

Designing and Managing Products



Tesla's Model 3 set out to prove that mass-produced, environmentally sound electric cars can successfully and profitably pilfer market share from producers of traditional gasoline-powered vehicles.

Source: imageBROKER/
Alamy Stock Photo

At the heart of a great brand is a great product. To achieve market leadership, firms must offer products and services of superior quality that provide unsurpassed customer value. Tesla has conquered the electric car market in the United States, thanks in part to a relentless focus on product innovation and performance.

>>> In March 2016, Tesla revealed the long-awaited Model 3, the vehicle that the company hopes will ultimately take the electric car to the mass consumer. Priced starting at \$35,000 (after \$8,000 credits and fuel savings were factored in), Model 3 aimed to disrupt the auto industry by proving that mass producing an environmentally friendly vehicle is both feasible and profitable. Tesla's new mass market car created a lot of excitement, generating over half a million pre-orders, 100,000 of which were placed before the Model 3 was revealed. The customer appeal of Model 3 stemmed from several factors. Perhaps the most important was the lack of direct competition. The combination of Tesla's image as a luxury brand and the (relatively) low price point made it the only option for customers who were looking for an all-electric sedan priced around \$40,000. To achieve its goal of building 5,000 vehicles a week, Tesla invested close to \$1 billion to build its first Gigafactory—a lithium-ion battery and vehicle assembly factory near Reno, Nevada. Tesla's efforts to scale up

production of Model 3 paid off: In 2018, it became the best-selling luxury vehicle in the United States, despite the fact that electric cars made up only 1.12% of total vehicle sales. Despite its success, Tesla faces growing competition from other car manufacturers that are revamping their product lines to include an increasing number of all-electric vehicles. Yet Tesla's focus is on gaining share from the traditional car market. "Our true competition is not the small trickle of non-Tesla electric cars being produced," argued Tesla's CEO Elon Musk, "but rather the enormous flood of gasoline cars pouring out of the world's factories every day." In the fall of 2020, Elon Musk laid out a plan for Tesla to build a \$25,000 electric car using drastically lower-cost batteries to potentially turn the company into the world's largest car manufacturer.¹

Marketing planning begins with formulating an offering to meet target customers' needs or wants. The customer will judge the offering's benefits on three basic elements: product, service, and brand. In this chapter we examine product; in Chapter 9, services; and in Chapter 10, brand. All three elements—product, service, and brand—must be fused into a competitively attractive market offering.

Product Differentiation

To successfully compete in the market, products must be differentiated. At one extreme are products that allow little variation: chicken, aspirin, and steel. Yet even here some differentiation is possible: Perdue chickens, Bayer aspirin, and India's Tata Steel have carved out distinct identities in their categories. Procter & Gamble makes Tide, Cheer, and Gain laundry detergents, each with a separate brand identity. At the other extreme are products that lend themselves to high differentiation, such as automobiles, commercial buildings, and furniture. Here the seller faces an abundance of differentiation possibilities.

Well-differentiated products can create significant competitive advantages. Crafting a distinctive aura for a product that helps distance it from competitors can involve moves that range from impressive technological advances like Intuitive Surgical's da Vinci robotic system for minimally invasive surgery to simple tweaks like putting a Chiquita sticker on a banana. Some brands, such as De Beers, differentiate their products by tying them to special occasions. Others, including Tropicana and Tiffany, use packaging to ensure that they stand out from their respective competitors.

Attributes on the basis of which to differentiate include core functionality, features, performance quality, conformance quality, durability, reliability, form, style, and customization.² Design has become an increasingly important differentiator, and we discuss it separately later in the chapter.

- **Core functionality.** To create customer value, products must deliver on their core benefit. Products that fail to deliver on their core value proposition will inevitably fail in the market. Consider the plight of one-time highflier Nokia.

Learning Objectives After studying this chapter you should be able to:

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| <p>8.1 Explain how companies use product differentiation to create market value.</p> | <p>8.4 Describe the key decisions involved in managing product packaging.</p> |
| <p>8.2 Explain the role of product design in differentiating market offerings.</p> | <p>8.5 Explain how companies design and manage product guarantees and warranties.</p> |
| <p>8.3 Discuss the key aspects of designing product portfolios and product lines.</p> | |



Source: Lencap/Alamy Stock Photo

>> Failure to keep innovating and stay relevant allowed competitors to oust pioneer Nokia from its perch as the former leader in the technology-intensive mobile phone industry.

Nokia For 14 years, Nokia dominated cell phone sales as the world's industry leader, before being surpassed by Samsung. Once the pride of Finland, the company has found itself outsold by Samsung even on its home soil. How could such a high-flying brand come crashing to earth? In a nutshell, it failed to innovate and stay relevant. Nokia did not respond to the wildly successful iPhone and the shifting consumer demand that accompanied it. The company thought the iPhone was too expensive to manufacture and was not up to its own product standards. The iPhone reportedly failed Nokia's "drop test," in which a phone is dropped on concrete from a height of five feet at different angles. Nokia had actually spent \$40 billion on R&D over the preceding decade and was a smart-phone pioneer, but it chose not to invest in devices that anticipated what the iPhone eventually became. Without the right new products, Nokia began to be associated by consumers with an earlier era of technology, a fatal blow in the fast-moving, technologically intensive smart-phone market.³

- **Features.** Most products can be offered with varying features that supplement their basic function. A company can identify and select appropriate new features by surveying recent buyers and then calculating *customer value* versus *company cost* for each potential feature. Marketers should consider how many people want each feature, how long it would take to introduce it, and whether competitors could easily copy it.⁴ To avoid "feature fatigue," the company must prioritize features and tell consumers how to use and benefit from them.⁵ For example, although Apple's sleek looks attracted attention, it was the simplified and more intuitive user interface that lured even tech-phobic customers to the computer market and gained it a cult following. Marketers must also think in terms of feature bundles or packages. Auto companies often manufacture cars at several "trim levels." This lowers manufacturing and inventory costs. Each company must decide whether to offer feature customization at a higher cost or a few standard packages at a lower cost.
- **Performance quality** is the level at which the product's primary characteristics operate. Quality is growing increasingly important for differentiation as companies adopt a value model and provide higher quality for less money. Firms should design a performance level appropriate to the target market and competition—however, not necessarily the highest level possible. They must also manage performance quality through time. Continuously improving the product can produce high returns and market share; failing to do so can have negative consequences. The latter proved to be the case for Kodak and Commodore.
- **Conformance quality.** Buyers expect high **conformance quality**, the degree to which all produced units are identical and meet promised specifications. Suppose a Porsche 911 is designed to accelerate to 60 miles per hour within 10 seconds. If every Porsche 911 coming off the assembly line does this, the model is said to have high conformance quality. A product with low conformance quality will disappoint some buyers. Firms thoroughly test finished products to ensure conformance. Although men account for almost three-quarters of the world's beer sales, SAB-Miller found that women were actually more sensitive to levels of flavor in beer and thus were better product testers.⁶
- **Durability**, a measure of the product's expected operating life under natural or stressful conditions, is a valued attribute for vehicles, kitchen appliances, and other durable goods. The extra price for durability must not be excessive, however, and the product must not be subject to overly rapid technological obsolescence, as personal computers, televisions, and cell phones have sometimes been.
- **Reliability** is a measure of the probability that a product will not malfunction within a specified time period. Maytag has an outstanding reputation for creating reliable home appliances. Its long-running "Lonely Repairman" ad campaign was designed to highlight that attribute. Buyers normally will pay a premium for more reliable products.

