Developing New Products and Services

9

ARNING BJECTIVES
ter reading this chapter u should be able to:

01 Recognize the terms that pertain to products and services.

O2 Identify the ways to classify consumer and business products and services.

.O3 Describe four unique elements of services.

.O4 Explain the significance of "newness" and "consumer learning" in terms of new products and services.

LO5 Describe the factors affecting the success or failure of a new product or service.

LO6 Explain the purposes of each step of the new-product process.

QR 9–1
Apple
iPad Ad

APPLE'S NEW-PRODUCT INNOVATION MACHINE

The stage in front of an auditorium is empty except for a chair, a table, and a huge screen with a large white logo. Then, in walks a legend ready for his magic show in his black mock turtleneck, jeans, and gray New Balance sneakers.

Apple's Innovation Machine

The legend, of course, is Steve Jobs (opposite page), co-founder and former chairman of the board of Apple, Inc., who died in October 2011. *Advertising Age* anointed Steve Jobs as Marketer of the Decade. *Fortune* rated Apple as the world's most-admired company while *Bloomberg Businessweek* has perennially identified Apple as the world's most innovative company. The magic shows Jobs orchestrated over the years introduced many of Apple's market-changing innovations, such as the:

- Apple II—the first commercial personal computer (1977).
- Macintosh—the first personal computer with a mouse and a graphical user interface (1984).
- iPod—the first commercially successful MP3 digital music player (2001).
- iPhone—the world's best multitouch mobile phone and media player (2007).
- MacBook Air—the extremely thin laptop that uses a solid state drive instead of a hard disk (2008).
- iPad—the thin, tablet-shaped device, now with the dazzling Retina Display color screen, that enables users to read books, newspapers, and magazines and access an array of "apps" such as video games (2010).

Steve Jobs's innovations revolutionized six industries: personal computers, animated movies, music, phones, tablet computing, and digital publishing.[1]

iCloud: Where the Digital Lifestyle Is Heading

Because many consumers now use multiple devices (smartphones like iPhone, PCs like iMac, and tablet devices like iPad), all of them need a way to share the music, photos, videos, files, and apps that reside on any one device. Enter iCloud (opposite page), "Which will now be the center of your digital life," as Steve Jobs explained in mid-2011. "iCloud stores all your content and wirelessly pushes any changes or purchases from one device automatically [up to the 'cloud' and then] down to all your other devices. Consumers won't have to worry about syncing their devices any longer to transfer their data. With iCloud, it will just work!"[2] Welcome to *cloud computing*, which involves moving the data and processing tasks normally hosted on your own personal computer onto a remote data center server accessible by the Internet.[3]

As the previous timeline of Apple's innovation shows, the life of an organization depends on how it conceives, produces, and markets *new* products (goods, services, and ideas), the topic of this chapter. Chapter 10 discusses the process of managing *existing* products, services, and brands.

WHAT ARE PRODUCTS AND SERVICES?

LO1

The essence of marketing is in developing products and services to meet buyer needs. A **product** is a good, service, or idea consisting of a bundle of tangible and intangible attributes that satisfies consumers' needs and is received in exchange for money or something else of value. Let's look more carefully at the meanings of goods, services, and ideas.

product
A good, service, or idea consisting of tangible and intangible features that satisfies consumers' needs and is received in exchange for money or something else of value.

A Look at Goods, Services, and Ideas

A *good* has tangible attributes that a consumer's five senses can perceive. For example, Apple's iPad can be touched and its features can be seen and heard. A good also may have intangible attributes consisting of its delivery or warranties and embody more abstract concepts, such as becoming healthier or wealthier. Goods also can be divided into nondurable goods and durable goods. A *nondurable* good is an item consumed in one or a few uses, such as food products and fuel. A *durable* good is one that usually lasts over many uses, such as appliances, cars, and mobile phones. This classification method also provides direction for marketing actions. For example, nondurable goods, such as Wrigley's gum, rely heavily on consumer advertising. In contrast, costly durable goods, such as cars, generally emphasize personal selling.

Services are intangible activities or benefits that an organization provides to satisfy consumers' needs in exchange for money or something else of value. Services have become a significant part of the U.S. economy, exceeding 40 percent of its gross domestic product. Hence, a product may be the breakfast cereal you eat, whereas a service may be a tax return an accountant fills out for you.

services
Intangible activities or benefits that an organization provides to satisfy consumers' needs in exchange for money or something else of value.

Finally, in marketing, an *idea* is a thought that leads to a product or action, such as a concept for a new invention or getting people out to vote.

Throughout this book, *product* generally includes not only physical goods but services and ideas as well. When *product* is used in its narrower meaning of "goods," it should be clear from the example or sentence.

Classifying Products

LO2

Two broad categories of products widely used in marketing relate to the type of user. **Consumer products** are products purchased by the ultimate consumer, whereas **business products** (also called *B2B products* or *industrial products*) are products organizations buy that assist in providing other products for resale. But some products can be considered both consumer and business items. For example, an Apple iMac computer can be sold to consumers for personal use or to business firms for office use. Each classification results in different marketing actions. Viewed as a consumer product, the iMac would be sold through Apple's retail stores or directly from its website. As a business product, an Apple salesperson might contact a firm's purchasing department directly and offer discounts for multiple purchases.

consumer products
Products purchased by the ultimate consumer.

business products
Products organizations buy that assist directly or indirectly in providing other products for resale.

Consumer Products The four types of consumer products shown in Figure 9–1 differ in terms of (1) the effort the consumer spends on the decision, (2) the attributes used in making the purchase decision, and (3) the frequency of purchase. *Convenience*

BASIS OF COMPARISON	TYPE OF CONSUMER PRODUCT: CONVENIENCE PRODUCT	SHOPPING PRODUCT	SPECIALTY PRODUCT	UNSOUGHT PRODUCT
Product	Toothpaste, cake mix, hand soap, ATM cash withdrawal	Cameras, TVs, briefcases, airline tickets	Rolls-Royce cars, Rolex watches, heart surgery	Burial insurance, thesaurus
Price	Relatively inexpensive	Fairly expensive	Usually very expensive	Varies
Place (distribution)	Widespread; many outlets	Large number of selective outlets	Very limited	Often limited
Promotion	Price, availability, and awareness stressed	Differentiation from competitors stressed	Uniqueness of brand and status stressed	Awareness is essential
Brand loyalty of consumers	Aware of brand but will accept substitutes	Prefer specific brands but will accept substitutes	Very brand loyal; will not accept substitutes	Will accept substitutes
Purchase behavior of consumers	Frequent purchases; little time and effort spent shopping	Infrequent purchases; needs much comparison shopping time	Infrequent purchases; needs extensive search and decision time	Very infrequent purchases; some comparison shopping

FIGURE 9–1
How a consumer product is classified significantly affects which products consumers buy and the marketing strategies used.

products are items that the consumer purchases frequently, conveniently, and with a minimum of shopping effort. *Shopping products* are items for which the consumer compares several alternatives on criteria such as price, quality, or style. *Specialty products* are items that the consumer makes a special effort to search out and buy. *Unsought products* are items that the consumer does not know about or knows about but does not initially want.

Figure 9–1 shows how each type of consumer product stresses different marketing mix actions, degrees of brand loyalty, and shopping effort. But how a consumer product is classified depends on the individual. One woman may view a camera as a shopping product and visit several stores before deciding on a brand, whereas her friend may view a camera as a specialty product and make a special effort to buy only a Nikon.

