

IB Business Management – Operations Management

5.1 Operations Methods – Features of Production Methods



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MAIN FEATURES OF THE DIFFERENT PRODUCTION METHODS

	Job	Batch	Flow/Mass	Mass customisation
Main feature	<ul style="list-style-type: none"> Single one-off items 	<ul style="list-style-type: none"> Group of identical products pass through each stage together 	<ul style="list-style-type: none"> Mass production of standardised products 	<ul style="list-style-type: none"> The use of flexible computer-aided production systems to produce items that meet individual customer requirements at mass production cost levels.
Essential requirements	<ul style="list-style-type: none"> Highly skilled workforce 	<ul style="list-style-type: none"> Labour and machines must be flexible to switch to making batches of other designs 	<ul style="list-style-type: none"> Specialised, often expensive, capital equipment - but can be very efficient High steady demand for standardised products 	<ul style="list-style-type: none"> Well-trained and multi-skilled workforce using specialised manufacturing equipment controlled by IT systems, especially IA and big data

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				<ul style="list-style-type: none"> High steady demand for customised products
Main advantages	<ul style="list-style-type: none"> Able to undertake specialist projects or jobs, often with high value added High levels of worker motivation 	<ul style="list-style-type: none"> Some economies of scale Faster production with lower unit costs than job production Some flexibility in design of product in each batch 	<ul style="list-style-type: none"> Low unit costs due to the constant working of machines, high labour productivity and economies of scale JIT stock management easier to apply than with other methods 	<ul style="list-style-type: none"> Higher profits as companies can charge a premium for their products. Improved customer satisfaction. Reduced customer churn. Streamlined production. Improved inventory management.
Main limitations	<ul style="list-style-type: none"> High unit production costs Time consuming Wide range of tools and equipment needed 	<ul style="list-style-type: none"> High levels of stocks at each production stage Unit costs likely to be higher than with flow production 	<ul style="list-style-type: none"> Inflexible - often very difficult and time consuming to switch from one type of product to another Expensive to set up flow-line machinery and each section needs to be carefully synchronised 	<ul style="list-style-type: none"> Impossible to build up stock ahead of time. Forecasting trends/spikes in sales more difficult due to wide range of options. Difficult to plan for surge in product demand. Affects the flow of supply chains with 3rd party business partners.