvement**) – employees are responsible for making small improvements to cut waste. **Cutting waste reduces manufacturing costs**.
- Examining processes** to identify areas for improvement / increased efficiency

- Just-in-time stock management** reduces the amount of stock held (**waste**) by producing items **just in time** for them to be used.
- Lean production** should reduce costs, allowing the business to be more profitable. However, mistakes add to the **lead time** and can cause problems such as the need to outsource work or compensate customers for delays.

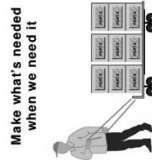
3.3.2 - The role of procurement

Procurement is establishing a relationship with **suppliers** to buy the **raw materials**, **producer goods** and **services** business require.

- Just-in-case; a push stock control** system whereby stock is ordered and stocked **just-in-case** it is needed.
 - + You will have **buffer stock** if it is needed suddenly (spike in demand)
 - + **Benefit from Purchasing Economies of Scale**
 - High costs in storage and insurance.
 - Some stock may be perishable or obsolete



- Just-in-time; a pull stock control** system whereby stock is ordered and arrives **just-in-time** for its use.
 - + Low stock, storage and insurance costs
 - + Items do not perish or become obsolete
 - High reliance on suppliers
 - May lose out on **Purchasing Economies of scale**



The choice of supplier depends on the:

- Price** of materials or services
- Quality** of materials, services or customer care
- Reliability** and **speed** of deliveries – do they always achieve what they say (**lead time**)
- Flexibility** in the volume (quantities) ordered
- Reputation** and **ethical issues** – how and where are the materials made
- Payment terms** - do they offer trade credit?



The **supply chain** is the sequence of businesses and processes that take place between the creation of the **raw materials** into the **finished product or service**. **Logistics** is the movement of goods between these processes.

3.3.3 - The concept of quality

Quality means different things to different people (**markets**). A product can have high quality if it provides **good value** (low price but acceptable wear and tear – Primark) however some products have a high price and low performance. Often, customers will only pay a high price if they are confident of the quality they will receive. This may be based on:

- The **reliability** of the product or service – does the product or service always do what is says it will
- Customer expectations** – does the product or service meet up to what the customer expected it to do

Achieving higher quality



Total Quality Management (TQM) is a philosophy where people involved in the manufacture of a product or the delivery of a service are **internal customers** to each other, and therefore **check and ensure quality at all stages** of the manufacture or delivery. In TQM, all people involved are encouraged to **continually improve** their approach by making small incremental changes to the service they provide each other.

- Lowers costs** as fewer mistakes are made
- Improves staff **motivation** as they take more pride in their work and are listened to
- Better reputation** as all aspects of the customer experience are higher quality

Quality Control - a check performed to see if a completed product meets the required quality standard

- Ensures only high quality products are sent to the customer
- Reactive:** waits for the whole product to be created before checking, leading to **high costs in rework** and waste in **defective products**

Quality Assurance - checks made to materials, machinery and the product itself during the manufacturing process that insures a high quality outcome

- Preventative:** reduces costs as mistakes are found before additional work is done to a product
- Involves all employees to care for quality, and many more quality checks

Costs of high quality:

- Higher price of raw materials
- Higher staff training costs
- Higher costs of quality inspection

Benefits of high quality:

- Increased revenue through improved reputation
- Can set higher prices
- Lower costs in reduced product recalls

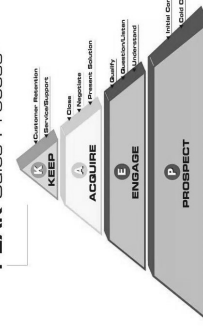
AQA Business Operations Unit 3

Appears in:
Paper 1

3.3.4 - Good customer service

Increasingly, quality is determined by the service provided around the product. For example, where the product is bought (online or in store). The quality experienced is higher if the customer service matches (or exceeds) customer wants and expectations. **Customer expectations** are managed through the **PEAK** process

PEAK Sales Process



Prospect: the marketing (**advertisement**) of a product. At this stage it is important to explain what value or quality features the product or service has. However it is important to manage customer expectation – not promise what cannot be achieved, so the product or service is more likely to meet or exceed **customer expectations**.