Business Products A major characteristic of business products is that their sales are often the result of *derived demand*; that is, sales of business products frequently result (or are derived) from the sale of consumer products. For example, as consumer demand for Ford cars (a consumer product) increases, the company may increase its demand for paint spraying equipment (a business product).

Business products may be classified as components or support products. *Components* are items that become part of the final product. These include raw materials such as lumber, as well as assemblies such as a Ford car engine. *Support products* are items used to assist in producing other products and services. These include:

- *Installations*, such as buildings and fixed equipment.
- *Accessory equipment*, such as tools and office equipment.
- *Supplies*, such as stationery, paper clips, and brooms.
- *Industrial services*, such as maintenance, repair, and legal services.

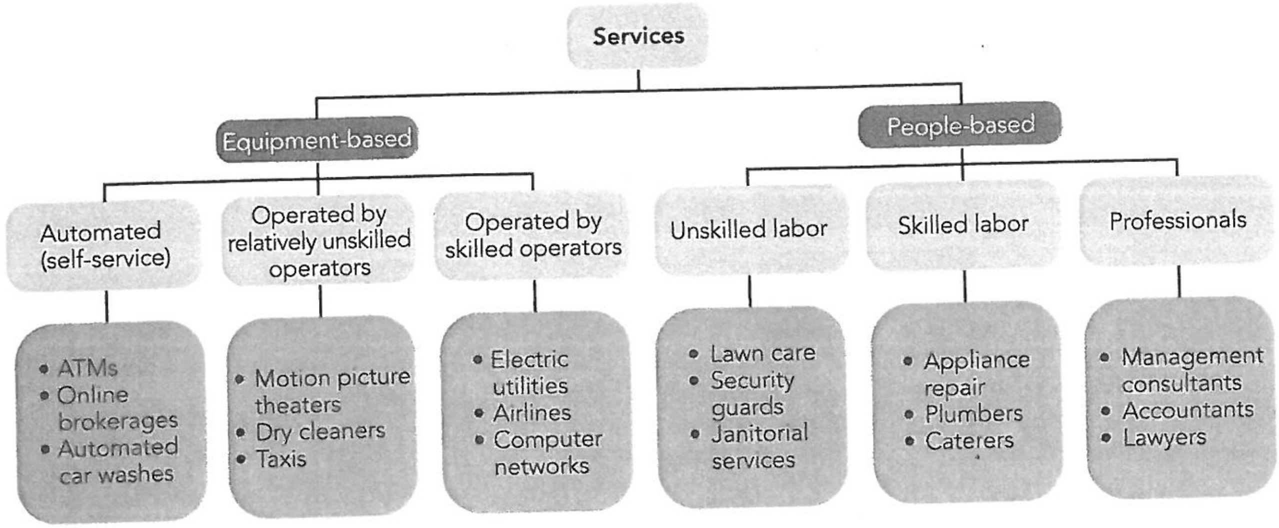


FIGURE 9–2
Services can be classified as equipment-based or people-based.

Strategies to market business products reflect both the complexities of the product involved (paper clips versus computer-machine tools) and the buy-class situations discussed in Chapter 5.

Classifying Services

Services can be classified according to whether they are delivered by (1) people or equipment, (2) business firms or nonprofit organizations, or (3) government agencies. Organizations in each of these categories often use significantly different kinds of market-mix strategies to promote their services.

Delivery by People or Equipment Figure 9–2 shows the great diversity of organizations that offer services. People-based professional services include those offered by advertising agencies or medical doctors. Sears utilizes skilled labor to offer appliance repair services. Broadview Security uses relatively unskilled labor to provide its security guard services. The quality of all these people-based services can vary significantly depending on the abilities of the person delivering the service.

Figure 9–2 also suggests that equipment-based services do not have the marketing concern of inconsistent quality because employees do not have direct contact when providing the service to consumers. Instead, consumers receive these automated services without interacting with any service employees, such as doing self check-in at Southwest Airlines, watching a movie at a local theater, or using Schwab's online stock trading.[4]

American Red Cross

Delivery by Business Firms or Nonprofit Organizations As discussed in Chapter 2, privately owned firms must make profits to survive, while nonprofit organizations seek to satisfy clients and be efficient. The kinds of services each offers affect their marketing activities. Recently, many nonprofit organizations, such as The American Red Cross, have used marketing to improve their communications and better serve those in need.

Delivery by Government Agencies Governments at the federal, state, and local levels provide a broad range of services. These organizations also have adopted many marketing practices used by business firms. For example, the United States Postal Service's "Easy Come. Easy Go" marketing campaign is designed to allow it to compete better with UPS, FedEx, DHL, and foreign postal services for global package delivery business.

The Uniqueness of Services

LO3

Four unique elements distinguish services from goods. These are *intangibility, inconsistency, inseparability,* and *inventory*—referred to as the **four I's of services**.

four I's of services
The four unique elements that distinguish services from goods: intangibility, inconsistency, inseparability, and inventory.

Intangibility Being intangible, services can't be touched or seen before the purchase decision. Instead, services tend to be a performance rather than an object, which makes them much more difficult for consumers to evaluate. To help consumers assess and compare services, marketers try to make them tangible or show the benefits of using the service.

Inconsistency Services depend on the people who provide them. As a result, their quality varies with each person's capabilities and day-to-day job performance. Inconsistency is more of a problem in services than it is with tangible goods. Tangible products can be good or bad in terms of quality, but with modern production lines, their quality will at least be consistent. On the other hand, the Philadelphia Phillies baseball team may have great hitting and pitching one day and the next day lose by 10 runs. Organizations attempt to reduce inconsistency through standardization and training.

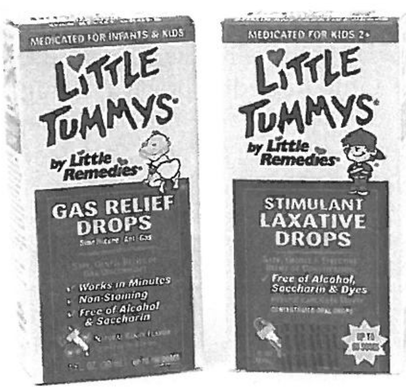
Inseparability Inseparability means that the consumer cannot distinguish the service provider from the service itself. For example, the quality of large lectures at your university or college may be excellent, but if you don't get your questions answered, find the counseling services poor, or do not receive adequate library assistance, you may not be satisfied with the entire educational experience delivered. Therefore, you probably won't separate your perception of the "educational experience"—the service itself—from all the people delivering the educational services for that institution.

Inventory Many goods have inventory handling costs that relate to their storage, perishability, and movement. With services, these costs are more subjective and are related to **idle production capacity**, which is when the service provider is available but there is no demand for the service. For a service, inventory cost involves paying the service provider along with any needed equipment. If a physician is paid to see patients but no one schedules an appointment, the idle physician's salary must be paid regardless of whether the service was performed. In service businesses that pay employees a commission, such as a part-time clerk at Sears, the sales clerk's work hours can be reduced to lower Sears's idle production capacity.

idle production capacity
When the service provider is available but there is no demand for the service.

Today, many businesses find it useful to distinguish between their core product—either a good or a service—and supplementary services. U.S. Bank has both a core service (a checking account) and supplementary services, such as deposit assistance, parking, drive-throughs, and ATMs. Supplementary services often allow service providers to differentiate their offerings from those of competitors to add value for consumers.

