

Product Life Cycle Explained: Stage and Examples

DEFINITION

The product life cycle is the duration a product is available to customers, starting with its market introduction and ending when it's removed from shelves.

What Is the Product Life Cycle?

The product life cycle is the length of time that a product is available to customers. It starts when a product (a good or a service) is introduced into the market and ends when it's removed from the shelves.

This concept is used by management and marketing professionals to make marketing and sales decisions, such as whether or not to increase advertising, reduce prices, expand to new markets, or redesign packaging. The process of strategizing ways to continuously support and maintain a product is called product life cycle management.

KEY TAKEAWAYS

- There are four stages in a product's life cycle: introduction, growth, maturity, and decline.
- A company often incurs higher marketing costs when introducing a product to the market, but experiences higher sales as product adoption grows.
- Sales stabilize and peak when the product's adoption matures, though competition and obsolescence may cause its decline.
- The concept of product life cycle helps inform marketing and sales decisions, from pricing and promotion to expansion or cost-cutting.

How the Product Life Cycle Works

A product begins with an idea. Within the confines of modern business, that idea isn't likely to go far until it undergoes research and development (R&D). If the company determines that it is feasible and potentially profitable, the product will be produced, marketed, and launched.

The life cycle of a product is broken into four stages:

1. Introduction
2. Growth
3. Maturity
4. Decline

FAST FACT

Some product life cycle models include product development as a stage, though at this point, the product has not yet been brought to customers.

Introduction Stage

The introduction phase is the first time customers are introduced to the new product. This stage typically requires the business to make a substantial investment in advertising. At this point, the marketing is focused on making consumers aware of the product and its benefits, especially if the item is broadly unknown or the problem it solves is unclear.

During the introduction stage, there may be little to no competition for a product, as competitors may only be getting their first look at the new offering. Even if the business is offering a new product or service in response to another business's sales, the marketing will still focus on introducing the new product rather than differentiating it from competitors' products.

Companies often experience negative financial results at this stage. Sales tend to be lower, promotional pricing may be low to drive customer engagement, marketing spending is high, and the sales strategy is still being evaluated.

Growth Stage

If the product is successful, it then moves to the growth stage. This is characterized by:

- Growing demand
- Increase in production
- Expanded availability

FAST FACT

The amount of time spent in the introduction phase before a company's product experiences strong growth will vary between industries and products.

During the growth phase, the product becomes more popular and recognizable. A company may still choose to invest heavily in advertising if the product faces heavy competition. However, marketing campaigns will likely be geared towards differentiating its product from others as opposed to introducing the goods to the market. A company may also refine its product by improving functionality based on customer feedback.

Financially, the growth period of the product life cycle results in increased sales and higher revenue. As peer businesses begin to offer rival products, competition increases, potentially forcing the company to decrease prices and experience lower margins.

Maturity Stage

The maturity stage of the product life cycle is the most profitable, as it is the time when the costs of producing and marketing decline. With the market saturated with the product, competition is now higher than at other stages, and profit margins start to shrink. Some analysts refer to the maturity stage as the point at which sales volume is "maxed out."

Depending on the product, a company may begin deciding how to innovate its product or introduce new ways to capture a larger market presence. This includes getting more feedback from customers and researching their demographics and needs.

During the maturity stage, competition reaches its highest level. Rival companies have had enough time to introduce competing and improved products, and competition for customers is usually highest. Sales levels stabilize, and a company strives to have its product exist in this maturity stage for as long as possible.

IMPORTANT

The stage of a product's life cycle impacts how it is marketed to consumers. A new product needs to be explained, while a mature product needs to be differentiated from its competitors.

Decline Stage

As the product takes on increased competition and other companies emulate its success, the product may lose market share. This is when the decline state begins.

Product sales begin to drop due to market saturation and alternative products. If customers have already decided whether they are loyal to the product or prefer those of its competitors, the company may choose not to invest in additional marketing efforts. Should a product be entirely retired, the company will cease generating support for it and phase out all marketing and production endeavors.

Alternatively, the company may decide to revamp the product or introduce a next-generation, completely overhauled model. If the upgrade is substantial enough, the company may choose to re-enter the product life cycle by introducing the new version to the market.

Microsoft's decision to sunset Windows 8.1 in January 2023 was an example of the decline stage. Consumers began receiving notifications the year before, informing them that Microsoft would no longer support the product, as the company would focus its resources on newer technologies.¹

Benefits and Drawbacks of Using the Product Life Cycle

Benefits

- Clarify portfolio of offerings
- Better allocation of resources
- Positive impact on economic growth
- Promotes innovation

Drawbacks

- Not appropriate for every industry or product
- Legal or trademark restrictions
- Planned obsolescence
- Product or resource waste

Benefits

The product life cycle allows marketers and business developers to better understand how each product or brand sits within a company's portfolio. This

understanding enables the company to internally reallocate resources to specific products based on their positioning within the product life cycle.

For example, a company may decide to reallocate marketing resources to products entering the introduction or growth stages. Alternatively, it may need to invest more labor costs into engineers or customer service technicians as the product matures.

The product life cycle naturally tends to have a positive impact on economic growth, as it promotes innovation and discourages supporting outdated products. As products move through the life cycle stages, companies that track the product life cycle can be more aware of the need to make their products more effective, safer, efficient, faster, cheaper, or better suited to client needs.

Drawbacks

Despite its utility for planning and analysis, the product life cycle doesn't apply to every industry and doesn't work consistently across all products. Consider popular beverage lines whose primary products have been in the maturity stage for decades, while spin-offs or variations of these drinks from the same company have failed.

The product life cycle may also be artificial in industries with legal or trademark restrictions. Consider the new patent term in the United States, which is 20 years from the date the patent application was filed.² A drug may be adversely impacted by competition when its patent ends, regardless of its life cycle stage.

Another unfortunate side effect of the product life cycle is prospective or planned obsolescence. When a product enters the maturity stage, a company may be tempted to begin planning its replacement. This may be the case even if the existing product still holds many benefits for customers and could continue to have a long shelf life. For producers who tend to introduce new products every few years, this can lead to product waste and inefficient use of product development resources.

Product Life Cycle vs. BCG Matrix

A similar analytical tool to help businesses determine the market positioning of a product is the Boston Consulting Group (BCG) Matrix. This four-square table defines products based on their market growth and market share:

- **Stars:** Products with high market growth and high market share
- **Cash cows:** Products with low market growth and high market share
- **Question marks or problem children:** Products with high market growth and low market share
- **Dogs:** Products with low market growth and low market share

Both systems analyze a product's market growth and saturation. However, the BCG Matrix does not traditionally communicate the direction in which a product will move. For example, a product that has entered the maturity stage of the product life cycle will likely experience decline next; the BCG Matrix does not communicate this product flow in its visual depiction.