Engage: the customer in a dialogue about the product. This could be face-to-face with a sales representative, a customer visiting **premises** (a shop) or a click on a webpage. To add value, high quality service may involve customers having questions answered by **knowledgeable staff** or the product or service adapted to meet their specific needs.

Acquire: encourage the customer to purchase the product or service. Customers are only likely to do this if they are convinced the product or service will meet their needs at a price that is reasonable to them. This could be achieved by **good product information, multiple methods of payment** (including finance, e and m-commerce), offer of **good post sales service**.

Keep: building **customer loyalty** such that customers will return and buy more from you in the future. This could be achieved by offering **loyalty schemes** and targeted email advertisements based on **data analysis** – suggesting what other products they should buy based on past purchases and interests

Methods of good service:

- Highly trained staff** who have good product knowledge and can provide **personal advice** to customers
- After (post) sales service** – providing discounted or free parts and servicing, customer care/training lines
- Use of websites** to provide customers with a more convenient way of ordering/tracking (**e-commerce**)
- Social Media** – to engage customers through m-commerce: location-based notifications & easier payment



Key Term	Definition
Brand Image	The consumers' perception of the brand; its character, qualities and shortcomings. It is developed over time and operates as a consistent theme through advertising campaigns.
Buffer Stock	A stock of raw materials held in reserve to protect the production process from unforeseen shortages.
Cost	The money spent by a business on goods and services.
Customer Engagement	The relationship between the business and the customer that puts the customer's requirements at the centre of the operation to build brand loyalty.
Disposal of waste	The removal, storage or destruction of unwanted material. Methods include recycling, burning and landfill sites.
E-Commerce	Business transactions carried out electronically on the internet.
Economies of Scale	The cost advantage of producing on a large scale. As output increases the unit cost decreases.
Export	Good/service sold to a customer in another country.
Fixed Costs	The costs that stay largely the same, regardless of the business' output.
Flow Production	Using a production line to make goods continuously and in large numbers.
Good	Items that are produced from raw materials for sale to businesses or consumers.
Import	Good/service bought from a supplier in another country.
Induction	Training given to a new employee when they start a new job; it provides information about the business, its operation and working practices.
Inspection	Testing/examining items to check that materials or items conform to the specified requirements/standards.
Job Analysis	The process of determining what the job entails, including responsibilities and tasks.
Job Production	A method of creating a single product to meet an individual order.
Just In Case (JIC)	Organising procurement to ensure that the production process never runs out of stock, reducing the number of sales lost due to insufficient raw materials.

Key Term	Definition
Just In Time (JIT)	Organising the ordering of raw materials and components to be delivered just before they will be used, reducing the need for storage.
Lean Production	Continually working to reduce the resources used to create products: raw materials, labour, machines and premises
Logistics	Managing the movement of supplies and products to ensure the timely delivery of supplies to the production process and finished products to customers.
M-Commerce	Business transactions are carried out electronically by mobile phone.
Motivation	The reasons people are interested in and committed to their job.
Outsourcing	Contracting another business to carry out some of the business' activities, often to reduce costs.
Post Sales Servicing	Maintenance or repair of equipment by the manufacturer or supplier during or after the warranty.
Primary Industry	A business that extracts the earth's natural resources.
Procurement	The process of buying goods and services including dealing with: <ul style="list-style-type: none"> • demand • selection of suppliers • analysing and negotiating prices • making the purchase • managing payments.
Product Knowledge	An in-depth understanding of the features, use and application of the good/service that will enable the person selling it to provide any information that the purchaser wants before committing to buy.
Product Recalls	The withdrawal from sale by the manufacturer of a defective or contaminated item.
Productivity	The amount produced by a worker/machine/factory in a given time; the ability to produce more output with fewer resources.
Raw Materials	Businesses that use raw materials that are heavy and/or bulky choose to locate close to their suppliers to reduce the cost of transport or storage.
Recycling	The conversion of waste into reusable material.
Supplier	A business that provides goods/services.
Supply chain	The network of organisations, people, activities, information and resources that take the product/service from supplier to customer.
Total Quality Management (TQM)	A philosophy that involves everyone in the business in the quest for continual improvement in the attitudes, practices, structures and systems that combine to create a top-quality product.
Trade Credit	The process of buying items from a supplier and paying for them later; for example, 30 days after invoice date.
Wholesaler	A business or person that buys goods in large quantities from producers, stores them in warehouses and sells them on to retailers.