The text describes how the broad Little Remedies product line benefits both consumers and retailers.



Assessing Service Quality

Once a consumer tries a service, how is it evaluated? Primarily by comparing expectations about a service offering to the actual experience a consumer has with the service.[5] Differences between the consumer's expectations and his or her actual experiences are identified through *gap analysis*. This analysis asks consumers to assess their expectations and experiences on dimensions of service quality such as those illustrated in Figure 9–3 on the next page for airline customers.[6] Expectations are influenced by word-of-mouth communications, personal needs, past experiences, and promotional activities, while actual experiences

DIMENSION	DEFINITION	EXAMPLES OF QUESTIONS AIRLINE CUSTOMERS MIGHT ASK
Reliability	Ability to perform the promised service dependably and accurately	Is my flight on time?
Tangibility	Appearance of physical facilities, equipment, personnel, and communication materials	Are the gate, the plane, and the baggage area clean?
Responsiveness	Willingness to help customers and provide prompt service	Are the flight attendants willing to answer my questions?
Assurance	Knowledge and courtesy of employees and their ability to convey trust and confidence	Are the ticket counter attendants, flight attendants, and pilots knowledgeable about their jobs?
Empathy	Caring, individualized attention provided to customers	Do the employees determine if I have special seating, meal, baggage, transfer, or rebooking needs?

FIGURE 9–3
The five dimensions related to the quality of a service are illustrated with questions airline customers might ask.

are determined by the way an organization delivers its service.[7] What if someone is dissatisfied and complains? Recent studies suggest that customers who experience a "service failure" will increase their satisfaction if the service provider makes a sincere attempt to address the complaint.[8]

Product Items, Product Lines, and Product Mixes

product item
A specific product that has a unique brand, size, or price.

product line
A group of products that are closely related because they are similar in terms of consumer needs and uses, market segments, sales outlets, or prices.

Most organizations offer a range of products and services to consumers. A **product item** is a specific product that has a unique brand, size, or price. For example, Ultra Downy softener for clothes comes in several different sizes. Each size is a separate *stock keeping unit* (SKU), which is a unique identification number that defines an item for ordering or inventory purposes.

A **product line** is a group of product or service items that are closely related because they satisfy a class of needs, are used together, are sold to the same customer group, are distributed through the same outlets, or fall within a given price range. Nike's product lines include shoes and clothing, whereas the Mayo Clinic's service lines consist of inpatient hospital care and outpatient physician services. Each product line has its own marketing strategy.

QR 9–2
Little Remedies Ad

The Little Remedies product line consists of more than a dozen nonprescription medicines for infants and young children sold in a family of creative packages. A broad product line enables both consumers and retailers to simplify their buying decisions. If a family has a good experience with one Little Remedies product, it might buy another one in the line. And an extensive line enables Little Remedies to obtain distribution chains such as Babies "Я" Us and Walmart, avoiding the need for retailers to deal with many different suppliers.

product mix
All the product lines offered by a company.

Many firms offer a **product mix**, which consists of all of the product lines offered by an organization. For example, Cray Inc. has a small product mix of five supercomputer lines that are sold mostly to governments and large businesses. Procter & Gamble, however, has a large product mix that includes product lines such as beauty and grooming (Crest toothpaste and Gillette razors) and household care (Tide detergent and Pampers diapers).

learning review

1. What are the four main types of consumer products?
2. What are the 4 I's of services?
3. What is the difference between a product line and a product mix?

NEW PRODUCTS AND WHY THEY SUCCEED OR FAIL

LO4

New products are the lifeblood of a company and keep it growing, but the financial risks can be large. Before discussing how new products reach the market, we'll begin by looking at *what* a new product is.

Sony must take care in launching its "new" PlayStation Move, when a PlayStation 3 exists already.

What Is a New Product?

The term *new* is difficult to define. Is Sony's PlayStation Move *new* when there was already a PlayStation 3?[9] Is Nintendo's Wii *new* when its GameCube launch goes back to 2001? What does *new* mean for new-product marketing? Newness from several points of view are discussed next.

Newness Compared with Existing Products If a product is functionally different from existing products, it can be defined as new. Sometimes this newness is revolutionary and creates a whole new industry, as in the case of the Apple II computer. At other times more features are added to an existing product to try to appeal to more customers. And as microprocessors now appear everywhere from computers to appliances, consumers' lives get far more complicated. This proliferation of extra features—sometimes called "feature bloat"—overwhelms many consumers. The Marketing Matters box on the next page describes how founder Robert Stephens and his Geek Squad are working to address the rise of feature bloat.[10]

Newness from the Consumer's Perspective A second way to define new products is in terms of their effects on consumption. This approach classifies new products according to the degree of learning required by the consumer, as shown in Figure 9–4.

FIGURE 9–4
The degree of "newness" in a new product affects the amount of learning effort consumers must exert to use the product and the resulting marketing strategy.

LOW — Degree of New Consumer Learning Needed — HIGH

BASIS OF COMPARISON	CONTINUOUS INNOVATION	DYNAMICALLY CONTINUOUS INNOVATION	DISCONTINUOUS INNOVATION
Definition	Requires no new learning by consumers	Disrupts consumer's normal routine but does not require totally new learning	Requires new learning and consumption patterns by consumers
Examples	New improved shaver, detergent, and toothpaste	Electric toothbrush, compact disk player, and automatic flash unit for cameras	Wireless router, digital video recorder, and electric car
Marketing strategy	Gain consumer awareness and wide distribution	Advertise points of difference and benefits to consumers	Educate consumers through product trial and personal selling

Marketing Matters > > > > > customer value

Feature Bloat: Geek Squad to the Rescue!

Adding more features to a product to satisfy more consumers seems like a no-brainer strategy for success.

Feature Bloat

In fact, most marketing research with potential buyers of a product done *before* they buy shows they say they *do want* more features in the product. It's when the new product gets home that the "feature bloat" problems occur—often overwhelming the consumer with mind-boggling complexity.

Computers pose a special problem for homeowners because there's no in-house technical assistance like that existing in large organizations. Also, to drive down prices of home computers, usually little customer support service is available. Ever call the manufacturer's toll-free "help" line? One survey showed that 29 percent of the help-line callers wound up swearing at the customer service representative and 21 percent just screamed.

The Geek Squad to the Rescue

Computer feature bloat has given rise to what TV's *60 Minutes* says is "the multibillion-dollar service industry populated by the very people who used to be shunned in the high-school cafeteria: Geeks like Robert Stephens!"

More than a decade ago he turned his geekiness into the Geek Squad—a group of technically savvy people who can fix almost any computer problem. "There's usually some frantic customer at the door pointing to some device in the corner that will not obey," Stephens explains.

"The biggest complaint about tech support people is rude, egotistical behavior," says Stephens. So he launched the Geek Squad to show some friendly humility by having team members work their wizardry while:

1. Showing genuine concern to customers.
2. Dressing in geeky white shirts, black clip-on ties, and white socks, a "uniform" borrowed from NASA engineers.
3. Driving to customer homes or offices in black-and-white VW "geekmobiles."

