

IGCSE Business Studies: Production

Production (Operations Management)

Using resources to produce goods and services

Production – using resources to make goods and services.

Productivity – a measure of efficiency by comparing the volume or quality of output with the resources used in production of the goods and/or services.

Methods of production (job, batch, flow)

Job production

This method of production is used to make products specifically to order. The production of wedding cakes and specialist machinery are examples of this.

Advantages	Disadvantages
The product would meet the requirements of the customer.	It could be more expensive as skilled labor would be required.
It could provide job satisfaction for the employee as there would be a greater variety of jobs to do.	It may be more labor intensive and may therefore take longer to produce.

Batch production

This method of production is used to make blocks of similar products but has a slight variation between each batch. The production of bread and furniture could be made in this way.

Advantages	Disadvantages
This method of production is quite flexible as the product could varied.	Raw materials for different batches would need to be stored during the production of another product. This could be very expensive depending on the storage requirements of the raw material.
It could provide a variety of work for the employees to do.	It could be more time consuming as raw materials, finished products and machinery would need to be moved around.

Flow production

Another name for this is mass production. This method of production is used to make large quantities of the same product in a continuous process.

Advantages	Disadvantages
Costs would be kept relatively low as this	The employees would be bored as their job

method could benefit from economies of scale and could therefore lower the price of the good.	would be repetitive.
Its likely to be capital intensive and will therefore lower labor costs and increase the efficiency of production.	If one part of the production line stops or malfunctions it would make the entire production come to a halt.
As it is capital intensive, there is not need for skilled workers to be hired and there not be a need for training.	Cost for setting up the production line would be very high as it is mainly capital intensive.
Goods could be produced quickly and relatively cheaply.	
Time would not be wasted as it is produced continuously there would not be a need to move the product from one part of the factory to another.	

Scale of production

Economies of scale – factors which lead to a decrease in average costs as a business grows. An example of this is when a large business can buy raw materials in bulk receives a discount from the supplier.

Diseconomies of scale – factors which lead to an increase in average costs as a business grows greater than a certain size. An example of this is when the business grows so large that communication between the top managers and the workers is difficult. The time lost from the relay of information would lead to a fall in efficiency.

Lean production

Lean production – this is a technique which could cut down wastage and increase efficiency of production.

Kaizen

Kaizen is mean 'continuous improvement' in Japanese. This technique involves meetings between the managers and workers to discuss problems and methods to address issues found in the process of production. This is very effective as the workers know the production line the best and it could also make them feel valued as a member of the business.

Just-in-time production (JIT)

This method of lean production reduces or removes the need for storage of raw materials as it would be ordered just in time for when it is needed.

Costs and cost classification

Examples of costs:

- Start up costs
- Day to day capital / working capital
- Expansion

Types of costs

Fixed costs – costs which is not not affected by the level of output, for example, rent.

Variable costs – costs which changes depending on the level of output, for example, raw materials.

Break-even analysis and simple cost-based decision making

Calculations:

Total costs = total variable costs + total fixed costs

Total revenue = selling price X output

Total variable costs = variable cost X output

Total costs = total variable costs + total fixed costs

Average costs = total costs / output

Profit = revenue – total cost

Break even quantity (BEQ) = fixed costs / contribution

Contribution = selling price – variable cost per unit