

Product Life Cycles and the Boston Matrix

Product Life Cycles and the Boston Matrix

- **Product Life Cycle** – shows the stages that products go through from development to withdrawal from the market
- **Product Portfolio** – the range of products a company has in development or available for consumers at any one time
- Managing product portfolio is important for cash flow

Product Life Cycles and the Boston Matrix

- **Product Life Cycle (PLC):**
 - Each product may have a different life cycle
 - PLC determines revenue earned
 - Contributes to strategic marketing planning
 - May help the firm to identify when a product needs support, redesign, reinvigorating, withdrawal, etc.
 - May help in new product development planning
 - May help in forecasting and managing cash flow

Product Life Cycles and the Boston Matrix

- **The Stages of the Product Life Cycle:**
 - Development
 - Introduction/Launch
 - Growth
 - Maturity
 - Saturation
 - Decline
 - Withdrawal

Product Life Cycles and the Boston Matrix

- **The Development Stage:**
- Initial Ideas – possibly large number
- May come from any of the following –
 - Market research – identifies gaps in the market
 - Monitoring competitors
 - Planned research and development (R&D)
 - Luck or intuition – stumble across ideas?
 - Creative thinking – inventions, hunches?
 - Futures thinking – what will people be using/wanting/needing 5,10,20 years hence?

Product Life Cycles and the Boston Matrix

- **Product Development: Stages**

- New ideas/possible inventions
- Market analysis – is it wanted? Can it be produced at a profit? Who is it likely to be aimed at?
- Product Development and refinement
- Test Marketing – possibly local/regional
- Analysis of test marketing results and amendment of product/production process
- Preparations for launch – publicity, marketing campaign

Product Life Cycles and the Boston Matrix

- **Introduction/Launch:**
 - Advertising and promotion campaigns
 - Target campaign at specific audience?
 - Monitor initial sales
 - Maximise publicity
 - High cost/low sales
 - Length of time – type of product

Product Life Cycles and the Boston Matrix

- **Growth:**
 - Increased consumer awareness
 - Sales rise
 - Revenues increase
 - Costs - fixed costs/variable costs, profits may be made
 - Monitor market – competitors reaction?

Product Life Cycles and the Boston Matrix

- **Maturity:**
 - Sales reach peak
 - Cost of supporting the product declines
 - Ratio of revenue to cost high
 - Sales growth likely to be low
 - Market share may be high
 - Competition likely to be greater
 - Price elasticity of demand?
 - Monitor market – changes/amendments/new strategies?

Product Life Cycles and the Boston Matrix

- **Saturation:**
- New entrants likely to mean market is 'flooded'
- Necessity to develop new strategies becomes more pressing:
 - Searching out new markets:
 - Linking to changing fashions
 - Seeking new or exploiting market segments
 - Linking to joint ventures – media/music, etc.
 - Developing new uses
 - Focus on adapting the product
 - Re-packaging or format
 - Improving the standard or quality
 - Developing the product range

