

Lean Production



Lean production is an approach that attempts to streamline operations by minimising waste in all aspects of production, including time, money, materials, machinery and workers.

Techniques

Lean production involves the adoption of:

Total Quality Management – aiming for zero defects by creating a culture of quality.

Kaizen - continuously looking for new ideas and ways of carrying out jobs more effectively.

Time Management – reducing the time taken to complete tasks through more effective planning and the use of simultaneous engineering.

Benchmarking - comparing the performance of one firm against the best in the industry.

Just-in-Time – aiming to hold minimum (if any) stock levels and producing goods just in time to meet customer requirements.

Benefits

Ability to charge lower prices, due to lower costs, increasing competitiveness.

Opportunity to earn higher profit margins, due to lower costs.

Potential for improvements in quality - lack of buffer stock means getting it right first time.

Problems

Staff resistance to changes in work practices, especially if it involves greater responsibility for no extra pay.

Lack of reliable suppliers may limit the scope for just-in-time.

Cost of training and implementing new processes – there may be insufficient resources to support this.

Key Term: Simultaneous Engineering

Organising the development of a product so that the various stages involved are carried out 'simultaneously' rather than in sequence, e.g., deciding how the product will be marketed as it is being designed and tested. This should reduce the amount of time taken to take a product from the initial idea to the market, hopefully securing an edge over the competition.

Task

Find out which well-known Japanese car manufacturer was involved in the development of lean production.