Mercedes-Benz In the midst of the first decade of this century, Mercedes-Benz endured one of the most painful stretches in its history. The company saw its reputation for stellar quality take a beating in J. D. Power and other surveys, and BMW surpassed it in global sales. To recover, a new management team was organized around functional elements—motors, chassis, and electronic systems—instead of model lines. Engineers now begin testing electronic systems

a year earlier and put each new model through 10,000 diagnostics that run 24 hours a day for three weeks. Mercedes-Benz also tripled its number of prototypes for new designs, allowing engineers to drive them 3 million miles before production. With these and other changes, the number of flaws in the company's cars dropped 72 percent from the 2002 peak, and warranty costs decreased 25 percent. As an interesting side effect, Mercedes-Benz dealers have had to contend with a sizable drop in their repair and service businesses.⁷

- **Form** Many products can be differentiated by form—the size, shape, or physical structure of a product. Consider the many possible forms of aspirin. Although essentially a commodity, aspirin can be differentiated by dosage, size, shape, color, coating, or action time.
- **Style** describes the product's look and feel to the buyer and creates distinctiveness that is hard to copy. Car buyers pay a premium for Jaguars because of their extraordinary looks. Aesthetics plays a key role for such brands as Apple computers, Godiva chocolate, and Harley-Davidson motorcycles.⁸ Strong style does not always mean high performance, however. A car may look sensational but spend a lot of time in the repair shop.
- **Customization** Customized products and marketing enable firms to differentiate strategically by finding out exactly what a person wants—and doesn't want—and delivering on that.⁹ Online retailers such as Zazzle and CafePress allow users to upload images and create their own clothing and posters or to buy merchandise created by other users. NikeiD, which allows customers to personalize and design their own shoes and clothing either online or in store at NikeiD Studios, generates hundreds of millions of dollars in revenue. The demand for customization is certainly there. One Forrester study found that more than a third of U.S. online consumers were interested in customizing product features or in purchasing build-to-order products that use their specifications. And companies have responded: M&M's allows you to print specialized messages on your candies; Pottery Barn Kids allows you to personalize a children's book; and for \$2,000 or so, Burberry allows you to select the fabric, color, style, and five other features for your own personalized trench coat.¹⁰

Product Design

As competition intensifies, design offers a potent way to differentiate and position a company's products and services. **Design** is the totality of features that affect the way consumers perceive a product's look, feel, and function. Design offers functional and aesthetic benefits and appeals to both our rational and emotional sides.¹¹



Source: Ekaterina_Mineeva/Shutterstock

<< Many different products, such as M&M's, can now be customized by consumers.

POWER OF DESIGN

In our visually oriented culture, transmitting brand meaning and positioning through design is critical. Eye-catching form, color, and graphics can help an offering separate itself from competitive products. “In a crowded marketplace,” writes Virginia Postrel in *The Substance of Style*, “aesthetics is often the only way to make a product stand out.”¹² Design is especially important with long-lasting durable goods such as automobiles. Cognizant of consumers’ desire for both form and functionality, Tesla excelled in developing a car that is both good for the environment and aesthetically appealing.

Design can shift consumer perceptions to make brand experiences more rewarding. Consider the lengths Boeing went to in making its 787 aircraft seem roomier and more comfortable. Raised center bins, side luggage bins, divider panels, gently arched ceilings, and raised seats make the aircraft interior seem bigger. One design engineer noted, “If we do our jobs, people don’t realize what we have done. They just say they feel more comfortable.”

As holistic marketers recognize the emotional power of design and the importance to consumers of look and feel as well as function, design is exerting a stronger influence in categories where it once played a small role. Herman Miller office furniture, Viking ranges and kitchen appliances, and Kohler kitchen and bathroom fixtures and faucets are among the brands that now stand out in their categories, thanks to attractive looks added to efficient and effective performance.

Some countries have developed strong reputations for their design skills and accomplishments, such as Italy in apparel and furniture and Scandinavia in products designed for functionality, aesthetics, and environmental consciousness. Finland’s Marimekko fabrics, which brought the breadth of colorful and unusual Finnish textiles to the attention of the world, are still being made using environmentally safe techniques. And the Finnish firm Fiskars, which dates back to the 17th century, is known around the world not only for Fiskars products but also for such other internationally recognized brands as Wedgwood, Waterford, Arabia, and Royal Doulton. Dyson put the United Kingdom on the international product design map by elevating the form and efficiency of such “homely” products as vacuums, fans, and hair dryers to a high art.

APPROACHES TO DESIGN

Design is not just a phase in creating a product, service, or application. It’s a way of thinking that penetrates all aspects of the marketing program so all design aspects work together. For the company, a well-designed product is easy to manufacture and distribute. For the customer, it is pleasant to look at and easy to open, install, use, repair, and dispose of. The designer must take all these goals into account.¹³

Given the creative nature of design, it’s no surprise there isn’t one widely adopted approach. Some firms employ formal, structured processes. **Design thinking** is a very data-driven approach with three phases: observation, ideation, and implementation. Design thinking requires intensive ethnographic studies of consumers, creative brainstorming sessions, and collaborative teamwork to decide how to bring the design idea to reality. Whirlpool used design thinking to develop the KitchenAid Architect kitchen appliances with a more harmonized look than had previously existed in the category. Another company known for its design prowess is Bang & Olufsen.