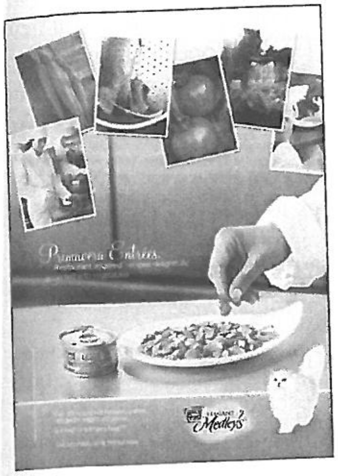
Do customers appreciate the 6,000-person Geek Squad, now owned by Best Buy? Robert Stephens answers by explaining, "People will say, 'They saved me . . . they saved my data.'" This includes countless college students working on their papers or theses with data lost somewhere in their computers—"data they promised themselves they'd back up next week."

For how the kind of innovation present in this ketchup bottle affects the marketing strategy, see the text.

With a *continuous innovation*, consumers don't need to learn new behaviors. Toothpaste manufacturers can add new attributes or features like "whitens teeth" or "removes plaque" when they introduce a new or improved product. But the extra features in the new toothpaste do not require buyers to learn new tooth-brushing behaviors, so it is a continuous innovation. The benefit of this simple innovation is that effective marketing mainly depends on generating awareness, so there is no need to reeducate customers.

With a *dynamically continuous innovation*, only minor changes in behavior are required. Heinz launched its EZ Squirt Ketchup in an array of unlikely hues—from green and orange to pink and teal—with kid-friendly squeeze bottles and nozzles.[11] Encouraging kids to write their names on hot dogs or draw dinosaurs on burgers as they use this new product requires only minor behavioral changes. So the marketing strategy here is to educate prospective buyers on the product's benefits, advantages, and proper use.

A *discontinuous innovation* involves making the consumer learn entirely new consumption patterns to use the product. Have you bought a wireless router for your computer? Congratulations if you installed it yourself! Recently, one-third of those bought at Best Buy were returned because they were too complicated to set up—the problem with a discontinuous innovation. So marketing efforts for discontinuous innovations usually involve not only gaining initial consumer awareness but also educating consumers on both the benefits and proper use of the innovative product, activities that can cost millions of dollars—and maybe require Geek Squad help.



The text describes the potential benefits and dangers of an incremental innovation such as Purina's Elegant Medleys, its restaurant-inspired food for cats.

Newness in Legal Terms The U.S. Federal Trade Commission (FTC) advises that the term *new* be limited to use with a product up to six months after it enters regular distribution. The difficulty with this suggestion is in the interpretation of the term *regular distribution.*

Newness from the Organization's Perspective Successful organizations view newness and innovation in their products at three levels. The lowest level, which usually involves the least risk, is a product line extension. This is an incremental improvement of an existing product line the company already sells. For example, Purina added its "new" line of Elegant Medleys, a "restaurant-inspired food for cats," to its existing line of 50 varieties of its Fancy Feast gourmet cat food. This has the potential benefit of adding new customers but the twin dangers of increasing expenses and cannibalizing its existing line.

At the next level is (1) a significant jump in innovation or technology or (2) a brand extension involving putting an established brand name on a new product in an unfamiliar market. In the first case, the significant jump in technology might be when a cellphone manufacturer offers new smartphones or a film camera producer offers digital cameras.

The second case—using an existing brand name to introduce a new product into an unfamiliar market—looks deceptively easy for companies with a powerful, national brand name. Colgate thought so. It puts its brand name on a line of frozen dinners called Colgate's Kitchen Entrees. The product line died quickly. A marketing expert calls this "one of the most bizarre brand extensions ever," observing that the Colgate brand name, which is strongly linked to toothpaste in people's minds, does not exactly get their "taste buds tingling."[12]

The third and highest level of innovation involves a radical invention, a truly revolutionary new product. Apple's Apple II, the first "personal computer," and its iPad are examples of radical inventions.

Effective new-product development in large firms exists at all three levels.

Why Products and Services Succeed or Fail

We all know the giant product and service successes—such as Apple's iPhone, Google, and CNN. Yet the thousands of product failures every year that slide quietly into oblivion cost American businesses billions of dollars. Ideally, a new product or service needs a precise *protocol*, a statement that, before product development begins, identifies (1) a well-defined target market; (2) specific customers' needs, wants, and preferences; and (3) what the product will be and do to satisfy consumers.

New-product success or failure? For the special problems these two products faced, see the text.

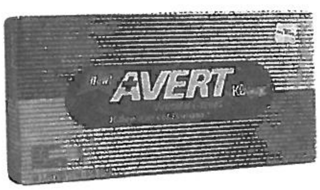
Research reveals how difficult it is to produce a single commercially successful new product, especially among consumer packaged goods (CPG) that appear on supermarket shelves one month and are gone forever a few months later. Most American families buy the same 150 items over and over again—making it difficult to gain buyers for new products. So less than 3 percent of new consumer packaged goods exceed first-year sales of $50 million—the benchmark of a successful CPG launch.[13]

To learn marketing lessons and convert potential failures to successes, we can analyze why new products fail and then study several failures in detail. As we go through the new-product process later in the chapter, we can identify ways such failures might have been avoided—admitting that hindsight is clearer than foresight.

LO5

Marketing Reasons for New-Product Failures Both marketing and nonmarketing factors contribute to new-product failures. Using the research results from several studies on new-product success and failure, we can identify critical marketing factors—which sometimes overlap—that often separate new-product winners and losers:[14]

1. *Insignificant point of difference.* Research shows that a distinctive point of difference is the single most important factor for a new product to defeat competitive ones—having superior characteristics that deliver unique benefits to the user. In the mid-1990s, General Mills launched Fingos, a sweetened cereal flake about the size of a corn chip with a $34 million promotional budget. Consumers were supposed to snack on them dry, but they didn't.[15] The point of difference was not important enough to get consumers to stop eating competing snacks such as popcorn and potato chips.
2. *No economical access to buyers.* Grocery products provide an example of this factor. Today's mega-supermarkets carry more than 30,000 different SKUs. With about 20,000 new consumer packaged goods (food, beverage, health and beauty aids, household, and pet items) introduced globally each month, the cost to gain access to retailer shelf space is huge. Because shelf space is judged in terms of sales per square foot, Thirsty Dog! (a zesty beef-flavored, vitamin-enriched, mineral-loaded, lightly carbonated bottled water for your dog) must displace an existing product on the supermarket shelves, a difficult task with the high sales-per-square-foot demands of these stores. Thirsty Dog! failed to generate enough sales to meet these requirements.
3. *Incomplete market and product protocol before product development starts.* Without this protocol, firms try to design a vague product for a phantom market. Developed by Kimberly-Clark, Avert Virucidal tissues contained vitamin C derivatives scientifically designed to kill cold and flu germs when users sneezed, coughed, or blew their noses into them. The product failed in test marketing. People didn't believe the claims and were frightened by the "cidal" in the brand name, which they connected to words like *suicidal.* A big part of Avert's failure was its lack of a product protocol that clearly defined how it would satisfy consumer wants and needs.[16]
4. *Not satisfying customer needs on critical factors.* Overlapping somewhat with point 1, this factor stresses that problems on one or two critical factors can kill the product, even though the general quality is high. For example, the Japanese, like the British, drive on the left side of the road. Until 1996, U.S. carmakers sent Japan few right-hand-drive cars—unlike German carmakers, which exported right-hand-drive models in several of their brands.
5. *Bad timing.* This results when a product is introduced too soon, too late, or when consumer tastes are shifting dramatically. Bad timing gives new-product managers nightmares. Microsoft, for example, introduced its Zune player a few years after Apple launched its iPod and other competitors offered their new MP3 players.
6. *Poor product quality.* This factor often results when a product is not thoroughly tested. The costs to an organization for poor quality can be staggering and include the labor, materials, and other expenses to fix the problem—not to mention the lost sales, profits, and market share that usually result. In early 2007, with a $500 million promotional budget, Microsoft launched its Windows



Lessons from new-product failures: Why might consumers choose not to buy a tissue to kill cold and flu germs . . .

