

Module 2: Product Development

Lesson 3 - Product Development & Life Cycle

OVERVIEW

In this lesson, students will gain a fundamental understanding of the product development process. Students will also explore the concept of product management and recognize the important role it plays in business.

OBJECTIVES

1. Define product management.
2. Explain each stage of the product life cycle.
3. Describe the steps in the product development process.

KEY TERMS

Product development

Product life cycle

Product management

This Lesson Bundle Includes:

- Product Development - Lesson Outline
- Product Development - Supplemental Presentation Slides
- Industry Application - Related Links

Lesson 3 - Product Development & Management

PRODUCT MANAGEMENT

Product management is the process within a business that supports and manages the activities related to designing, developing, maintaining, improving, launching, and acquiring products or services. The process is tied to a business's efforts to effectively direct each stage of the product life cycle, from the conceptualization of the product or service until it is phased out of the market.

The process requires product managers to analyze many types of information, including customer research, the tracking and understanding of industry trends, and monitoring economic conditions. Product managers must also keep a careful eye on the competitive landscape, recognizing what competitors are doing well and where opportunities exist to leverage competitive advantages.

PRODUCT LIFE CYCLE

The term **product life cycle** refers to the length of time a product is introduced to consumers into the market until it is phased out and removed from the shelves. The product life cycle is the succession of stages that a product goes through during its existence, starting from ideation and the development stage and ultimately ending in decline. There are five stages in the cycle. Marketing professionals and businesses use the product life cycle to make important decisions and strategies on everything from sales forecasts, marketing budgets, product pricing, and packaging.

Product Life Cycle Stages

There are five stages in the product life cycle:

1. **Development**
2. **Introduction**
3. **Growth**
4. **Maturity**
5. **Decline**

1. Development

In the product development stage of the life cycle, a business has an idea for a new product or improvement to an existing product. This is the ideation phase of development when a concept is discussed. The development stage requires a significant investment in research, at which point the business will create a prototype or “beta” version of the product or service. The product must then be tested and a determination will be made whether it is ready for the introduction stage.

2. Introduction

The product is launched in the introduction phase of the product life cycle. This occurs when the product or service is initially introduced to the marketplace.

3. Growth

In the growth stage of the product life cycle, the new development has been well received by consumers, demonstrated by strong demand for the product or service. Generally, this is the stage in the life cycle when competing products will begin the development stage as other businesses see an opportunity within the marketplace.