Bang & Olufsen The Danish firm Bang & Olufsen (B&O)—which has received many kudos for the design of its stereos, TV equipment, and telephones—trusts the instincts of a handful of designers who rarely consult with consumers. The company does not introduce many new products in any given year, so each one is expected to be sold for a long time. Its BeoLab 8000 speakers sold for \$3,000 a pair when introduced in 1992 and retailed for more than \$5,000 almost 20 years later. When the company was the subject of a special exhibition at the Museum of Modern Art in New York City, the museum noted, “Bang & Olufsen design their sound equipment as beautiful objects in their own right that do not inordinately call attention to themselves.” Today, 15 B&O products are part of MOMA’s permanent design collection.¹⁴

Design needn’t involve extensive remodeling. “Universal design” and “incremental improvement” are the watchwords at Oxo, maker of kitchen and office supplies. Oxo appeals to users from grandparents to grandchildren with small, frustration-relieving improvements that make everyday objects a pleasure to use. Its clever redo of the salad spinner, inspired by a child’s toy carousel, lets users operate it by pushing a button instead of pulling a string or manually rotating a knob while holding the spinner down with the other hand. Oxo’s rectangular, easy-to-grab storage containers also open with a top button, eliminating the need to tug on a corner. Oxo added thickly padded handles to the lowly kitchen peeler to make it easier to use, and its tongs have a non-slip handle and lock to keep them closed for easier storing.¹⁵



Source: Grzegorz Czapski/Alamy Stock Photo

<< Well-thought-out, timeless design ensures that TV and sound products from Danish firm Bang & Olufsen have a long life span.

The International Design and Excellence Awards (IDEA) are given each year based on benefit to the user, benefit to the client/business, benefit to society, ecological responsibility, appropriate aesthetics and appeal, and usability testing. IDEO has been one of the more successful design companies through the years. Samsung's recent design accomplishments have been the result of a concerted effort.

Samsung Much of Samsung's remarkable marketing success comes from innovative new products that have captured the imagination of consumers all over the world. The company has invested heavily in R&D and in design capabilities, with big payoffs. It has a clear design philosophy it calls "Design 3.0" and an internal design slogan, "Make it Meaningful," that reflects its relentless focus on making beautiful and intuitive products that will be integrated into customers' lifestyles. Samsung applies three design criteria. Its products are (1) simple and intuitive, (2) efficient and long lasting, and (3) adaptive and engaging. Like its chief rival, Apple, the company organizes its design efforts through a cross-divisional Corporate Design Center that reports directly to the CEO. The Corporate Design Center aligns the design efforts of various divisions and analyzes cultural trends to help forecast the future of design. It also coordinates the work done at Samsung's five Global Design Centers, located in London, San Francisco, Shanghai, Tokyo, and Delhi.¹⁶



Source: Sundry Photography/Alamy Stock Photo

<< With a design philosophy underpinned by an internal "Make it Meaningful" slogan, Samsung is focused on making beautiful and functional products that can be integrated into consumers' lifestyles.

Product Portfolios and Product Lines

Most products exist as a part of a company's product portfolio and/or product line. Each product must be related to other products to ensure that a firm is offering the optimal set of products to fulfill the needs of its different customer segments.

PRODUCT PORTFOLIO DESIGN

A **product portfolio** encompasses all products offered by a company, including various product categories and product lines. For example, the extensive iPhone product portfolio includes headphones and headsets, cables and docks, armbands, cases, power and car accessories, and speakers. NEC's (Japan) portfolio consists of communication products and computer products. Michelin has three product lines: tires, maps, and restaurant-rating services. At Northwestern University, separate academic deans oversee the schools of medicine, law, business, engineering, music, journalism, and liberal arts, among others.

A company's product portfolio has a certain width, length, depth, and consistency. These concepts are illustrated in Figure 8.1 for selected Procter & Gamble consumer products.

- The **width** of a product portfolio is the number of different product lines the company carries. Figure 8.1 shows a product portfolio width of three lines. (In fact, P&G produces many additional lines.)
- The **length** of a product portfolio is the total number of items in the mix. In Figure 8.1, it is 12. We can also talk about the average length of a line. We obtain this by dividing the total length (here 12) by the number of lines (here 3), for an average product line length of 4.
- The **depth** of a product portfolio consists of the number of variants offered for each product in the line. If Tide came in two scents (Clean Breeze and Regular), in two formulations (liquid and powder), and with two additives (with and without bleach), it would have a depth of six because there are six distinct variants.¹⁷ We can calculate the average depth of P&G's product mix by averaging the number of variants within the brand groups.
- The **consistency** of the product portfolio reflects how closely related the various product lines are in end use, production requirements, distribution channels, or some other way. P&G's product lines are consistent in that they are consumer goods that go through the same distribution channels. The lines are less consistent in the functions they perform for buyers.

These four product mix dimensions permit a company to expand its business in four ways. It can add new product lines, thus widening its product mix. It can lengthen each product line. It can add more product variants to each product and thereby deepen its product mix. Finally, a company can pursue more product line consistency. To make these product, service, and brand decisions, marketers can conduct product line analysis.

PRODUCT LINE ANALYSIS

A **product line** is a group of related products sold by the same company. In offering a product line, companies normally develop a basic platform and modules that can be added to meet different customer requirements and lower production costs. Car manufacturers build cars around a basic platform. Homebuilders show a model home to which buyers can add additional features. Product line managers

FIGURE 8.1

Product Portfolio Width and Product Line Length for Procter & Gamble Products

Sources: REUTERS/Lucy Nicholson/Alamy Stock Photo; Keith Homan/Alamy Stock Photo; Malcolm Haines/Alamy Stock Photo; Keith Homan/Alamy Stock Photo; GK Images/Alamy Stock Photo; Courtesy of Kelly Murphy; Keith Homan/Alamy Stock Photo; GK Images/Alamy Stock Photo; rvlsoft/Alamy Stock Photo; rvlsoft/Alamy Stock Photo; Betty LaRue/Alamy Stock Photo; Helen/Alamy Stock Photo



need to know the sales and profits of each item in their line to determine which items to build, maintain, harvest, or divest.¹⁸ They also need to understand each product line's market profile and image.¹⁹

A company's product line typically contains products that appeal to different layers of customer needs. Supermarkets make almost no margin on bread and milk, reasonable margins on canned and frozen foods, and better margins on flowers, ethnic food lines, and freshly baked goods. Companies should recognize that different items will allow for different margins and develop strategies for maximizing the profitability of the entire product line.

The product line manager must review how the line is positioned against competitors' lines. Consider Paper Company X with a paperboard product line.²⁰ Two paperboard attributes are weight and finish quality. Paper is usually offered at standard levels of 90, 120, 150, and 180 weights. Finish quality is offered at low, medium, and high levels.

A product map allows a company to see its main competitors at a glance. It also helps planners to identify market segments and spot market opportunities. The map in Figure 8.2 shows the location of the various product line items of Company X and four competitors, A, B, C, and D. Competitor A sells two product items in the extra-high-weight class ranging from medium to low finish quality. Competitor B sells four items that vary in weight and finish quality. Competitor C sells three items in which the greater the weight, the greater the finish quality. Competitor D sells three items, all lightweight but varying in finish quality. Company X offers three items that vary in weight and finish quality.