Vista to replace its successful predecessor Windows XP. But the Vista software had so many quality problems with compatibility and performance, even Microsoft's most loyal users revolted. Today its problems would be highlighted even faster as Facebook and Twitter users post their complaints.[17]

7. *Too little market attractiveness.* The ideal is a large target market with high growth and real buyer need. But often the target market is too small or competitive to warrant the huge expenses necessary to reach it. OUT! International's Hey! There's A Monster In My Room spray was designed to rid scary creatures from a kid's bedroom and had a bubble-gum fragrance. While a creative and cute product, the brand name probably kept the kids awake at night more than their fear of the monsters because it implied the monster was still hiding in the bedroom. Also, was this a real market?
8. *Poor execution of the marketing mix: brand name, package, price, promotion, distribution.* Somewhere in the marketing mix there can be a showstopper that kills the product. Introduced by Gunderson & Rosario, Inc., Garlic Cake was supposed to be served as an hors d'oeuvre with sweet breads, spreads, and meats, but somehow the company forgot to tell this to potential consumers. Garlic Cake died because consumers were left to wonder just what a Garlic Cake is and when on earth a person would want to eat it.

. . . or a spray to get rid of scary creatures from a child's bedroom? Answers appear in the text.

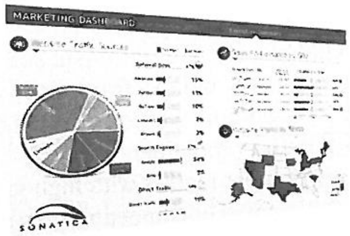
Simple marketing research should have revealed the problems in these new-product disasters. Developing successful new products may sometimes involve luck, but more often it involves having a product that really meets a need and has significant points of difference over competitive products.

What Were They Thinking? Organizational Problems in New-Product Failures A number of other organizational problems can cause new-product disasters. Key ones—some of which overlap—include:

1. *Not really listening to the "voice of the consumer."* Product managers may believe they "know better" than their customers or feel they "can't afford" the valuable marketing research that could uncover problems.
2. *Skipping stages in the new-product process.* Although details may vary, the seven-stage new-product process discussed in the next section is a sequence used in some form by most large organizations. Skipping a stage often leads to disaster.
3. *Pushing a poorly conceived product into the market to generate quick revenue.* Today's marketing managers are under incredible pressure from top management to meet quarterly revenue targets. This focus on speed often results in overlooking the network of services needed to support the physical product.[18]
4. *Encountering "groupthink" in task force and committee meetings.* Someone in the new-product planning meeting knows or suspects the product concept is a dumb idea. But that person is afraid to speak up for fear of being cast as a "negative thinker" and "not a team player" and then being ostracized from real participation in the group. Do you think someone on the Life Savers new-product team suspected a Life Savers soda wasn't a good idea but was afraid to speak up?[19] In the same way, a strong public commitment to a new product by its key advocate may make it difficult to kill the product even when new negative information comes to light.[20]
5. *Not learning critical takeaway lessons from past failures.* The easiest lessons are from "intelligent failures"—ones that happen early in the new-product process. At this point these failures are less expensive and immediately give better understanding of customers' wants and needs.
6. *Avoiding the "NIH problem."* A great idea is a great idea, regardless of its source. Yet in the bureaucracy that can occur in large organizations, ideas from outside often get rejected simply because they come from outside—what has been termed the "not-invented-here (NIH) problem."

Introduce a Life Savers soda? The text asks if "groupthink" played a part in this new-product decision.

Many of these organizational problems contribute to the eight marketing reasons for new-product failures described earlier.



Using Marketing Dashboards

Which States Are Underperforming?

In 2009, you started your own company to sell a nutritious, high-energy snack you developed. It is now January 2013. As a marketer, you ask yourself, "How well is my business growing?"

Your Challenge The snack is sold in all 50 states. Your goal is 10 percent annual growth. To begin 2013, you want to quickly solve any sales problems that occurred during 2012. You know that states whose sales are stagnant or in decline are offset by those with greater than 10 percent growth.

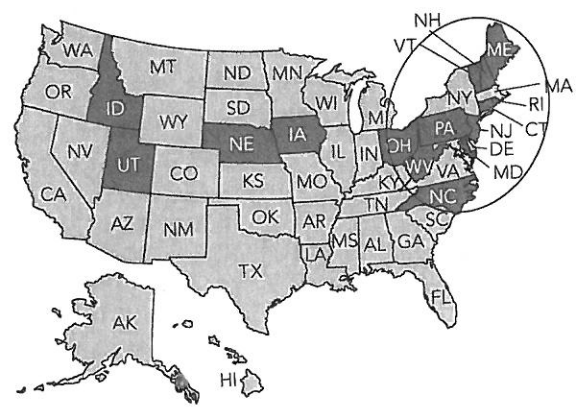
Studying a table of the sales and percent change versus a year ago in each of the 50 states would work but be very time-consuming. A good graphic is better. You choose the following marketing metric, where "sales" are measured in units:

$$\text{Annual \% sales change} = \frac{(\text{2012 Sales} - \text{2011 Sales}) \times 100}{\text{2011 Sales}}$$

You want to act quickly to improve sales. In your map, growth that is greater than 10 percent is green, 0 to 10 percent growth is orange, and decline is red. Notice that you (1) picked a metric and (2) made your own rules that green is good, orange is bad, and red is very bad.

Your Findings You see that sales growth in the northeastern states is weaker than the 10 percent target, and sales are actually declining in many of the states.

Annual Percentage Change in Unit Volume, by State



Your Action Marketing is often about grappling with sales shortfalls. You'll need to start by trying to identify and correct the problems in the largest volume states that are underperforming—in this case in the northeastern United States.

You'll want to do marketing research to see if the problem starts with (1) an external factor involving consumer tastes or (2) an internal factor such as a breakdown in your distribution system.

How Marketing Dashboards Can Improve New-Product Performance

The Using Marketing Dashboards box shows how marketers measure actual market performance versus the goals set in new-product planning. It shows that you have set a goal of 10 percent annual growth for the new snack you developed. You have chosen a marketing metric of "annual % sales change" to measure the annual growth rate from 2011 to 2012 for each of the 50 states.

Your special concerns in the marketing dashboard are the states shown in red, where sales have actually declined. As shown in the box, having identified the northeastern United States as a problem region, you conduct in-depth marketing research to lead to corrective actions. For example, is the decline in sales in this region due to an external factor, such as consumer preference? Perhaps consumers in the northeastern United States prefer more regional snack tastes or think your snack is too sweet. Or perhaps the problem is due to your own internal marketing strategy, such as poor distribution, prices that are too high, or bad advertising.

learning review

4. What kind of innovation would an improved electric toothbrush be?
5. Why can an "insignificant point of difference" lead to new-product failure?
6. What is "groupthink," and how can it lead to new-product failures?

THE NEW-PRODUCT PROCESS

LO6

new-product process
The seven stages an organization goes through to identify business opportunities and convert them into salable products or services.