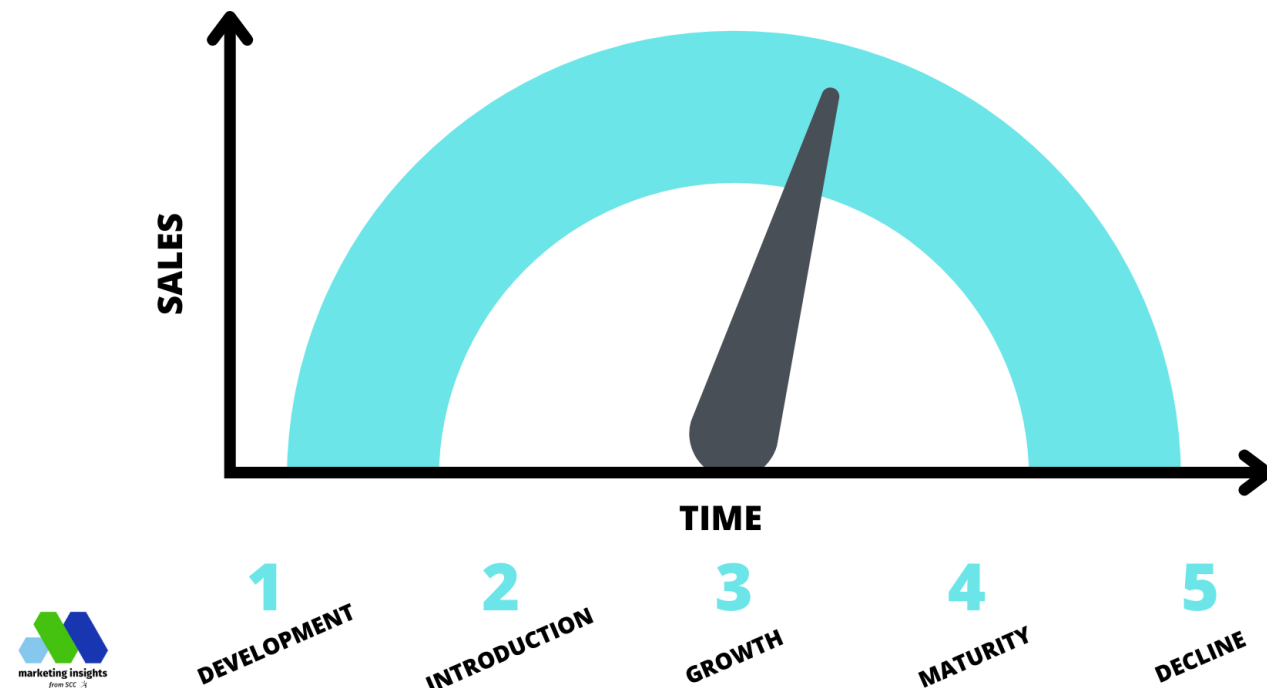
4. Maturity

Sales will slow down and eventually peak in the maturity stage of the product life cycle. At this stage in the cycle, businesses will often reduce prices to maintain market share with the introduction of competing products in the marketplace. Effective marketing becomes paramount to help keep the product in the mature stage of the life cycle.

5. Decline

If the product or service is unable to continue to meet the wants and needs of consumers, it moves from the maturity phase into product decline. Sales will decrease and eventually, the product will likely be phased out and discontinued. As competition intensifies and new and improved products reach the marketplace, it becomes increasingly difficult for a product or service to remain in the maturity phase in perpetuity.

Product Life Cycle Stages



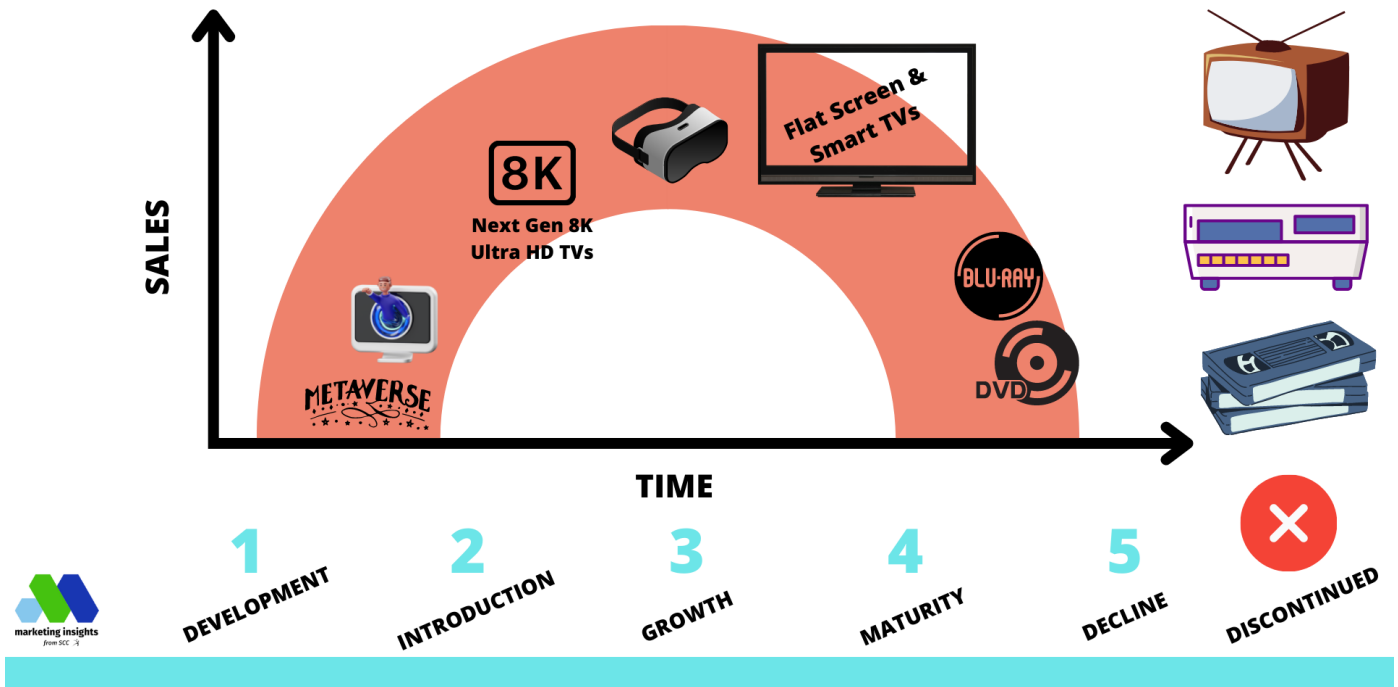
Product Evolution Through Life Cycle Stages