The product map also shows which competitors' items are competing against Company X's items. For example, Company X's low-weight, medium-quality paper competes against competitor D's and B's papers, but its high-weight, medium-quality paper has no direct competitor. The map also reveals possible locations for new items. No manufacturer offers a high-weight, low-quality paper. If Company X estimates a strong unmet demand and can produce this paper at low cost and price it accordingly, it could consider adding this paper to its line.

Another benefit of product mapping is that it identifies market segments. Figure 8.2 shows the types of paper, by weight and quality, preferred by the general printing industry, the point-of-purchase display industry, and the office supply industry. The map shows that Company X is well positioned to serve the needs of the general printing industry but less effective in serving the other two markets.

Multibrand companies all over the world try to optimize their brand portfolios. This often means focusing on core brand growth and concentrating resources on the biggest and most established brands. Hasbro has designated a set of core toy brands to emphasize in its marketing, including GI Joe, Transformers, and My Little Pony. Procter & Gamble's "back to basics" strategy has concentrated on brands with more than \$1 billion in revenue, such as Tide, Crest, Pampers, and Pringles. Every product in a product line must play a role, as must every brand in the brand portfolio.

Volkswagen Volkswagen has four different core brands of particular importance in its European portfolio. Initially, Audi and Seat had a sporty image, and VW and Škoda had a family-car image. Audi and VW were in a higher price-quality tier than Škoda and Seat, which had spartan interiors and utilitarian engine performance. To reduce costs, streamline part/systems designs, and eliminate redundancies, Volkswagen upgraded the Seat and Škoda brands, which captured market share with splashy interiors, a full array of safety systems, and reliable power trains. Clearly, the danger is that by borrowing from its upper-echelon Audi and Volkswagen products, Volkswagen could dilute its cachet. Frugal European consumers may convince themselves that a Seat or Škoda is almost identical to its VW sister, at several thousand euros less.²¹

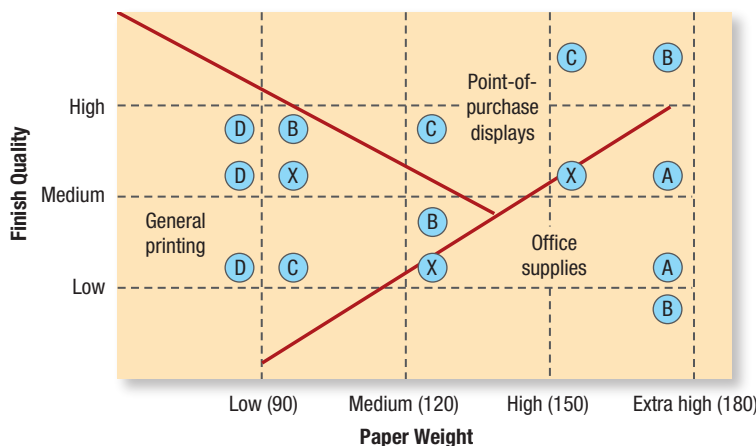


FIGURE 8.2

**Product Map
for a Paper-Product
Line**

Source: Benson P. Shapiro, *Industrial Product Policy: Managing the Existing Product Line* (Cambridge, MA: Marketing Science Institute Report No. 77-110). Copyright © 2003. Reprinted by permission of Marketing Science Institute and Benson P. Shapiro.

>> Volkswagen's upgrade of its European Škoda and Seat family sedans may end up diluting the image of its sportier, higher-priced Audi and VW brands.



Sources: Bodnar Photodesign/Shutterstock; Dmitry Orlov/Alamy Stock Photo

Product lines regularly need to be modernized. The question is whether to overhaul the line piecemeal or all at once. A piecemeal approach allows the company to see how customers and dealers take to the new style. It is also less draining on the company's cash flow, but it lets competitors see changes and start redesigning their own lines. Consider Häagen-Dazs's product line innovation.

Häagen-Dazs Unlike other companies, which were pumping air into their ice cream to save on costs, Reuben Mattus was determined to catapult the family's recipe into a category all its own. He used only the finest ingredients to create thicker, smoother ice cream under the Häagen-Dazs name. Initially the company offered only three simple flavors (vanilla, chocolate, and coffee) until it added strawberry to the mix in 1966, after a 6-year search to find a source for sweet, red berries that were up to Mattus's standards. Product innovation continued as Häagen-Dazs introduced its chocolate-covered ice cream bars on Valentine's Day in 1986. In 1993, Häagen-Dazs sorbet made its debut. When Häagen-Dazs discovered Dulce de Leche in South America, in 1998 it developed its own thicker, richer caramel to better complement the ice cream. In 2013, inspired by the creamy texture of gelato, Häagen-Dazs set out to create its own version of the Italian treat. And in 2016, Häagen-Dazs began phasing out GMO ingredients from all flavors.²²

In rapidly changing markets, modernization is continuous. Companies plan improvements to encourage customer migration to higher-value, higher-priced items. Microprocessor companies such as Intel and Qualcomm and software companies such as Microsoft, Oracle, and SAP continually introduce more advanced versions of their products. Marketers want to time improvements so they do not appear too early (damaging sales of the current line) or too late (giving the competition time to establish a strong reputation).²³



Source: Ian Dagnall/Alamy Stock Photo

>> Flavor innovation at Häagen-Dazs, which prides itself on the quality of its products, can take years as the company searches to find a source for or develops ingredients that are up to its standards.

PRODUCT LINE LENGTH

Company objectives influence product line length—the total number of items in the product line. One objective is to create a product line to induce up-selling. The Mercedes C-Class plays a critical role as an entry point to the brand. As one industry analyst noted, “The C-Class is critical for the luxury race because it creates the most amount of volume for Benz. It also opens the Benz brand to potential future buyers by catching them while they're young with the hopes that they upgrade as they get more affluent and older.”²⁴

A different objective is to create a product line that facilitates cross-selling: Hewlett-Packard sells printers as well as computers. Still another is to protect against economic ups and downs: Electrolux sells household appliances such as refrigerators, dishwashers, and vacuum cleaners under different brand names in the discount, middle-market, and premium segments, in part as a hedge against the economy moving up or down. Companies seeking high market share and market growth generally carry longer product lines. Those emphasizing high profitability carry shorter lines consisting of carefully chosen items.