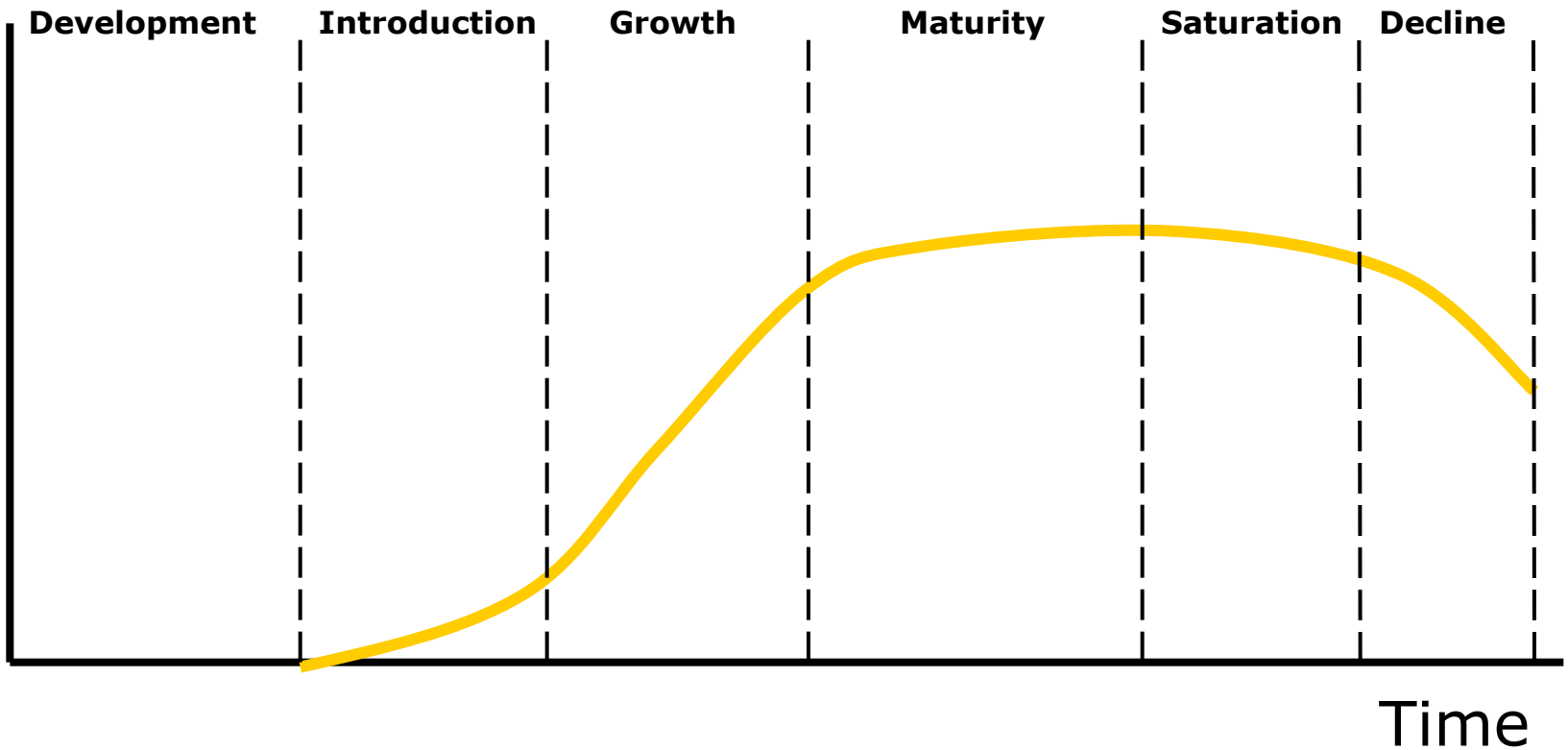
Product Life Cycles and the Boston Matrix

- **Decline and Withdrawal:**

- Product outlives/outgrows its usefulness/value
- Fashions change
- Technology changes
- Sales decline
