In this lesson, we consider new product/service introductions. We hear success stories about new and innovative products as well as failures. It takes time, effort, and money to create and successfully launch new products/services. We will also be looking at the reasons behind new product failures.

Stages in the New-Product Process

New-product development requires a seven-stage process, as shown in the figure below. We will consider each stage in detail.



New-Product Process. The seven stages in the new-product process include 1) new-product strategy development, 2) idea generation, 3) screening and evaluation, 4) business analysis, 5) development, 6) market testing, and 7) commercialization.



New-Product Strategy Development

This is the first stage of new-product development. It provides the necessary focus, structure, approach, and guidelines for pursuing innovation. Businesses decide the type of innovation they are willing to pursue. Critical questions are asked and answered, such as how much cost and profitability new products should contribute to the company.

In this stage, some businesses use **Six Sigma** protocols as part of their new-product strategy. It refers to satisfying the needs of consumers by achieving quality through a highly disciplined process. Six Sigma processes focus on developing near-perfect products/services. The aim is to achieve "zero defects." In Six Sigma protocols, the decisions are made based on data and research rather than gut feeling.

Many companies make use of lead users as a part of their new-product strategy development stage. **Lead users** are a small group of potential users who desire new products or services before the general market recognizes this need. Lead users can provide critical information and feedback to businesses that is extremely helpful in the new-product process. The feedback helps shape the nature and scope of what is actually to be created or produced.



Idea Generation

Idea generation is one of the most difficult stages of the new-product process. In this stage, companies focus on developing a pool of concepts. Each one of these concepts is a candidate for new products/services.

Companies utilize different tools for idea generation, one of which is called **crowdsourcing**. A precise definition for the focus on innovation is set by the company. The company then turns the floor over to massive numbers of people for their ideas. There could be thousands of ideas sent by interested users. Crowdsourcing might generate a huge pool of ideas.



Retrieved from https://www.dell.com

Example: Dell used crowdsourcing on their online site to generate a pool of ideas. 13,464 ideas for new products, website, and marketing improvements were submitted. The company decided to implement 402 of these ideas.



Screening and Evaluation

This stage involves evaluation of ideas from the pool of ideas generated in the previous stage. Some of the ideas are a better fit to the company's objectives than others. The goal in this stage is to identify the best idea from the pool. Two types of evaluation methods are employed: internal and external.

Internal approach: Businesses consider their scope in innovation that they set in the first stage of the new-product development process. They internally evaluate the technical feasibility of the proposal. The idea should meet the objectives of their new-product strategy.

External approach: Businesses externally evaluate ideas by asking their customers. *Concept tests* are applied as external evaluations. There is no prototype or physical product at this stage. Concept testing is simply taking the idea on paper without creating a prototype to consumers and asking their feedback. It is the preliminary testing of the new-product idea rather than the actual, final product with consumers.

Concept Check Question:

1. What is the first step in the new-product process?

Business analysis

New-product strategy development

Screening and evaluation

Idea generation



Business Analysis

In this stage, businesses specify the product features, their marketing strategy, and financial projections. Financial projections are especially important for commercializing the product. Please note that this is the last checkpoint before significant capital is invested in creating a prototype. A **prototype** is a full-scale operating model of the product.

Stop and Think Question: What type of questions should businesses ask in the business analysis stage? Remember that we are interested in our production capabilities, the product's features in relation to our existent products, and regulatory requirements. Click reveal after thinking about the answer.



Development

This is the stage in which the prototype is produced. Up to this point the new product was just an idea on paper; in this stage, the idea is turned into a physical product or prototype.



Market Testing

Market testing is the last step before commercialization. The goal is to expose the product to prospective consumers under realistic purchase conditions. The results of testing show if the potential consumers would buy the product.

We are interested in three types of market testing:

- 1. standard test markets
- 2. controlled test markets
- 3. simulated test markets

Standard test markets: Businesses pick a number of test cities and use actual distribution channels to transport and sell the product. This type of testing is expensive and fairly time consuming. In addition to distribution channels, promotion and sales programs must be set up.

Controlled test markets: There are service companies who work under contracts and perform testing of products. In the controlled test markets method, the producer signs a contract with a service company and leaves the entire test program to them. The service company pays retailers for shelf space and can therefore guarantee a specified percentage of the product's potential distribution volume.