While all products have a life cycle, many are able to remain in the mature stage of the cycle for years before reaching the decline. However, many products never even make it past the development stage. Other products follow their own unique path as they move throughout the cycle. For example, some products might cycle back into the growth stage after reaching the decline stage with effective marketing from a business that results in a sales resurgence.

Product Life Cycle in the Home Entertainment Industry

Once all the rage, video cassettes (VHS tapes) have not appeared on the shelves of retailers in two decades. Laser discs raced through the entire product life cycle in just a few short years. Meanwhile, the products that displaced video cassettes (VHS), DVDs, and Blu-ray discs, are now in the decline stage. Flat screen and smart TVs are in the mature stage of the life cycle while virtual reality products are in the growth stage. Entertainment products in the metaverse are now in the development stage.

Product Life Cycle of Entertainment Products



DISCUSSION TOPIC



Have you ever tested a product? For example, have you ever installed a “beta” version of Apple’s newest iPhone operating system (iOS) before the software was officially launched to the masses?

Why do you think Apple would roll out an unfinished software update when they know it could potentially still have bugs?

What other brands might benefit from a similar strategy?



PRODUCT DEVELOPMENT

As we have learned, it takes more than just a good idea to introduce a new product or service into the marketplace. **Product development** is the process of determining all the steps necessary for creating a new product. The process requires several important steps before reaching the introduction phase of the product life cycle and launching the product or service. Product development helps marketing professionals to make marketing mix decisions about price, promotion, and place.

Product Development Stages

There are six stages in product development:

1. Ideation
2. Market Research
3. Competition Analysis
4. Product Development
5. Product Testing
6. Product Launch



1. Ideation

Ideation refers to the conceptualization phase of the product planning process. This is where the concept for a new product or service originates, then discussed internally to determine its viability.

2. Market Research

An important component of the product planning process is market research. In this step, a business can identify whether a product or service will meet the wants and needs of consumers.

3. Competition Analysis

To determine the viability of a new product or service, a business must conduct an analysis of the competition. This step includes a review of competing products and services within the market and can help a business to determine what the product or service concept lacks in features relative to the competition as well as where they may have a competitive advantage.

4. Product Development

The product development step occurs in phases, beginning with a business determining what problem they are trying to solve with the creation of a new product or service. As the business examines the product development process, it will ask important questions like “why”, “who”, and “how” the project will get done.

Phase 1: Why?

In the first phase, a business will question “why” a new product is being developed. What problem does it solve or what purpose does it serve?

- Does the company need to introduce a lighter running shoe or add more arch support to an existing shoe?

Phase 2: Who?

In the second phase, a business will identify “who” must be involved in the development process.

- Will the project require engineers? Manufacturing? Supply chain managers? Product line managers?

Phase 3: How?

The third phase is a project assessment phase when a business will estimate the project timeline, costs, and necessary resources.

- Sourcing: the business evaluates which suppliers can best provide the necessary resources for the project
- A company may request RFPs (requests for proposals) from vendors and compare quotes from manufacturer A and manufacturer B
- The business will also discuss the price point for the new product in this phase based on costs associated with the development of the product (called costing)

Phase 4: Decision Phase

The fourth and final phase (decision phase) is when the business determines how the product will be made.

- Business identifies which suppliers and distributors to work with, price points and finalizes a project timeline.
- At this point, all the contracts with suppliers are secured, a project timeline is in place, and it is time to build, create, or manufacture the product or service.

5. Product Testing

At this point in the product development process, a factory or manufacturer produces a sample or prototype of the product the business has asked them to create. This is the product testing phase where a business will test the product or service before introducing it to the market. Businesses will determine whether consumers understand the new product or service and if they are receptive to the concept.



This helps a business to be confident that the product or service they will be launching is something that consumers will actually purchase.

A business might choose to make alterations to the product based on feedback during testing. However, it will evaluate how costly those changes might be when determining which, if any, adjustments will be made.