Product lines tend to lengthen over time. Excess manufacturing capacity puts pressure on the product line manager to develop new items. The sales force and distributors also lobby for a fuller product line to satisfy customers. But as items are added, costs rise for design and engineering, inventory carrying, manufacturing changeover, order processing, transportation, and new-item promotions. Eventually, top management may stop development because of insufficient funds or manufacturing capacity. A pattern of product line growth followed by massive pruning may repeat itself many times. Increasingly, consumers are growing weary of dense product lines, overextended brands, and feature-laden products (see “Marketing Insight: When Less Is More”).²⁵ Using sales and cost analysis, product line managers must periodically review the line for deadwood that depresses profits.²⁶

Crocs The signature plastic clogs or “boat shoes”—colorful, comfortable, perfect for summer—succeeded soon after their introduction in Boulder, Colorado, in 2002. The company’s 2006 IPO was the largest ever in U.S. footwear, raising \$208 million. Its stock peaked a year later when Crocs’ sales reached \$847 million. But the recession and consumer fatigue with the brand were a double whammy that led to a steep drop in sales and drove the stock price down to a mere \$1 in what Crocs CFO later called a “near-death experience.” By 2011, however, Crocs had rebounded with more than \$1 billion in revenue and growth goals of 15 percent to 20 percent. What happened? The company had diversified into more than 300 models of stylish, comfortable boots, loafers, sneakers, and other shoes that helped to reduce its reliance on clogs to less than 50 percent of sales. It also adopted a multichannel distribution approach to sell wholesale through retailers like Kohl’s and Dick’s Sporting Goods (60 percent of business), as well as directly online (10 percent) and through more than 500 of its own retail stores (30 percent). International sales now make up more than half of its sales, including in emerging markets and the growing middle-class markets in Asia and Latin America.²⁷



Source: mozakim/Shutterstock

>> When the quick success achieved by Crocs’ signature plastic clogs was threatened by the 2008 recession and lackluster sales, the company rebounded by diversifying with hundreds of stylishly comfortable footwear designs and adopting multichannel distribution.

A company lengthens its product line in two ways: line stretching and line filling.

Line Stretching. Every company’s product line covers a certain part of the total possible range. For example, Mercedes automobiles are located in the upper price range of the automobile market. **Line stretching** occurs when a company lengthens its product line beyond its current range, whether down-market, up-market, or both ways.

Down-Market Stretch. A company positioned in the middle market may want to introduce a lower-priced line for several reasons. First, a company may notice strong growth opportunities in the lower-tier market and enter this market to capture some of this growth. Alternatively, a company might be forced to move downscale because the middle market is stagnating or declining. Finally, a company might stretch its product line downscale to tie up lower-end competitors who might otherwise try to move up-market. Indeed, when a company has been attacked by a low-end competitor, it often decides to counterattack by entering the low end of the market.

When launching downscale product line extensions, companies face a number of branding choices. One option is to use the parent brand name on all its offerings. Sony has used its name on products in a variety of price tiers. An alternative approach is to introduce lower-priced offerings using a sub-brand name, such as P&G’s Charmin Basic and Bounty Basic. Yet another option is to introduce the lower-priced offerings under a different name, such as the Gap’s Old Navy brand. This strategy is expensive to implement and means brand equity will have to be built from scratch, but the equity of the parent brand name is protected.

Moving down-market carries risks that include dilution of the core brand’s image and cannibalization of the core brand’s sales. P&G introduced Tide Basic in test markets—priced lower but also lacking some of the latest detergent technology of its famous parent brand—and decided against rolling it out.²⁸ On the other hand, Mercedes successfully introduced its C-Class cars at \$30,000 without

impairing its ability to sell other Mercedes cars for \$100,000. John Deere introduced a lower-priced line of lawn tractors called Sabre from John Deere, while still selling its more expensive tractors under the John Deere name. In these cases, consumers may have been better able to compartmentalize the different offerings and understand the functional differences between them.²⁹

Up-Market Stretch. Companies may wish to enter the high end of the market to achieve more growth, realize higher margins, or simply position themselves as full-line manufacturers. Many markets have spawned upscale segments: Starbucks in coffee, Häagen-Dazs in ice cream, and Evian in bottled water. The leading Japanese auto companies each introduced a highly successful upscale automobile nameplate: Toyota's Lexus, Nissan's Infiniti, and Honda's Acura. They invented entirely new names because consumers might not have given the brand "permission" to stretch upward when those lines were first introduced. Moving up-market is not without risks, however. A company might lack the resources—infrastructure, know-how, and people—to develop a superior product that will fit the needs of its upscale target customers.

Some companies have used their core brands in moving up-market. Gallo sells Gallo Family Vineyards (priced at \$10 to \$30 a bottle) with a hip, younger image to compete in the premium wine segment. General Electric introduced the GE Profile brand for its large-appliance offerings in the upscale market. In order to signal consumers that there's been a quality improvement, some brands have used modifiers like "new" or "enhanced." Consider Ultra Dry Pampers, Extra Strength Tylenol, and Power Pro Dustbuster Plus.

Two-Way Stretch. Companies serving the middle market might stretch their line in both directions to effectively blanket the market with products and "sandwich" their competition. This carries the risks involved in both down-market and up-market stretches. However, this strategy can work, as evidenced by Robert Mondavi Winery, now owned by Constellation Brands. Mondavi sells \$35 bottles of wine as the first premium "New World" wine; it also sells \$125 bottles of Mondavi Reserve at high-end wineries, restaurants, and vineyards and through direct order, as well as \$11 bottles of Woodbridge created during the grape oversupply of the mid-1990s. Purina further illustrates how simultaneous up- and down-market extension can be effective.

Purina Dog Food Purina Dog Food has stretched up and down to create a product line differentiated by benefits to dogs, breadth of varieties, ingredients, and price. Pro Plan (\$40/18 lb bag) helps dogs live long and healthy lives with high-quality ingredients (real meat, fish, and poultry). Purina ONE (\$25/16.5 lb bag) meets dogs' changing and unique nutritional needs and provides superpremium nutrition for good health. Purina Dog Chow (\$15/18.5 lb bag) provides dogs with complete nutrition to build, replenish, and repair at each life stage. Alpo by Purina (\$10/17.6 lb bag) offers beef, liver, and cheese flavor combinations and three meaty varieties.

>> Purina Dog Food strengthened its market position by extending its product line with offerings that provide different levels of benefits at different price points.



Source: REUTERS/Edgard Garrido/Alamy Stock Photo

Line Filling. A firm can also lengthen its product line through **line filling**—that is, by adding more items within the existing range. Motives for line filling include reaching for incremental profits, satisfying dealers who complain about lost sales because of items missing from the line, addressing consumers' desire for variety,³⁰ trying to become the leading full-line company, and plugging holes to keep out competitors. Consider the way BMW has been filling the gaps in its product line.