To develop new products efficiently, companies such as General Electric and 3M use a specific sequence of steps to make their products ready for market. Figure 9–5 shows the **new-product process**, the seven stages an organization goes through to identify business opportunities and convert them into salable products or services. Today many firms use a formal Stage-Gate® process to evaluate whether the results at each stage of the new-product development process are successful enough to warrant proceeding to the next stage. If problems in a stage can't be corrected, the project doesn't proceed to the next stage and product development is killed.[21]

Stage 1: New-Product Strategy Development

For companies, *new-product strategy development* is the stage of the new-product process that defines the role for a new product in terms of the firm's overall objectives. During this stage, the firm uses both a SWOT analysis (Chapter 2) and environmental scanning (Chapter 3) to assess its strengths and weaknesses relative to the trends it identifies as opportunities or threats. The outcome not only defines the vital "protocol" for each new-product idea but also identifies the strategic role it might serve in the firm's business portfolio.

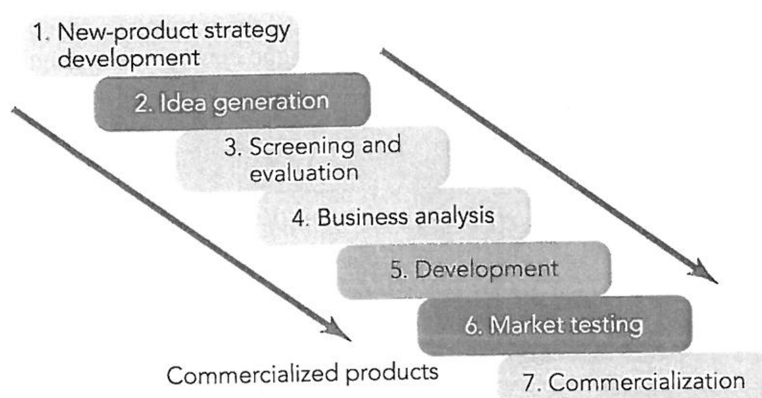
New-product development in services, such as buying a stock or airline ticket or watching a National Football League game, is often difficult. Why? Because services are intangible and performance-oriented. Nevertheless, service innovations can have a huge impact on our lives. For example, the online brokerage firm E*TRADE has revolutionized the financial services industry through its online trading.

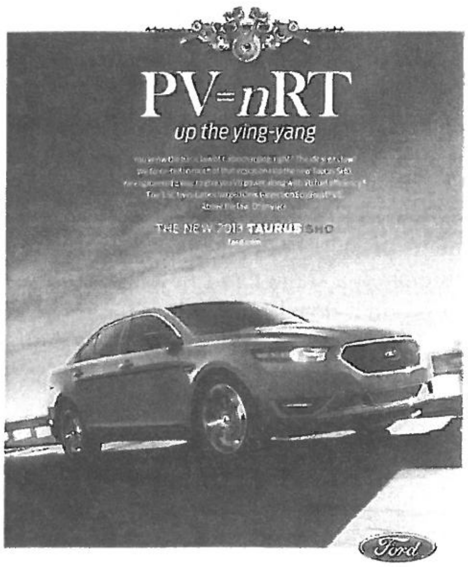
Stage 2: Idea Generation

Idea generation, the second stage of the new-product process, involves developing a pool of concepts to serve as candidates for new products, building upon the previous stage's results. Many forward-looking companies have discovered their own organizations are not generating enough useful new-product ideas. This has led to *open innovation*, in which an organization finds and executes creative new-product ideas by developing strategic relationships with outside individuals and organizations. Open innovation helps organizations overcome the not-invented-here barriers discussed earlier. Consider the following examples of open innovation relationships.[22]

Employee and Co-Worker Suggestions Employees should be encouraged to suggest new-product ideas through suggestion boxes. The idea for Nature Valley granola bars from General Mills came when one of its marketing managers observed co-workers bringing granola to work in plastic bags.

FIGURE 9–5
Carefully using the seven stages in the new-product process increases the chances of new-product success.





One result of Ford's chief executive officer encouraging better idea sharing among employees is its new Ford Focus shown here.

An important part of Ford's current turnaround has been chief executive officer Alan Mulally's encouraging managers and employees to speak up and volunteer ideas to improve its technology and line of new cars—an openness lacking in U.S. auto companies in the past.[23] Further, Mulally has made clear that managers and employees in different departments aren't rivals. Instead of the not-invented-here (NIH) thinking of past years, Mulally has encouraged managers and employees to see themselves as part of the "One Ford" team and share information and help one another. This emphasis on improved employee communications has helped Ford launch new models, add new technologies, and redesign its supply chain.[24]

Customer and Supplier Suggestions Firms ask their salespeople to talk to customers and ask their purchasing personnel to talk to suppliers to discover new-product ideas.[25] Whirlpool gets ideas from customers on ways to standardize components so that it can cut the number of different product platforms to reduce costs.[26] Business researchers tell firms to actively involve customers and suppliers in the new-product development process. This means the focus should be on what the new product will actually do for them rather than simply what they want.[27]

A. G. Lafley, CEO of Procter & Gamble (P&G), gave his executives a *revolutionary* thought: "Look outside the company for solutions to problems rather than insisting P&G knows best." When he ran P&G's laundry detergent business, he had to redesign the laundry boxes so they were easier to open. Why? While consumers *said* P&G's laundry boxes were "easy to open," cameras they agreed to have installed in their laundry rooms showed they opened the boxes with *screwdrivers*![28]

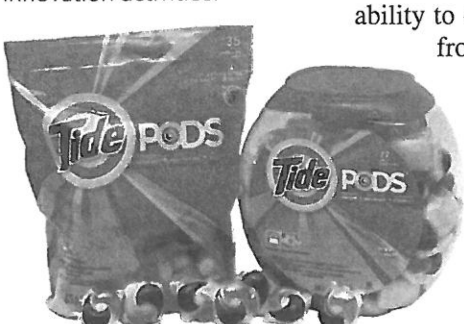
With a $150 million marketing budget, in 2012 P&G launched Tide Pods, a revolutionary three-chamber liquid dose that cleans, fights stains, and brightens. P&G describes Tide Pods as "its biggest laundry innovation in more than a quarter century." P&G says Tide Pods has produced the highest consumer-satisfaction scores the company has ever seen for a new laundry product. But after its successful new-product launch, P&G redesigned its packaging after discovering that some children thought the pods were candy and tried to eat them.[29]

QR 9-3
P&G's Tide Pods Ad

"Crowdsourcing" is a creative idea-generation method if an R&D-marketing team wants ideas from 10,000 or 20,000 customers or suppliers. *Crowdsourcing* involves generating insights leading to actions based on massive numbers of people's ideas. It requires a precise question to focus the idea-generation process. Dell used crowdsourcing to develop an online site to generate 13,464 ideas for new products and website and marketing improvements, of which 402 were implemented.[30]

Research and Development Laboratories Another source of new products is a firm's own research and development laboratories. Apple's sleek iPad, iPhone, and iMac models came out of its Apple Industrial Design Group, which continues to be driven by the obsessive concerns of its co-founder, the late Steve Jobs, for cutting-edge industrial design in all the company's products. One secret behind Apple's world-class ability to convert vague concepts into tangible products: an action-item list emerging from every meeting. This focuses on *who* does *what* by *when*![31]

Procter & Gamble's new Tide Pods launch shows how it has improved both planning and implementation by involving consumers earlier in its innovation activities.