Simulated test markets: Simulated test markets (STM) help save time and money. Companies use simulations to replicate a full-scale test market. Shopping malls are ideal places for STMs, where consumers are given the chance to try the product and test it. In some cases participants are given money to decide to buy or not buy the firm's or the competitors' product from a real or simulated store environment.



Commercialization

Commercialization is the last and the most expensive stage of the new-product development process. It involves positioning, full-scale production, and sales.

Three main tools are used in the commercialization stage including the use of perceptual maps, product positioning, and regional rollouts. You have seen perceptual maps in an earlier lesson. A perceptual map is a two-dimensional figure showing the product and substitute products on the same map. You have learned positioning as well.

Critical Thinking Question: Recall the two approaches to positioning. What are they and how do they differ?

Regional rollouts are considered as helpful in minimizing the risk of new-product failure. The idea is that the product is introduced sequentially into certain geographical areas to allow production levels and marketing activities to build up gradually. It helps to allocate the cost of distribution and marketing to certain cities first, then move into more locations gradually. For example, grocery product manufacturers and some telecommunications service providers commonly apply regional rollouts.

Grocery product manufacturers face costly fees in the commercialization stage. One type of fee is known as a **slotting fee**. Shelf space is limited in the grocery stores and many supermarkets require a slotting fee for new products. A slotting fee is a payment a manufacturer makes to place a new item on a retailer's shelf. Such fees can easily add up to several million dollars for a single product when considering multiple locations.

Another fee is known as a **failure fee**. Grocery stores set a predetermined number of sales for new grocery products. If the product's sales do not meet the targeted level of sales, some retailers require a failure fee. It is a penalty payment that the producer makes to compensate the grocery store for failed sales from its valuable shelf space.

Slotting fees and failure fees are further reasons why large grocery product manufacturers use regional rollouts.

Summary of the New-Product Process

The table below presents a summary of the new-product development process including all seven stages and corresponding methods commonly used in each stage.

Stages of Process	Purpose of Stage	Marketing Information and Methods Used
New-product strategy development	Identify focus, structure, approach, and guidelines for innovation	Company objectives: use of cross-functional realms. Six Sigma and lead users
Idea generation	Develop concepts for possible products	Ideas from employees and co-workers, consumers, research and development, and competitors; methods of brainstorming and focus groups
Screening and evaluation	Separate good product ideas from bad ones inexpensively	Screening criteria, concept tests, and weighted point systems
Business analysis	Identify the product's features and its marketing strategy, and make financial projections	Product's key features, anticipated marketing mix strategy; economic, marketing, production, legal, and profitability analyses
Development	Create the prototype product, and test it in the laboratory and on consumers	Laboratory and consumer tests on product prototypes
Market testing	Test product and marketing strategy in the marketplace on a limited scale	Test markets, simulated test markets (STMs), virtual reality market testing
Commercialization	Position and offer product in the marketplace	Perceptual maps, product positioning, regional rollouts

Factors Contributing to New-Product

Failures

There are many factors that contribute to the failures of new-product introductions. We can take lessons from these failures if we understand the true reasons behind these new-product failures. Let us take a look at some factors.

Factor 1: Insignificant "point of difference"

New products cannot be successful unless they possess unique attributes that are superior to existing competitive products. If the characteristics of the new product are not significant enough to deliver unique benefits, it could be a reason for failure.



Retrieved from https://blog.generalmills.com/2015/01/ 5-foods-from-the-90s-we-miss-today/

Example: General Mills introduced "Fingos," a sweetened cereal flake. The point of difference was that consumers were supposed to snack on them dry. It was not supposed to be mixed with milk. But this point of difference was not significant enough, since most consumers did not eat the cereal dry instead they continued to snack on competing snacks, such as popcorn, potato chips, or Cheerios from the box.

Factor 2: Incomplete market and product definition before product development starts

When introducing new products, a precise *protocol* should be followed. The protocol should identify a well-defined target market, specific customer needs/wants, and what the product will be and do to satisfy consumer needs. If there are gaps in the protocol, it would lead to problems in product development.



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from https://manuals.info.apple.com/

MANUALS/1000/MA1485/en_US/0340315ANEMUM.pdf

Example: Apple Computer introduced the hand-sized Newton computer without following a clear protocol. The product was a failure even though it was intended to help keep the users organized.

Factor 3: Too little market attractiveness

Even though the product is well designed, the target market is critical to the success of the product. If the target market is too small it might not bring enough profit to cover the research and development, and marketing expenses of the new product.



