

Lifecycle Management

You would use this concept to help inform business decision making at each stage in the life of your product or process.

Projected performance gain



Introduce

- A process to manage products through their production lives from introduction to demise.



Improved

- Sales and profitability: Maximise sales and profit at every stage of the product's lifecycle
- Decision making about product portfolio: Apply the correct strategy for the stage in the product's lifecycle
- Improved forecasting, resulting in reduced waste
- Improved identification of sales opportunities
- A framework for product optimisation.

What investment is needed to understand the concept?

DIFFICULTY



Medium

Requires some reading around the subject and a structured approach.

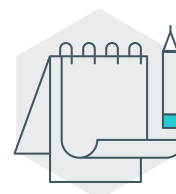
ACTIVITY



Team

Best results come from a team of design, procurement, engineers and assembly operators.

EQUIPMENT



None

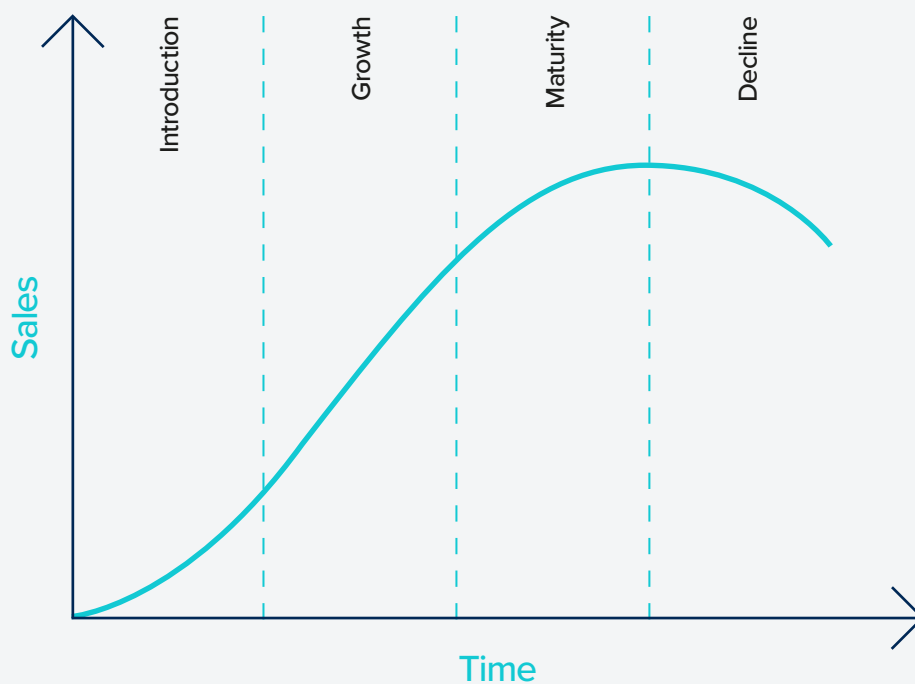
No equipment is needed.

Explanation of the concept

In general, products move through a number of phases during their lives:

- **Design and Development:** This when the Research & Development is carried out
- **NPI:** This is the prototype stage. The market for the product is developed and awareness of the product is built.
- **Ramp to Volume:** At this stage, the product is manufactured, marketed, and released. Distribution increases, demand increases and competition also increases
- **Volume Manufacture:** This stage could also be called 'product maturity'. The product is widely available and there are usually many competitors in the market. At this stage, the product is marketed to different segments however sales will level off
- **Product Demise:** Demand for the product is past its peak and is losing its market share. At this stage the product is usually either discontinued or adapted by adding new features.

PRODUCT LIFECYCLE CURVE



The idea behind Lifecycle Management is to plan around each phase of the product lifecycle to ensure that each phase delivers what the business needs.

As an example, perceived wisdom is that 70% of the manufacturing cost of a product becomes fixed during the design and development phase. As such, there needs to be a clear focus on Value Engineering and manufacturing process selection at this point.


The NPI and Ramp to Volume phase is where the production process is developed and tested with input from all process stakeholders.


During volume manufacture the opportunity is to focus on the production process to improve efficiencies and reduce production costs. There is also an opportunity to re-spin / re-design / cost out during the product mid lifecycle to drive up profitability.

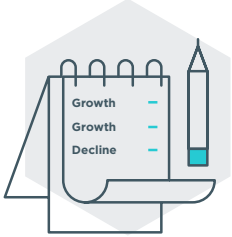
A product's demise is determined by a number of inputs such as a decrease in sales volumes, reduction in profitability, customer input, availability of a replacement etc.


A successful manufacturing company will aim to have multiple products in different stages of their lifecycle.

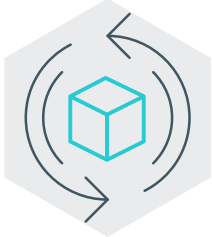
What action should I take?

1. 

Gather a team of design, procurement, engineers and assembly operators.
2. 

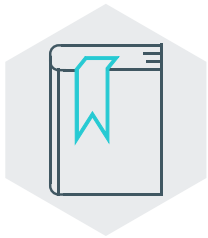
Explain the concepts behind Lifecycle Management.
3. 

Pick a product or range of products and categorise them in terms of their lifecycle status.
4. 

Consider their performance and identify actions that will deliver benefits through managing their lifecycles more closely.
5. 

Establish a regular Lifecycle Management review.

Recommended resources



Bicheno, J. (2004). The New Lean Toolbox. Piccie Books. ISBN 0 9541 2441 3



[GC BGH Manufacturing Factsheet 37: New Process Development](#)

[GC BGH Manufacturing Factsheet 44: Process FMEA](#)

Glossary

Value Engineering: A method to improve the value of products by examining the function.

Volume Manufacturing: At this stage in the product lifecycle, production is optimised, cost reductions have been made and sales are at a peak. This is when the product is at maturity.

For more advice, case studies and additional factsheets visit: www.businessgrowthhub.com/manufacturing