With digital products, this is the step where a business may choose to engage in beta testing. Beta testing typically refers to a software product in which a small percentage of consumers use or sample the product and then offer feedback to the business.

6. Product Launch

In the product launch step, the new product or service is introduced to the market. While it varies from industry to industry (and product to product), it typically takes an estimated three months to launch the product after the product testing phase. At this point, the company can begin to accept pre-orders or offer “pre-sale” promotions.

Product planning example:

Lululemon, long associated with the development of comfortable athletic apparel products and responsible for “athleisure” innovation, launched its first running shoe product in 2022.¹ Here we will examine how the initiative illustrates various steps in the product development process, (based on information from a news story published by [Fast Company](https://www.fastcompany.com/90728587/with-its-first-line-of-sneakers-lululemon-wants-to-bring-its-science-of-feel-to-your-feet)).

The problem to solve:

- For years, Lululemon has [researched](#) what the company refers to as the ‘Science of Feel’, essentially monitoring how apparel feels on the body when people exercise, along with how it impacts the consumer psychologically while wearing the product.

The research:

- The company studied the market and determined the market had a need for a running shoe developed with ‘Science of Feel’ in mind
- The company also researched how men’s feet differ from men’s to construct the ideal fit

The competition analysis:

- Very few sneaker brands offer running shoes designed specifically for women

The product development:

- The product was named “Blissfeel”
- The price point was set at \$148 at retail
- The initial product was offered in 110 colorways, ranging from gray to peach with neon green and electric red
- The brand used information from 3D foot nerve mapping to determine potential areas of sensitivity, heat, and sweat buildup

¹ <https://www.fastcompany.com/90728587/with-its-first-line-of-sneakers-lululemon-wants-to-bring-its-science-of-feel-to-your-feet>



DISCUSSION TOPIC

According to a [study](#) from market research company IDC, the gaming sector is a \$180 billion industry. Gamers spend hundreds of hours playing and competing on a variety of consoles or devices every year.

Ikea viewed the growing industry as a business opportunity. Recognizing the limited number of furniture options designed specifically for gamers, the company launched a collection of gaming accessories in 2021.

The product line now features over 30 [products](#), ranging from gaming desks and chairs to neck pillows.



Based on what you learned in this section, discuss the following:

- How would you describe how Ikea approached the first phase of the product development process?
- What was the “why” question that they answered?
- How do you think that influenced decisions the company made throughout the remainder of the product development process?
- Do you think Ikea engaged in product testing before introducing the new gaming accessories and furniture? Who might have tested the product?
- How do you think they marketed the new product line at launch?



KEY TAKEAWAY

It takes more than just a good idea to introduce a new product or service into the marketplace. **Product planning** is the process of determining all the steps necessary for creating a new product.

That product or service will then enter the various stages of the **product life cycle**, from the origination of the idea to the product’s decline when it is phased out and discontinued. Marketing professionals and businesses use the product life cycle to make important decisions and strategies on everything from sales forecasts, marketing budgets, product pricing, and packaging.



INDUSTRY APPLICATION

Connect your classroom with industry examples by reviewing the following news stories relating to concepts covered in this lesson:

Product Planning - [Going big: Behind the making of Goldfish Mega Bites – Campbell Soup Company](#)

Product Planning - [Cereal with orange juice? This is how Tropicana will celebrate International Orange Juice Day](#)

Product Planning - [Why Apple's VR headset could succeed where every similar product has failed](#)

Product Planning - [Why these chunky, ugly running shoes are selling like crazy](#)

Product Planning - [Panda Express' orange chicken changed the game for American Chinese food 35 years ago](#)

Product Development - [Kellogg's wants you to add water to its new cereal](#)

Product Launch - [How Gorton's Seafood is using TikTok for a product launch](#)

Product Launch - [Ramen for breakfast? Cup Noodles launches new breakfast flavored noodles](#)

Product Life Cycle - [Pepsi Is Discontinuing Sierra Mist In Favor of All-New Sprite Competitor](#)

Product Life Cycle - [Can streaming video survive the metaverse?](#)

KEY TERMS DEFINED:

Product development: The process of determining all the steps necessary for creating a new product.

Product life cycle: Refers to the length of time a product is introduced to consumers into the market until it is phased out and removed from the shelves.

Product management: The process within a business that supports and manages the activities related to designing, developing, maintaining, improving, launching, and acquiring products or services.