Battery by Toxitz/iStock/Getty Images; logo retrieved from

https://www.kodak.com

Example: Kodak discontinued its Ultralife lithium battery in the early 1990s. The battery had a 10-year shelf life, which was going to last twice as long as an alkaline battery. However, Kodak made the product available only in the 9-volt size. 9-volt batteries account for less than 10% of the batteries sold in North America. The product was not successful due to the very small market size.

Factor 4: Poor execution of the marketing mix (brand name, package, price, promotion, and distribution)

Marketing mix elements (4Ps) are under the control of the company. Businesses mix these elements in order to create the best potential for the success of the new product/service. If the mix is not aligned with the company's goals from this product/service, it is likely that the new product will not succeed.



Glass from Tas3/iStock/Getty Images;logo retrieved from https://www.minutemaid.com

Example: Coca-Cola's Minute Maid Squeeze-Fresh frozen orange juice concentrate in a squeeze bottle. The product was supposed to stay (in the concentrate form) fresh in the refrigerator for more than a month. Consumers would make one glass of juice at a time. This product failed because of the poor execution of marketing mix elements. It was messy to use, and the advertising and packaging did not educate consumers well enough on how much concentrate to mix.

Factor 5: Poor product quality

The quality of the product/service is judged by the users/consumers when they try the product/service the first time. Poor quality is an issue which would be a reason for the failure of a product/service. If the product is pushed to the market before it is thoroughly tested, it might fail due to lower performance than promised.



Retrieved from https://computerstepbystep.com/windows_xp_to_vista.html

Example: Microsoft launched Windows Vista to replace Windows XP. However, Vista software had many quality problems and consumers immediately reacted. Even though Microsoft spent \$500 million on a promotional budget, Vista was not successful due to poor quality.

Factor 6: Bad timing

The time of introduction is a critical factor for the success of the new products/services. Environmental forces are shaping markets and shifting the tastes of consumers. It is not ideal to introduce a new product when there are major shifts happening in the market.



Microsoft and Apple

Layton, J. How does Zune compare to iPod? Retrieved from https://electronics.howstuffworks.com/zune-ipod.htm

Example: Microsoft introduced its Zune player a few years after Apple launched its iPod. Given iPod's market share at the time, the introduction of Zune was not timely. It was too late to enter after iPod had scooped up the majority of the market share at that time.

Factor 7: No economical access to buyers

Making products available to buyers might be costly for some products. Grocery products are a good example. There are thousands of items sold in the supermarkets. As new products are introduced, there is a fight for the limited shelf space. The cost of shelf space and the fees supermarkets charge could easily add up to hundreds of thousands of dollars. Products are assigned shelf space based on a targeted number of sales. If target sales are not met, supermarkets charge additional fees.



Queensbury/iStock/Getty Images

Example: Craft beer in The Beer Store. The Beer Store provides 20% of its shelf space for products from Ontario small and craft brewers. There are currently more than 250 micro-breweries in Ontario, all competing for this limited shelf space in 450 retail Beer Stores across Ontario.

Organizational Problems: New-Product Failures

No organization wants to spend money and effort on new product introduction and face a failure at the end. There are critical factors to pay attention to in order to avoid failures.

1. Not really listening to the "voice of the consumer"

• The needs and wants of the consumers must be the center of attention. Marketing research reveals important information regarding consumers' preferences. Businesses need to invest enough time and money into exploratory research if they want to discover the consumer needs successfully.

2. Skipping steps in the new-product process

• There is a seven-step new-product process (see figure below). Skipping steps in the process might lead to product failures.

3. Pushing a poorly conceived product into the market to generate quick revenue

• There is a lot of pressure on the marketing managers to meet quarterly revenue targets. If products are pushed to the market too soon, before they are properly tested, they may show poor quality and poor performance.

4. "Groupthink" in task force and committee meetings

• Some members in a new product development committee might see a serious defect but be afraid to speak up. They don't want the team to regard them as a "negative thinker." Everyone wants to be a team player. Defects might become invisible due to "groupthink" in the committee meetings.

5. Not learning critical takeaway lessons from past failures

• Every failure reveals important information as to what went wrong. Businesses must carefully examine the reasons behind past failures in order to be successful in future new introductions.

Source: https://contensis.uwaterloo.ca/sites/courses-archive/1191/ECON-344-ARBUS-302/lecture-content/module-2/week-7-1.aspx