- Cost of supporting starts to rise too far
- Decision to withdraw may be dependent on availability of new products and whether fashions/trends will come around again?

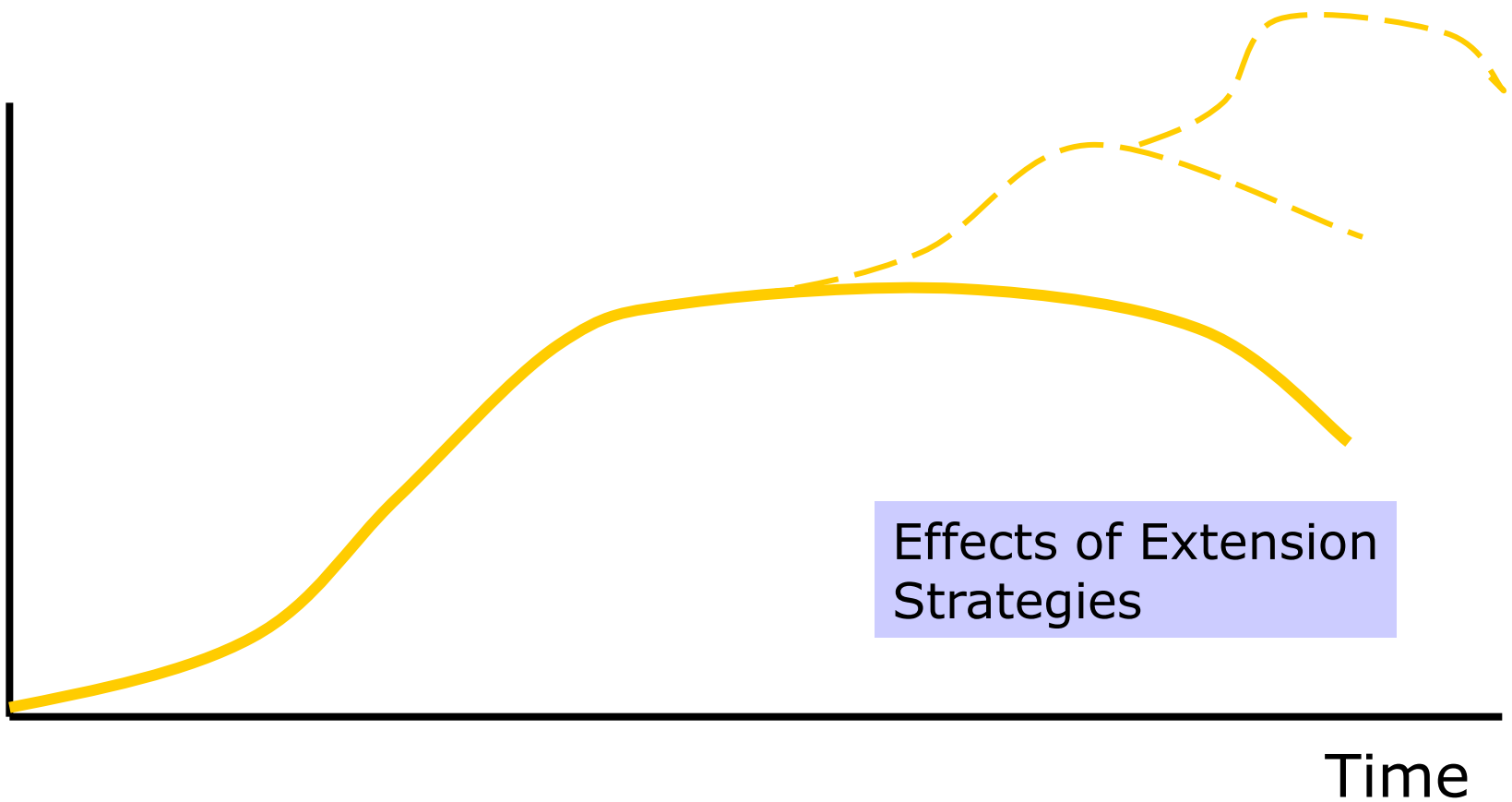
Product Life Cycles and the Boston Matrix

