Product Life Cycle

Every product has a life cycle, that is a period of time during which it appeals to the consumer, i.e. it sells. But during the period of the Product Life Cycle sales are not constant, there are variations in levels of demand, the amount of competition in the market place, consumer understanding and liking of the product and the share of the market the product captures. Normally five separate stages of a products life cycle are recognized, and these are:

- **Introduction.**
- **Growth.**
- **Maturity.**
- **Saturation**
- **Decline.**

The stages of the product life cycle.

Introduction. The product is new to the market, few potential consumers know of its existence. Price can be high, (for example new computer games) and sales may be restricted to early adopters (those consumers that must have new technology, gadgets, or fashions first). Profits are often low or losses are being made, this is because development costs have to be repaid, and advertising expenditure can be high. Some products are introduced to the market in a splash of publicity, hoping to capture as large a market share as soon as is possible.

Growth. The product is becoming more widely known and consumed. Marketing is used to try to establish or strengthen the brand and develop an image for the product. Profits may start to be earned, but advertising expenditure is still high. Prices may fall as the first competitors enter the market.

Maturity. The product range may be extended, by adding both width and depth. Competition will increase and this has to be responded to. Advertising should be used to reinforce the image of the product in the consumer's minds. Sales are at their peak, profits should be high.

Saturation. Very few new customers are gained, replacement purchases are the trend. Firms should try to reduce their costs, so that pricing strategies can be more flexible. Brand image should be maintained, and in so doing full value is taken from the brand. Alternatively the brand can move down market, capturing new markets, or market niches, but this should not be done at the expense of quality. Profits may be maintained, but can start to fall.

Decline. Sales can now fall fast, and as a result the range sold is likely to be reduced, with the firm concentrating on core products. Advertising costs will be reduced, and attempts will be made to mop-up what is left of the potential market. Each product sold could be quite profitable as development costs have been paid back at an earlier stage in the life cycle. But overall, total profits will fall. Price is also likely to fall, but by concentrating on remaining market niches there should be some price stability.

Example life cycles.

Dixons' Freeserve.

In this case the product, the first free ISP (Internet Service provider) entered the market with a massive amount of publicity, with the objective of capturing as much market share as possible. The company were successful in doing this by using it's large number of distribution channels, and a loss leader pricing strategy. Within 2 or 3 months Freeserve became the UK's largest Internet Service provider.

The Introduction stage was very short, and growth took off virtually immediately. The third stage, Maturity, saw competition entering the market, with existing ISP's re-pricing their products, and new market entrants coming to the market with a similar business model to Freeserve. But Freeserve was able to maintain its market position, firstly through availability of the product (software CD's) through it's Dixons, Currys and PC World outlets, secondly because it offered an efficient and well designed product, tailored to it's users needs, and thirdly ISP users are inclined to remain with the same provider rather than switch providers, so once they have their customer Dixons are likely to keep him. Eventually Freeserve was sold to Wannadoo.

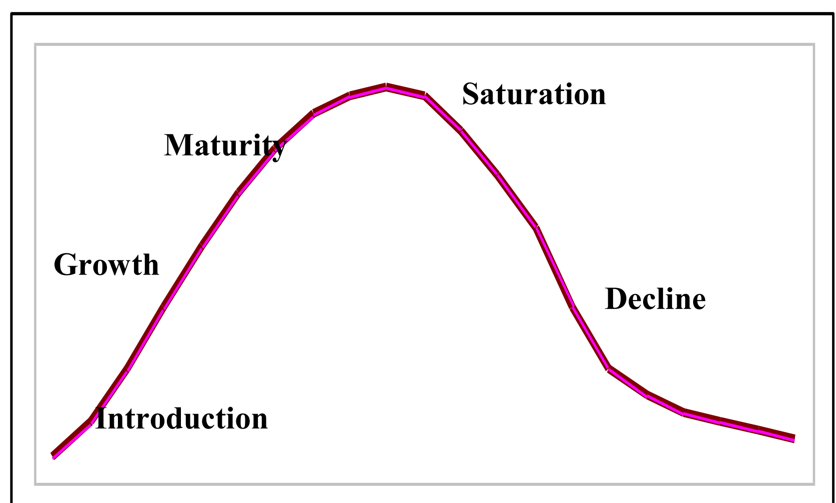
People Movers or Multi-Purpose Vehicles.(MPV's)

The first MPV was launched by Renault in the late 1980's. The Espace, more a converted van, than a high sided saloon car, soon found a market of enthusiastic buyers. Sales quickly gathered speed, with the Espace being seen as a different and modern alternative to estate cars. The popularity of the Espace was noted by other car manufacturers, who moved quickly to try and capture their share of this growing market sector. Soon the market was flooded with MPV's, from Ford, Peugeot, Mercedes, Honda, Vauxhall and Toyota. The MPV was the vehicle to be seen with on the school run. It was fashionable. As the market became saturated, the mini MPV was introduced. Cars like the Megane Scenic captured an entirely new market.