BMW AG Over time, BMW has morphed from a one-brand, five-model carmaker into a powerhouse with three brands, 14 series, and roughly 30 distinct models. Not only has the carmaker expanded its product range downward with MINI Coopers and its compact 1-series models, but it has also built it upward with Rolls-Royce and filled in the gaps with its sports activity vehicles, roadsters, and coupes. The company has used line filling successfully to boost its appeal to the rich, the super-rich, and the hope-to-be-rich, all without departing from its pure premium positioning. BMW has also built a clear brand migration strategy within its product line, trying to move its customers from lower-end to higher-end vehicles.³¹

Line filling is overdone if it results in cannibalization, causes confusion, or merely does not address the needs of any customer segment. Indeed, if the offerings are too similar to one another, customers are likely to be confused about which to choose. And if offerings vary in price, they may overwhelmingly buy the cheaper one. In addition to avoiding confusion and cannibalization, the proposed offering should meet a genuine market need, rather than being added simply to satisfy an internal need. The infamous Edsel automobile, on which Ford lost \$350 million in the late 1950s, met Ford's internal positioning need for a car between its Ford and Lincoln lines, but it clearly did not meet the market's needs at all.

Managing Packaging and Labeling

Many marketers view packaging and labeling as an important element of product strategy. Some product packages—such as the Coke bottle, Tiffany's blue box, and the Red Bull can—are world famous.

PACKAGING

Packaging includes all the activities of designing and producing the container for a product. Packages might have up to three layers, with one or more of these layers designed to capture the purchaser's attention and ensure that the product is distinct from the competition. Cool Water cologne by Davidoff For Men comes in a signature blue bottle with white lettering (*primary package*) inside a blue cardboard box with white lettering (*secondary package*), shipped in a corrugated box (*shipping package*) to protect the six dozen bottles in cardboard boxes.

Packaging is important because it is the buyer's first encounter with the product. A good package draws the consumer in and encourages product choice. In effect, it can act as a "five-second commercial" for the product. Some packages can even be attractively displayed at home. Distinctive packaging like that for Kiwi shoe polish, Altoids mints, and Absolut vodka is an important part of a brand's equity.

Several factors contribute to the growing use of packaging as a marketing tool.

- **Self-service.** In an average supermarket, which may stock 15,000 items, the typical shopper passes some 300 products per minute. Given that 50 percent to 70 percent of all purchases are made in the store, effective packaging must perform many sales tasks: attract attention, describe the product's features, create consumer confidence, and make a favorable overall impression.
- **Consumer affluence.** Affluent consumers are willing to pay a little more for the convenience, appearance, dependability, and prestige of better packaging.
- **Company and brand image.** Packaging contributes to instant recognition of the company or brand. In the store, they can create a billboard effect, as Garnier Fructis does with its bright green packaging in the hair care aisle.

- **Innovation opportunity.** Unique or innovative packaging can bring big benefits to consumers and profits to producers. Companies are always looking for a way to make their products more convenient and easier to use—often charging a premium when they do so. The SC Johnson Smart Twist Cleaning System has a handheld sprayer and carousel that rotates among concentrated versions of three different cleaning products; Kleenex hand towels use a dispenser that fits upside down on a bathroom towel rack; and Kiwi Express Shine shoe polish has a dispenser and applicator to shine shoes without the need to spread newspaper, wear a glove, or use a brush.

Packaging must achieve a number of objectives: It must identify the brand; convey descriptive and persuasive information; facilitate product transportation, protection, and storage; and aid consumption. To achieve these objectives and satisfy consumers' desires, marketers must ensure that the functional and aesthetic components of packaging are aligned with one another and, at the same time, are optimized to create value for customers and the company. Functionally, structural design is crucial. The packaging elements must harmonize with one another and with pricing, advertising, and other parts of the marketing program.³² Aesthetic considerations involve a package's size and shape, material, color, text, and graphics.³³

Color is a particularly important aspect of packaging and carries different meanings in different cultures and market segments. As one expert says, "Color is all-pervasive. It is language-neutral, but loaded with meaning. It's completely overt, yet each person sees color through different eyes, both literally and figuratively."³⁴ Color can define a brand, from Tiffany's blue box to Cadbury's purple wrapping and UPS's brown trucks. Orange, the telecom mobile operator, uses color as both its look and its very name!

One of the reasons why color is important is that different colors can have different meanings and convey different emotions. Consider the following interpretations of different colors that some marketing experts believe are common in Western culture.³⁵

Red symbolizes excitement, energy, passion, courage, and being bold. *Orange* connotes friendliness and fun, combining the energy of red and the warmth of yellow. *Yellow*, the color of the sun, is equated with warmth, joy, and happiness. *Green*, the color of nature, connotes health, growth, freshness, and renewal. *Blue*, the color of the sky and sea, is associated with dependability, trust, competence, and integrity. *Purple* symbolizes nobility, wealth, and wisdom, combining the stability of blue and the energy of red. *Pink* is considered to have soft, peaceful, comforting qualities. *Brown*, the color of the earth, connotes honesty and dependability. *Black* is seen as classic, strong, and balanced. *White* connotes purity, innocence, and cleanliness.

>> Tiffany's brand is defined in part by its iconic "Tiffany blue" packaging.



Source: Simon Lord/Alamy Stock Photo

Packaging updates and redesigns can occur frequently to keep the brand contemporary, relevant, or practical. Although these changes can have an immediate impact on sales, they also can have a downside, as PepsiCo learned for its Tropicana brand.

Tropicana PepsiCo experienced great success with its Tropicana brand, acquired in 1998. Then, in 2009, the company launched a redesigned package to “refresh and modernize” the brand. The goal was to create “emotional attachment by ‘heroing’ the juice and trumpeting the natural fruit goodness.” Arnell Group led the extreme makeover, which culminated in an entirely new look, downplaying the brand name, highlighting the phrase “100 percent orange pure & natural,” and replacing the “straw in an orange” graphic on the front with a close-up of a glass of orange juice. Consumer response was swift and negative. The package was deemed “ugly” or “stupid,” and some even confused the product with a store brand. Sales dropped 20 percent. After only two months, PepsiCo management announced it would revert to the old packaging.³⁶

After a company designs its packaging, it must test that packaging. *Engineering tests* ensure that the package stands up under normal conditions; *visual tests* confirm that the script is legible and the colors harmonious; *dealer tests* determine that dealers find the packages attractive and easy to handle; and *consumer tests* establish that buyers will respond favorably.

