

## Topic 2.3.1 Operations

### Key Vocabulary

**Good** – a tangible item that exists in a physical sense, e.g. a car

**Service** – an experience or non-physical item, e.g. a trip to a theme park

**Job production** – one-off production of a one-off item for each individual customer

**Batch production** – producing a limited number of identical products

**Flow production** – continuous production of identical products, which gives scope for high levels of automation

**Productivity** – a measure of efficiency, usually output per person per time period

**Automation** – using machines that can operate without people

**Robots** – machines that can be programmed to do tasks that can be done by humans, e.g. spray painting

**Flexibility** – the ability to switch quickly and easily from one task to another

**CAD** – Computer Aided Design

**CAM** – Computer Aided Manufacture

### Core Knowledge

The purpose of production is to create **goods** and **services**.

Production Method	Advantages	Disadvantages	Examples
<b>Job</b>	<ul style="list-style-type: none"> <li>Unique products</li> <li>High quality</li> <li>Higher prices</li> </ul>	<ul style="list-style-type: none"> <li>Need highly skilled workers</li> <li>Lengthy process</li> <li>Higher cost per unit</li> </ul>	Tailoring, bridges, Olympic Stadium
<b>Batch</b>	<ul style="list-style-type: none"> <li>Variety and choice for customers</li> <li>Materials purchased in bulk, lowering production costs</li> </ul>	<ul style="list-style-type: none"> <li>Work is repetitive</li> <li>Equipment must be cleaned after each batch</li> </ul>	Bread, clothing
<b>Flow</b>	<ul style="list-style-type: none"> <li>Bulk buyer leads to lower unit costs</li> <li>Production 24/7</li> <li>Consistent quality</li> </ul>	<ul style="list-style-type: none"> <li>High capital investment</li> <li>Less flexibility to adapt products</li> <li>Very repetitive work</li> </ul>	Canned food, bottled drinks

#### **Impact of technology:**

- Lower costs in long term due to lower labour costs; improved quality so less wastage
- Increased productivity due to no breaks or holidays
- Improved quality / consistency
- Lower costs can lead to competitive prices

### Don't be a "man on the street"

- Remember not all production happens in a factory: a bakery is also manufacturing
- Introducing technology does not lower costs immediately: in the short term there are high costs and this will affect cash flow and profit margins



### Wider Business World

**Morgan cars** – produced by job production

**Ford cars** – considered to be the first mass produced car in the world



### Synoptic Links

**Technology** – has had an impact on production

**Marketing** – creates the demand for the product

**Finance** – introducing technology will incur costs and affect cash flow

**Human Resources** – if staff lose their jobs they will be entitled to redundancy payments

**Legislation** – operations will need to follow Health & Safety law