Professional R&D and innovation laboratories that are outside the walls of large corporations are sources of open innovation and can provide new-product ideas.[32] IDEO is a world-class new-product development firm, having designed more than 4,000 of them. IDEO designs include the Apple mouse and the Crest Neat Squeeze toothpaste dispenser.[33]

Brainstorming sessions conducted at IDEO can generate 100 new ideas in an hour. IDEO's "shop-a-long" visits with client firms let a client's managers experience firsthand what their customers do. A sample recommendation from a shop-a-long visit with managers from a large U.S. health maintenance organization came from actually playing the part of a patient: Make examining rooms larger to enable the nervous patient to have a friend or relative in the room while waiting for the doctor.[34] Fresh Express asked IDEO to design an innovative single-serve package for salads. IDEO's solution (photo): A five-section package—one large section for the salad greens and four smaller ones for proteins, dressings, and so on—with each section sealed in plastic.

An IDEO innovation: A five-section, single-serve package for salads. Visit IDEO's website (www.ideo.com) to view its recent innovations.

Competitive Products Analyzing the competition can lead to new-product ideas. For six months, the Marriott Corporation sent a six-person intelligence team to travel and stay at economy hotels around the country. The team assessed the competition's strengths and weaknesses on everything from the soundproof qualities of the rooms to the softness of the towels. Marriott then budgeted $500 million for a new economy hotel chain—Fairfield Inns.

Smaller Firms, Universities, and Inventors Many firms look for outside visionaries that have inventions or innovative ideas that can become products. Some sources of this open innovation strategy include:

- *Smaller, nontraditional firms.* Small technology firms and even small, nontraditional firms in adjacent industries provide creative advances. General Mills partnered with Weight Watchers to develop Progresso Light soups, the first consumer packaged product in any grocery category to carry the Weight Watchers endorsement with a 0 points value per serving.[35]
- *Universities.* Many universities have technology transfer centers that often partner with business firms to commercialize faculty inventions. The first-of-its-kind carbonated yogurt Go-Gurt Fizzix was launched in late 2007 as a result of General Mills partnering with Brigham Young University to license the university's patent to put the "fizz" into the yogurt.[36]
- *Inventors.* Many lone inventors and entrepreneurs develop brilliant new-product ideas—like Gary Schwartzberg's tube-shaped bagel filled with cream cheese. A portable breakfast for the on-the-go person, the innovative bagel couldn't get widespread distribution. So Schwartzberg sold his idea to Kraft Foods, Inc., which now markets its Bagel-Fuls filled with Kraft's best-selling Philadelphia cream cheese in supermarkets across the United States.[37]

Gary Schwartzberg partnered with Kraft Foods to get his cream cheese–filled bagels in stores across the United States.

Great ideas can come from almost anywhere—the challenge is recognizing and implementing them.

Stage 3: Screening and Evaluation

Screening and evaluation is the stage of the new-product process that internally and externally evaluates new-product ideas to eliminate those that warrant no further effort.

Internal Approach A firm's employees evaluate the technical feasibility of a proposed new-product idea to determine whether it meets the objectives defined in the new-product strategy development stage. For example, 3M scientists develop many world-class innovations in the company's labs. A recent innovation was its micro-replication technology—one that has 3,000 tiny gripping "fingers" per square inch. An internal assessment showed 3M that this technology could be used to improve the gripping of golf or work gloves.

Organizations that develop service-dominated offerings need to ensure that employees have the commitment and skills to meet customer expectations and sustain customer loyalty—an important criterion in screening a new-service idea. This is the

customer experience management (CEM)
The process of managing the entire customer experience within the company.

essence of **customer experience management (CEM)**, which is the process of managing the entire customer experience within the company. Marketers must consider employees' interactions with customers so that the new services are consistently delivered and experienced, clearly differentiated from other service offerings, and relevant and valuable to the target market.

External Approach Firms use *concept tests*, external evaluations with consumers that consist of preliminary testing of a new-product idea rather than an actual product. Generally, these tests are more useful with minor modifications of existing products than with new, innovative products with which consumers are not familiar.[38] Concept tests rely on written descriptions of the product but may be augmented with sketches, mock-ups, or promotional literature. Key questions for concept testing include: How does the customer perceive the product? Who would use it? and How would it be used?

learning review

7. What is the new-product strategy development stage in the new-product process?
8. What are the main sources of new-product ideas?
9. How do internal and external screening and evaluation approaches differ?

Stage 4: Business Analysis

Business analysis specifies the features of the product and the marketing strategy needed to bring it to market and make financial projections. This is the last checkpoint before significant resources are invested to create a *prototype*—a full-scale operating model of the product. The business analysis stage assesses the total "business fit" of the proposed new product with the company's mission and objectives—from whether the product can be economically developed and manufactured to the marketing strategy needed to have it succeed in the marketplace.

This process requires not only detailed financial projections but also assessments of the marketing and product synergies related to the company's existing operations. Will the new product require a lot of new machinery to produce it or can it be produced using the unused capacity of existing machines? Will the new product cannibalize sales of existing products or will it increase revenues by reaching new market segments? Can the new product be protected with a patent or copyright? Financial projections of expected profits require estimates of expected prices per unit and units sold, as well as detailed estimates of the costs of R&D, production, and marketing.

For services, business analysis involves using capacity management to find ways to match the availability of the service offering to when it is needed. For example, airlines and mobile phone service providers use off-peak pricing to charge different prices during different times of the day or during different days of the week to help match the supply and demand for their services.[39]

As described in the text, it took a year and a half in the development stage to produce "a perfect cup" of Chobani's Greek Yogurt. New Chobani flavors in 2012: apple, cinnamon, blood orange, and passion fruit.

Stage 5: Development

Development is the stage of the new-product process that turns the idea on paper into a prototype. This results in a demonstrable, producible product that involves not only manufacturing the product efficiently but also performing laboratory and consumer tests to ensure it meets the standards established for it in the protocol.

In 2005 Turkish immigrant Hamdi Ulukaya opened his mail in upstate New York and saw an ad that said, "Fully equipped yogurt factory for sale." He bought it, painted the walls, hired a yogurt master, and turned his attention to the task of developing a high-quality yogurt. "It took a year and a half to make a perfect cup of yogurt," says Ulukaya.

Marketing Matters > > > > > customer value

Marissa Mayer: The Talent behind Google's Familiar *White* Home Page

Unknown to you, Google Employee No. 20, Marissa Mayer, probably impacts your life at least 5 or 10 times a week.

The New York Times calls her the "gatekeeper of Google's home page," the one person who "controls the look, feel, and functionality of the Internet's most heavily trafficked search engine." Virtually every new design or feature—from the color of the Google toolbar to the exact words on a Google page—needs her stamp of approval. The very clear, very plain, very white Google home page reflects Mayer's passion about obtaining a favorable user experience.

As vice president of search products and user experience, Mayer has introduced over 100 Google products and features. Sounding like a combination English teacher and art instructor, Mayer sets the design standards based on her internal Google experiments to measure user preferences. Her precise design rules include:

- Avoid first- and second-person pronouns.
- Write "Google" instead of "we."
- Don't switch tenses.
- Avoid italics because they are hard to read on a computer screen.

Beyond the grammar lessons, there are also precise design and graphic arts guidelines: "If you want to make the design on the page simpler, take away one of these: A type of font, a color, or an image." And then there's the Saturday morning she had to find the stray slash – "/" – on Google servers that sent tens of millions of users the message in red: "THIS SITE MAY HARM YOUR COMPUTER."