When developing effective packaging, companies must consider its environmental impact. Japan’s tendency to overpackage everything from groceries to cosmetics is in direct contrast to its reputation as a stellar recycler. A lone banana can come wrapped in several layers of cellophane. Squares of chocolate are individually wrapped, put together in a cardboard wrapper, and then encased in plastic. Hygiene and regulations are factors, but tradition and consumer expectations count more. Product wrapping is viewed as an added touch of luxury and often carries the store or brand name. Thus, the designing of environmentally friendly packaging will need to address customer expectations.³⁷

Fortunately, addressing growing environmental concerns has become an important element in developing effective packaging in other parts of the world. Although this may consume more of a company’s time and resources, many firms have “gone green” and are finding creative new ways to package their wares, which can lead to unexpected benefits. Nespresso, Keurig, and others have developed recyclable coffee pods, which should attract new ecologically minded customers to its coffee-brewing machines. Dell introduced bamboo packaging as an alternative to corrugated cardboard, foam, molded paper pulp, and plastic and took other steps to reduce the overall volume of packaging used.³⁸ And yet, developing environmentally friendly packaging that also satisfies customers’ needs can be challenging, as Frito-Lay found out.

Sun Chips Frito-Lay’s Sun Chips multigrain snacks, containing 30 percent less fat than potato chips, have succeeded as a healthier, “good for you” snack option. Part of the firm’s effort to support a “healthier planet” as well as to run its factory in Modesto, California, on solar power and unveil a novel 100 percent compostable bag made of plant-based materials. Much research went into the development of the bag, and it was launched with fanfare in 2010. Unfortunately, it included polymers that made it “kind of crispy and crunchy” at room temperature, and consumers began to complain about how noisy it was. One Air Force pilot said it was louder than the cockpit of his jet. To prove his point, he squeezed the new Sun Chips bag and recorded a 95-decibel level with a sound meter, considerably more than the 77-decibel level recorded when he squeezed a conventional Tostitos bag. When thousands of people chose to friend a Facebook page called “Sorry But I Can’t Hear You Over This Sun Chips Bag”—and with sales sliding—Frito-Lay decided to drop the compostable bag after an 18-month run.³⁹



>> Frito-Lay decided to eliminate the entirely compostable bag it had painstakingly developed for its healthier alternative to potato chips after sales slid amid consumer complaints about the bag’s high noise level.

LABELING

The label can be a simple attached tag or an elaborately designed graphic that is an inherent part of the package. It might carry a great deal of information or only the brand name. Even if the seller prefers a simple label, the law may require more.

A label performs several functions. First, it *identifies* the product or brand, as does the name Sunkist stamped on oranges. It might also *grade* the product; canned peaches are grade-labeled A, B, and C. The label might *describe* the product: who made it, where and when, what it contains, how it is to be used, and how to use it safely. Finally, the label might *promote* the product through attractive graphics. For example, advanced technology allows 360-degree shrink-wrapped labels to replace glued-on paper labels, so containers can be surrounded with bright graphics and accommodate more product information.

Labels eventually need freshening up. The label on Ivory soap has been redesigned at least 18 times since the 1890s, with gradual changes in the size and design of the letters. As Tropicana found out, companies with labels that have become icons need to tread very carefully in order to preserve key branding elements when undertaking a redesign.

A long history of legal concerns surrounds labels and packaging. In 1914, the Federal Trade Commission Act held that false, misleading, or deceptive labels or packages constitute unfair competition. The Fair Packaging and Labeling Act, passed by Congress in 1967, set mandatory labeling requirements, encouraged voluntary industry packaging standards, and allowed federal agencies to set packaging regulations in specific industries.

The Food and Drug Administration (FDA) has required processed-food producers to include nutritional labeling that clearly states the amounts of protein, fat, carbohydrates, and calories contained in products, as well as vitamin and mineral content as a percentage of the recommended daily allowance. The FDA has also taken action against potentially misleading uses of such descriptions as “light,” “high-fiber,” “natural,” and “low-fat.”

Not all countries apply such strict definitions. In the United Kingdom, “light” and “lite” do not have an official meaning in law, although “low-fat” does—the food product must be less than 3 percent fat to qualify. As a result, some foods branded “light” there have been found to contain up to seven times more fat than those described as “low-fat.”⁴⁰

Managing Guarantees and Warranties

All sellers are legally responsible for fulfilling a buyer’s normal or reasonable expectations. Guarantees and warranties are explicit or implicit promises by sellers that the product will perform as specified or that the seller will fix it or refund the customer’s money during a specified period. Products under warranty or guarantee can be returned to the manufacturer or a designated repair center for repair, replacement, or refund. Whether expressed or implied, guarantees and warranties are legally enforceable.

A **guarantee** ensures that if a product fails to function as promised by the company or as customers expect, the company will provide some type of compensation to the purchaser. Detailing the process of addressing potential product failures up front adds credibility to the company’s claims, reduces the functional and monetary risk associated with using the product, and creates peace-of-mind value for customers. Besides creating customer value, guarantees also can be beneficial to the company: They intensify its focus on the customer experience, establish accountability, expedite the development of performance standards, and provide guidelines for recovering from failures.⁴¹

Many sellers offer either general or specific guarantees. A company such as Procter & Gamble promises general or complete satisfaction without being more specific: “If you are not satisfied for any reason, return for replacement, exchange, or refund.” A.T. Cross guarantees its Cross pens and pencils for life. The customer mails the pen to A.T. Cross (mailers are provided at stores), and the pen is repaired or replaced at no charge.

A company can provide customers with an *overall satisfaction* guarantee that applies to any facet of the product experience, whether it involves the actual quality of the product or the customer’s assessment of product quality. Or the company might provide a *specific attribute* guarantee that applies to a particular aspect of the product, such as performance, reliability, or durability. Product guarantees can be valid for a specified time period such as one year, or they might involve a variable time frame—for example, the life of the product or the customer.

Warranties provide customers and the company with much the same benefits as guarantees do. However, warranties and guarantees differ on two key dimensions. Warranties usually cover the repair or replacement of the purchased item and usually do not allow the customer to return the product for a refund, which is the case with guarantees. Furthermore, whereas guarantees are always provided free of charge and require no additional payment from customers, warranties are available to extend the free warranty that comes with the product. Such extended warranties do require added payment and can be acquired at the time the product is purchased or at a later date.⁴²

Extended warranties and service contracts can be extremely lucrative for manufacturers and retailers. Analysts estimate that warranty sales have accounted for a large percentage of Best Buy's operating profits. Despite evidence that buying extended warranties does not pay off, some consumers value the peace of mind they offer.⁴³ These warranties still generate billions of dollars in revenue for U.S. suppliers of electronic goods, although the total has declined as consumers have become more comfortable seeking solutions to technical problems online or from friends.⁴⁴

Guarantees and warranties reduce the buyer's perceived risk. They suggest that the product is of high quality and that the company and its service performance are dependable. They can be especially helpful when the company or product is not well known or when the product's quality is superior to that of competitors. Hyundai's and Kia's highly successful 10-year or 100,000-mile power train warranty programs were designed in part to assure potential buyers of the quality of the products and the stability of the companies.