In early 2000 the market for the large MPV went into decline, buyers switched to 4-wheel drives or to mini MPV's. As a result some manufacturers withdrew from the market as models reached the end of their life cycle, leaving a small core of manufacturers to supply products to what remained of a once booming market.

Auntie Bessie's

Tryton Foods re-launched its famous Aunt Bessie's brand in 2002 , with the aim of taking a significant share of the frozen food market. Known at first for its popular Yorkshire puddings, the Aunt Bessie's brand is showing annual growth of 20% compared to the total frozen food market's near-static 1.1%. After the successful re-launch of the Yorkshire Puds, the brand was widened to include roast potatoes, roast parsnips and even frozen gravy. Aunt Bessie's has over the last 8 years be-



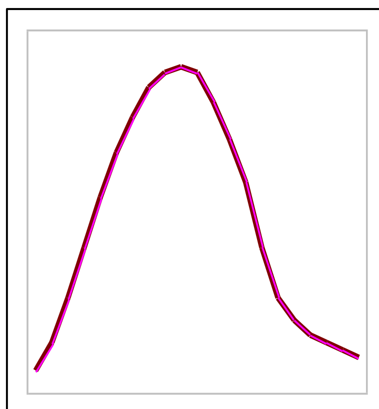
come a brand leader in Traditional Hot Desserts with a staggering 52% year-on-year growth. Each product has successfully been established, with the use of effective marketing strategies moving quickly to maturity in the product life cycle. With the rapid growth in sales looking likely to continue, Aunt Bessie's is heading for a £250m brand value by the end of2012.

Example life Cycle Diagrams.

On page 2, we saw a typical or classic, Product Life Cycle. In this example we see the five stages, starting with introduction, through growth, maturity, saturation and finally decline. The vertical axis represents sales volume, the horizontal axis time. This is a typical structure of a product life cycle, but it is far from being appropriate to all products, there are many exceptions to this rule of thumb..

Below we see two further examples of product life cycles. In the first, known as Straw on Fire, the product quickly moves through all the stages. Introduction is short, market saturation may be reached in a matter of months, and decline sets in shortly after.

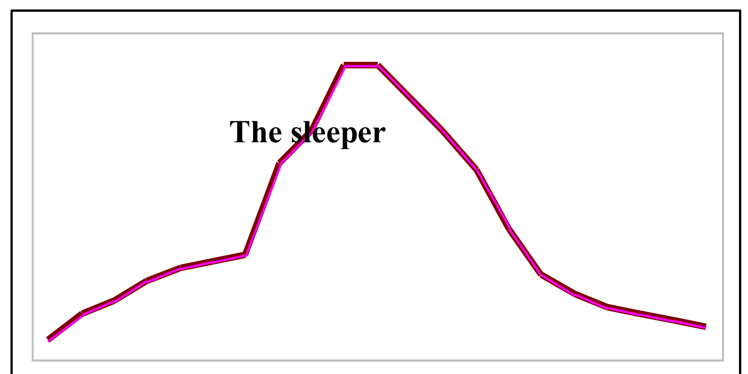
Some strong examples of this type of life cycle can be found in the children's toy market. There have been many products which followed this pattern, examples include, Furbies, hoola hoops, yo-yos, ninja turtles etc. How long will this years winner in the X Factor remain a star?



Below we see another type of Product Life Cycle that does not fit with the standard. This example, demonstrates that some products take a while to become accepted in the market place. They 'sleep', sales may initially be restricted to early adopters (consumers who are willing to pay a premium for new technology) or those 'in the know'. It takes awhile for the mass market to accept the product.

This mass market acceptance may depend on large advertising campaign or reductions in price. Sometimes novels which later become Hollywood blockbusters fall into this category – just consider Silence of the Lambs, or The Bridges of Maddison County, which both topped the best seller lists only after being made into films.

These 3 are not the only possible shapes or structure of product life cycles. Consider the shape of the life cycles of Coca Cola, or Rice



Krispies or Mars Bars? Are these products in decline, or are sales being maintained?

Product Portfolio Management or Analysis.

The understanding of the shape or form of the Product Life Cycles, of a firm's range of products is important. Having an understanding of the patterns of demand, likely levels of

competition and future demand levels can have many benefits to businesses.