Sales



Product Life Cycles and the Boston Matrix

Sales



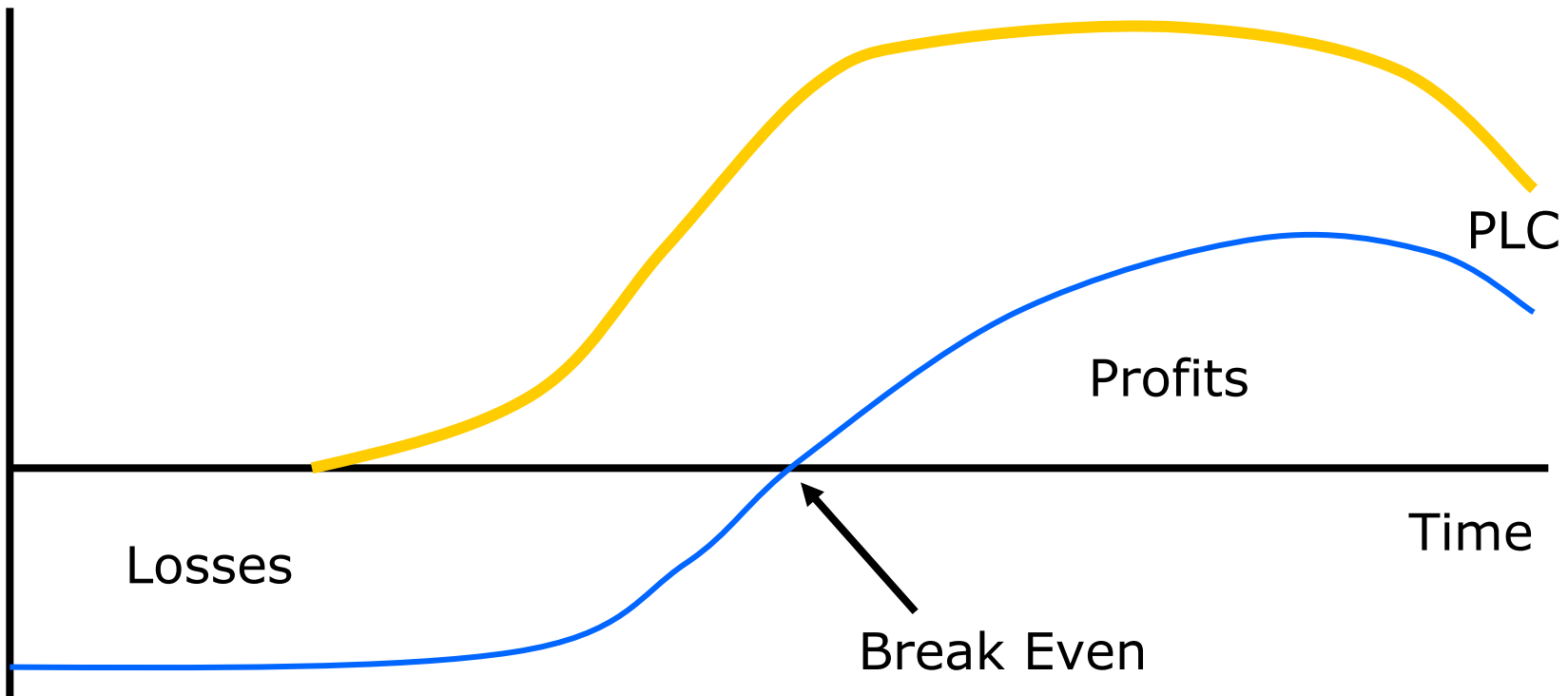
Effects of Extension Strategies

Time

Product Life Cycles and the Boston Matrix

Sales/Profits

PLC and Profits



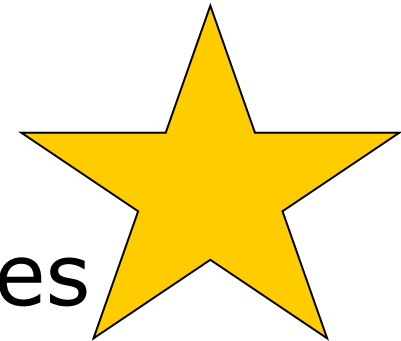
The Boston Matrix

- **The Boston Matrix:**

- A means of analysing the product portfolio and informing decision making about possible marketing strategies
- Developed by the Boston Consulting Group
 - a business strategy and marketing consultancy in 1968
- Links growth rate, market share and cash flow

The Boston Matrix

- Classifies Products into four simple categories:
- **Stars** – products in markets experiencing high growth rates with a high or increasing share of the market
 - Potential for high revenue growth



The Boston Matrix



- **Cash Cows:**
 - High market share
 - Low growth markets – maturity stage of PLC
 - Low cost support
 - High cash revenue – positive cash flows

The Boston Matrix

- **Dogs:**

- Products in a low growth market
- Have low or declining market share (decline stage of PLC)
- Associated with negative cash flow
- May require large sums of money to support



Is your product starting to embarrass your company?

The Boston Matrix

- **Problem Child:**
 - Products having a low market share in a high growth market
 - Need money spent to develop them
 - May produce negative cash flow
 - Potential for the future?



Problem children – worth spending good money on?

The Boston Matrix

Market Growth

High

Problem Children or Question Marks?



Stars



Dogs



Cash Cows



Low

Market Share
High

The Boston Matrix

- **Implications:**

- **Dogs:**

- Are they worth persevering with?
- How much are they costing?
- Could they be revived in some way?
- How much would it cost to continue to support such products?
- How much would it cost to remove from the market?

The Boston Matrix

- **Implications:**
- **Problem Children:**
 - What are the chances of these products securing a hold in the market?
 - How much will it cost to promote them to a stronger position?
 - Is it worth it?

The Boston Matrix

- **Implications:**
- **Stars:**
 - Huge potential
 - May have been expensive to develop
 - Worth spending money to promote
 - Consider the extent of their product life cycle in decision making