Mayer has had such an impact on Google's success that she was tapped to be the new CEO of Yahoo! in mid-2012.

QR 9–4
Chobani
Video

With over 40,000 new consumer packaged goods (CPG) products launched annually, who can imagine a new food category skyrocketing to success? But that's exactly what has happened with . . . Greek yogurt! The dominant brand is Ulukaya's Chobani Greek Yogurt, launched in 2007. Chobani—meaning "shepherd"—stresses (1) natural ingredients, (2) high quality, and (3) great taste!

By 2012 Chobani had a 13 percent share of the entire yogurt market and was processing 3 million pounds of milk a day to produce its Greek yogurt. Blindsided by Chobani, major competitors like Dannon—with its Oikos brand—and General Mills—with its Yoplait brand—have jumped into the Greek yogurt business. Even Kraft Foods, which had left the yogurt business and whose yogurt factory Ulukaya bought, started marketing its new Athenos brand of Greek yogurt in 2011![40]

For services, improving the delivery of customer service is critical. This involves analyzing the entire sequence of steps or "service encounters" to improve the interactions between consumers and the service provider. High-contact services such as hotels, car rental agencies, and web providers use this approach to serve customers better. That white, plain-vanilla Google home page may look like it was designed by a child. But the Marketing Matters box describes how Google's Marissa Mayer works to get exactly the right "feel" for Google's millions of users.[41]

During development, laboratory tests like this one on Barbie result in safer dolls and toys for children.

Safety tests are also critical for when the product isn't used as planned. To make sure seven-year-olds can't bite Barbie's head off and choke, Mattel clamps her foot in steel jaws in a test stand and then pulls on her head with a wire. Similarly, car manufacturers conduct extensive safety tests by crashing their cars into concrete walls.

Consumer products companies, such as General Mills shown here, often use controlled test markets to assess the likely success of new product, promotional, or pricing strategies.

Stage 6: Market Testing

Market testing is a stage of the new-product process that involves exposing actual products to prospective consumers under realistic purchase conditions to see if they will buy. If the budget permits, consumer packaged goods firms do this by *test marketing,* which involves offering a product for sale on a limited basis in a defined area for a specific time period. The three main kinds of test markets are (1) standard, (2) controlled, and (3) simulated.[42] Because standard test markets are so time-consuming and expensive and can alert competitors to a firm's plans, some firms skip test markets entirely or use controlled or simulated test markets.

Standard Test Markets In a *standard test market,* a company develops a product and then attempts to sell it through normal distribution channels in a number of test-market cities. Test-market cities must be demographically representative of markets targeted for the new product, have cable TV systems that can deliver different ads to different homes, and have retailers with checkout counter scanners to measure sales. A distinguishing feature of a standard test market is that the producer sells the product to distributors, wholesalers, and retailers, just as it would do for other products.

Controlled Test Markets A *controlled test market* involves contracting the entire test program to an outside service. The service pays retailers for shelf space and can therefore guarantee a specified percentage of the test product's potential distribution volume. SymphonyIRI Group is a leader in supplying controlled test markets. Its BehaviorScan service uses five demographically representative cities to track sales made to a panel of households. In some cases the effectiveness of different TV commercials and other direct-to-consumer promotions can be measured.

Simulated Test Markets To save time and money, companies often turn to *simulated (or laboratory) test markets (STM),* a technique that somewhat replicates a full-scale test market. STMs are often run in shopping malls, to find consumers who use the product class being tested. Next, qualified participants are shown the product or the product concept and are asked about usage, reasons for purchase, and important product attributes. They then see the company's and competitors' ads for the test product. Finally, 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.

When Test Markets Don't Work Not all products can use test markets. Test marketing a service is very difficult because consumers can't see what they are buying. For example, how do you test market a new building for an art museum? Similarly, test markets for expensive consumer products such as cars or costly industrial products such as jet engines are impractical. For these products, reactions of potential buyers to mockups or one-of-a-kind prototypes are all that is feasible.

Stage 7: Commercialization

Finally, the product is brought to the point of *commercialization*—the stage of the new-product process that positions and launches a new product in full-scale production and sales. Companies proceed very carefully at the commercialization stage because this is the most expensive stage for most new products. If competitors introduce a product that leapfrogs the firm's own new product or if cannibalization of its own existing products looks significant, the firm may halt the new-product launch.

Large companies use *regional rollouts*, introducing the product sequentially into geographical areas of the United States, to allow production levels and marketing activities to build up gradually to minimize the risk of new-product failure. Grocery product manufacturers and telephone service providers use this strategy.

To discover the downs and ups of commercializing a new product, see the text discussion of Burger King's 15-year search for french fries that can compete with those of McDonald's.

Burger King's French Fries: The Complexities of Commercialization Burger King's "improved french fries" are an example of what can go wrong at the commercialization stage. McDonald's french fries are the gold standard against which all other fries in the fast-food industry are measured. In 1997, Burger King decided to take on McDonald's fries and spent millions of R&D dollars developing a whey/starch-coated fry designed to retain heat longer and add crispiness. The launch, backed with a $70 million marketing campaign, turned into a disaster. The reason: Except under ideal conditions, the new fry proved too complicated to get right day after day in Burger King restaurants, and changes had to be made to get the "production" process correct to ensure consistent results.

Fast-forward to today. Over the past couple of years, Wendy's has introduced new fries in the fast-food war. Launched in late 2010, Wendy's Natural Cut Fries with Sea Salt have become a huge hit.

Burger King, now the number three fast-food marketer after McDonalds and Wendy's, responded with its new Thick Cut fries in late 2011. In development and testing for over two years, the new fries are "fluffier" on the inside for a more "potatoey" taste, have less sodium, and have a new "coating" on the outside. This was done to create a "crispy, golden brown deliciousness" while retaining the heat longer—for at least 10 minutes because 75 percent of customers eat their fries "on the go" in their cars, offices, or homes.

A taste test conducted by an independent market research firm stated that the new Burger King fries were preferred over McDonald's fries by a 57 to 35 percent margin. Burger King also launched the largest TV advertising campaign in its history—featuring "spokespud" Mr. Potato Head—to promote the new fries.[43]

The Special Risks in Commercializing Grocery Products New grocery products pose special commercialization problems. Because shelf space is so limited, many supermarkets require a *slotting fee* for new products, a payment a manufacturer makes to place a new item on a retailer's shelf. This can run to several million dollars for a single product. But there's even another potential expense. If a new grocery product does not achieve a predetermined sales target, some retailers require a *failure fee*, a penalty payment a manufacturer makes to compensate a retailer for devoting valuable shelf space to a product that failed to sell. These costly slotting fees and failure fees are further examples of why large grocery product manufacturers use regional rollouts.

Speed as a Factor in New-Product Success Companies have discovered that speed or *time to market* (TtM) is often vital in introducing a new product. Recent studies have shown that high-tech products coming to market on time are far more profitable than those arriving late. So companies like Sony, BMW, 3M, and Hewlett-Packard often overlap the sequence of stages described in this chapter.

With this approach, termed *parallel development*, cross-functional team members who conduct the simultaneous development of both the product and the production process stay with the product from conception to production. This enabled Hewlett-Packard to reduce the development time for notebook computers from 12 to 7 months. In software development, *fast prototyping* uses a "do it, try it, fix it" approach—encouraging continuing improvement even after the initial design. To speed up time to market, many firms insulate their new-product teams from routine administrative tasks to keep them from bogging down in red tape.[44]