All firms with a long-term view of their future success and market potential, will have a mix of products available for sale. Often this mix is made up of a range of different products, e.g. Fords range of cars, or Lever Bros. range of soap powders – this range gives 'product breadth'. And also there will be variations on one type of product, e.g. 7 different types of Ford Mondeos, or several different sizes of Persil soap powder. This is known as 'product depth'. The combination of breadth and depth of products will give us a firms product mix.

For mass marketing firms the objective of product portfolio management is to ensure that the market appeal of the portfolio is maintained and in so doing capture as wide a range of the market as possible. For niche marketing firms the objective of product portfolio management is to capture and keep as much of a niche market as possible.

Managing the Product Portfolio

There are three main tools that can be used in managing the product mix The first is Product Portfolio (life cycle) Analysis, the second is The Boston Matrix, and the third The Ansoff Matrix. (separate chapters are available on Boston Matrix and Ansoff Matrix)

Product Portfolio Analysis

As we have seen every product has a life cycle, that is a period of time over which it appeals to the consumer. Within this life cycle there are five stages.

Introduction
Growth
Maturity
Saturation
Decline

When firms have range of products the marketing manager must be aware of what stage on the product life cycle each of the companies products is at. This knowledge will enable the firm to market the product range effectively. Armed with an understanding of the Life Cycle of each product the marketing department can devise for each product an appropriate marketing mix.

But Product Portfolio Analysis goes beyond simple marketing mix management.

The timing of production, development and release of new products will be to a large extent be dictated by Product Portfolio Analysis.

Product Portfolio Analysis tells us that it is important that profits earned from current successful products are used in part to fund development of new products.

Profits from products at maturity should be used to fund the development of new products and then through the unprofitable introduction and growth stages of the products life cycle.

The diagram above shows effective product mix
management, with sales growing at a steady pace. As one product declines another takes its place.

Effective Product Portfolio Analysis also helps prevent production, and capacity problems. If sales of existing products are declining, and new products are not yet ready

for launch, or have not yet gained general acceptance from the consumer, then the firm can be left with spare capacity. This brings manpower and asset use problems. Redundancies may have to occur, or workers may become demotivated because of short-time working or lack of overtime or bonuses. If assets are not being used to their full capacity, then the return on these assets will fall, also interest on debts will still have to be paid – this can lead to liquidity problems.

The marketing manager must liaise with product development to ensure that products reaching the end of their life cycle are replaced with new products that appeal to the market place.

Firms should attempt to manage their product mix so that they have stability of output, they do not want periods of spare capacity. If a new product is not ready for launch extension strategies should be used to prolong the life cycle of the existing product.

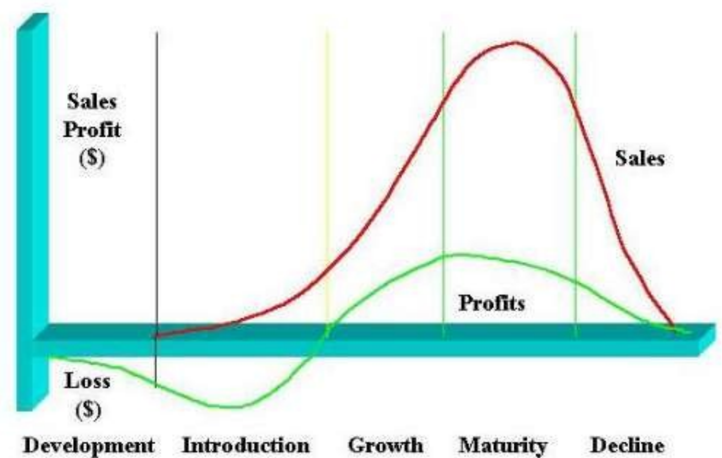
Extension strategies could include:

- **repositioning the product in the market place**, this is usually down market
- **re-launching the product,** aiming at a different segment, e.g. promoting the healthy aspects of consuming the product
- **using the 'now with' policy,** you often see tactic used this with limited edition cars

All these extension strategies usually do is delay the end of the life cycle. But extension strategies hopefully delay the end just enough to allow a new profitable product to become established, replace the product in decline and help the firm keep a balanced product portfolio.

Profitability, Cash Flow and The Product Life Cycle.

Developing new products is an expensive business, even without going back to the drawing board and starting from scratch, there are still costs of market research , marketing, establishing new or extended distribution channels etc. to consider. All of these costs affect profits and cash flow, and for most products we can estimate profits against different stages of the product life cycle.



The above diagram shows that losses are likely to be incurred until well into the product life cycle—this is because development costs have to be repaid, and the cost of launching and promoting a new brand are likely to be high. The firm will need strong cash flow to be able to wait until the product starts generating profits.

Notes.