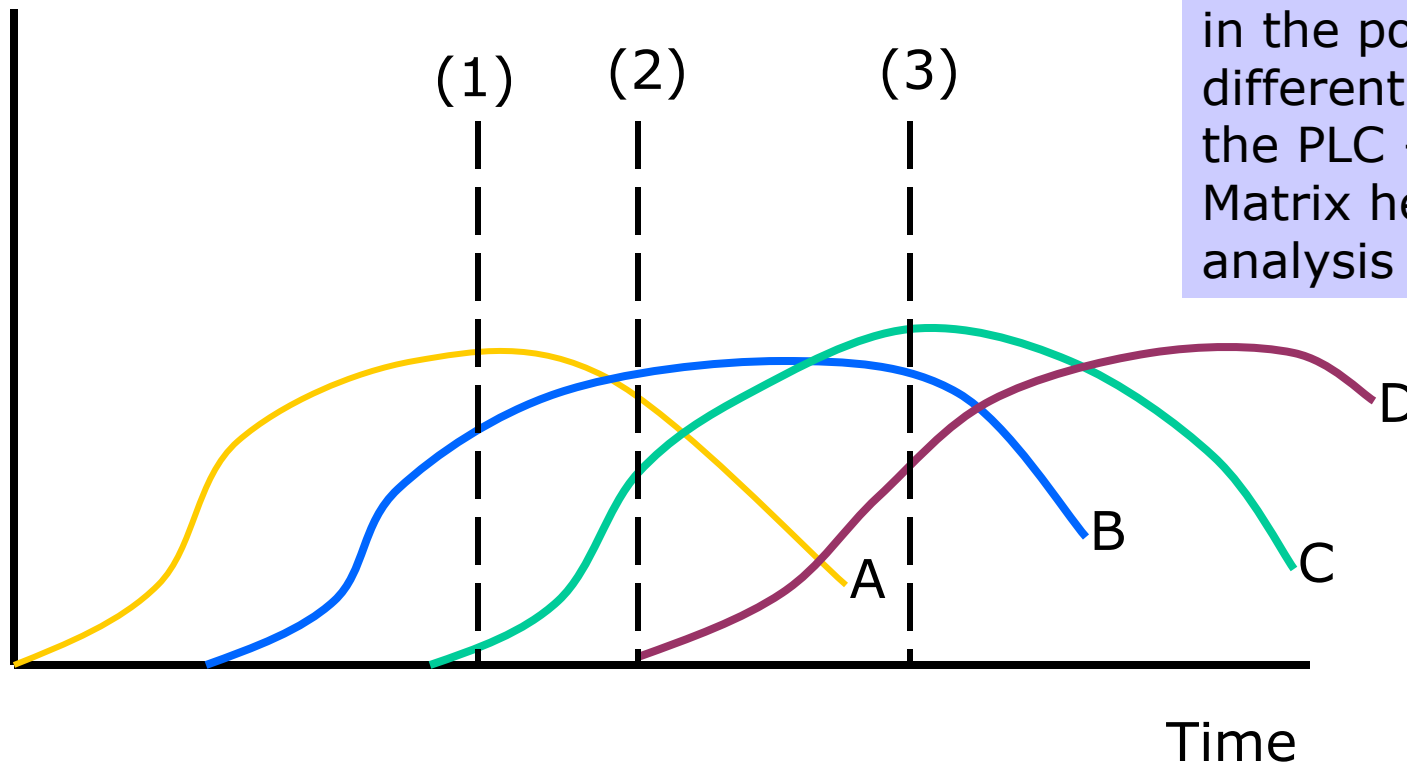
The Boston Matrix

- **Implications:**
- **Cash Cows:**
 - Cheap to promote
 - Generate large amounts of cash – use for further R&D?
 - Costs of developing and promoting have largely gone
 - Need to monitor their performance – the long term?
 - At the maturity stage of the PLC?

The Product Life Cycle and the Boston Matrix

Importance of maintaining a balance of products in the portfolio at different stages of the PLC – Boston Matrix helps with the analysis

Sales



Dogs

These are products with a low share of a low growth market. They do not generate cash for the company instead they tend to absorb it. These products should be gotten rid off.

Cash Cows

These are products with a high share of a slow growth market. Cash Cows generate more than is invested in them. So they should be kept in the businesses portfolio of products for the time being.

Problem Children

These are products with a low share of a high growth market. They consume resources and generate little in return. They absorb most money as you attempt to increase market share.

Stars

These are products that are in high growth markets with a relatively high share of that market. Stars tend to generate high amounts of income. Stars should be kept and built up.

There should be some kind of balance within a company's portfolio. Dogs should be avoided completely; Cash Cows, Problem Children and Stars need to be kept in a kind of equilibrium. The funds generated by a company's Cash Cows are used to turn problem children into Stars, which may eventually become Cash Cows. Some of the Problem Children will become Dogs, and this means that a larger contribution from the successful products will be needed to compensate for the failures.

We as a company feel that our product falls into the star category of the Boston matrix. This is because of the feedback received from our research. This informs us of the speed at which similar products sell and generate profit for other companies. This backed by our strong marketing campaign are just a few of the reasons why our product falls into the 'Star' categories.

Problems with the Boston Matrix There is an assumption that higher rates of profit are directly related to high rates of market share. This may not always be the case. When Boeing launch a new jet, it may gain a high market share quickly but it still has to cover very high development costs. It is normally applied to Strategic Business Units (SBUs). These are areas of the business rather than products. For example, ford own Land rover in the UK. This is an SBU not a single product. There is another assumption that SBUs will cooperate. This is not always the case. The main problem is that it oversimplifies a complex set of decision. The Matrix should be used as a planning tool.



[Kellogg's case study](#)