Effective product guarantees and warranties should have three traits: They need to be *relevant*, *easily understood*, and *easy for the customer to invoke*. For a guarantee to be relevant, the guaranteed feature of the offering should be of importance to customers. Guarantees and warranties are of limited or no value to customers when they apply to features that customers do not perceive as important or that rarely malfunction. Guarantees and warranties are easy for customers to understand when the company's promise and the measures that customers need to take in the event that the product fails are stated in a simple, straightforward manner. Guarantees and warranties are easy for customers to invoke—and are more easily communicated to customers—when they contain a limited number of exclusions and limitations. This reduces the amount of time and effort needed for customers to exercise their recourse to satisfaction should the product fail to live up to the stipulations of the guarantee or warranty.⁴⁵

marketing INSIGHT

When Less Is More

Among the decisions that managers at both manufacturers and retailers must make is how to design and manage their product lines and product assortments. Even though conventional wisdom suggests that offering an extensive variety of options will be more beneficial and, therefore, more attractive to a greater number of consumers, it is also more costly for the company. Research-backed surveys indicate that consumers prefer retailers and brands that offer the greatest variety, so managers typically try to maximize the number of options offered to consumers within the cost constraints imposed by the company.

There are several factors underlying the belief among most managers that variety facilitates choice:

- **Increased ability to match preferences and options.** Larger assortments offer an opportunity to better match consumer preferences with the options available in the choice set. The more options contained in an assortment, the greater the chance that individual consumers will find their optimal choice.

- **Increased flexibility for consumers.** Larger assortments allow consumers to keep their options open and offer them greater flexibility when making a selection. Lack of variety might make consumers feel that their choice is restricted by there being an inadequate number of options, which can create an aura of negativity.
- **Increased opportunity to explore available options.** The mere fact that a choice set contains a large variety of options may convince consumers that they have been given the chance to explore the complete roster of options available in the product category. This gives them confidence that they understand the different features and benefits among the choice alternatives before making a decision.

Thus there are impressive reasons why larger assortments are likely to be of benefit to consumers, but this is not always true. In some instances, more options can hinder rather than facilitate consumers' ability to decide

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marketing insight *(continued)*

among the options. There are several reasons why this can occur:

- **Information overload.** Consumers choosing from large assortments can find themselves hampered by information overload, because they have to process more information than they have to consider when they choose from less extensive assortments. Consumers often find it less taxing to deal with smaller assortments simply because they have to consider and evaluate fewer options and attributes.
- **Choice overload.** Larger assortments are more likely to lead to choice overload, which can occur when the consumer finds more than one satisfactory option in the available choice set. This compounds the difficulty of making a decision: In addition to processing a large amount of information, the consumer needs to make a trade-off, giving up performance on one attribute in order to gain performance on another.
- **High consumer expectations.** Larger assortments can complicate choice by leading consumers to expect that they are likely to find the “perfect” option. When consumers have high expectations of finding their ideal choice among the available options but it fails to materialize, there is a greater probability that they will walk away from the assortment without making a decision.

Assembling the optimal assortment size from which target customers can choose is not a simple task. Some

market conditions favor large assortments that will enhance consumer choice, whereas in other scenarios, larger assortments may be detrimental to consumer choice. The question that must be answered: When will more or fewer options benefit consumer choice? Recent research suggests that consumers’ reaction to assortment size is dependent on their expertise, particularly their knowledge of the attributes and attribute levels of the choice alternatives and the degree to which they already have preferences among these options. This will allow them to more easily trade off the benefits and costs of different option attributes. What this means is that “expert” consumers with product knowledge and readily articulated preferences are more likely to benefit from the variety offered by larger assortments than are “novices” who are unfamiliar with the product category and have no ready preferences.

Thus, when it comes to managing product assortments, more variety is not always the best way to go. Empirical research shows that there are many instances when fewer options can make purchase more likely, lower the rate of return, and lead to more satisfied customers. Research on assortment size emphasizes that managers should consider two key factors when designing product lines: consumer goals and consumer expertise. Managers need to take these two essential factors into account in order to develop a product line strategy that creates customer-centric offerings and achieves market success.⁴⁶

summary

1. The product is a key element of the marketing mix. Along with services and brands, products are the core drivers of customer benefits and are the reason why consumers are willing to purchase a particular offering.
2. To successfully compete in the market, products must be differentiated. Attributes on the basis of which to differentiate include core functionality, features, performance quality, conformance quality, durability, reliability, form, style, and customization.
3. Product design—the way a product looks, feels, and functions—offers a potent way to differentiate and position a company’s products and services. Design is not just a phase in creating a product, service, or application. It’s a way of thinking that permeates all aspects of the marketing program so that all design aspects work together. Design offers functional and aesthetic benefits and influences both the rational and the emotional aspects of consumers’ decision making.
4. Most products exist as a part of a company’s product portfolio and/or product line. Each product must be related to other products to ensure that a firm is offering the optimal set of products to fulfill the needs of its different customer segments.
5. A product portfolio encompasses all products offered by a company, including various product categories and product lines. A company’s product portfolio has a certain width, length, depth, and consistency. These four dimensions are the tools for developing the company’s marketing strategy and deciding which product lines to grow and which to maintain, harvest, or divest.
6. A product line is a group of related products sold by the same company. A company’s product line typically contains products that appeal to different layers of customer needs. In offering a product line, companies normally develop a basic platform and modules that can be added to meet different customer requirements and lower production costs. To analyze a product line and decide how many resources to invest in it, product line managers need to look at sales, profits, and market profile.

7. Company objectives influence product line length—the total number of items in the product line. Product lines tend to lengthen over time. A company lengthens its product line in two ways: line stretching and line filling. Line stretching occurs when a company lengthens its product line beyond its current range, whether down-market, up-market, or both. Line filling occurs when a firm adds more items within the existing range.
8. Packaging includes all the activities of designing and producing the container for a product. Packaging must achieve a number of objectives: identify the brand, convey descriptive and persuasive information, facilitate product transportation/protection/storage, and aid consumption. A good package draws the consumer in and encourages product choice.
9. The label can be a simple attached tag or an elaborately designed graphic that is an inherent part of the package. A label performs several functions: It *identifies* the product or brand; it might *describe* the product (who made it, where and when, what it contains, how it is to be used, and how to use it safely), and it might *promote* the product through persuasive messaging.
10. Guarantees and warranties are explicit or implicit promises by sellers that the product will perform as specified or the seller will fix it or refund the customer's money during a specified period. Guarantees reduce the buyer's perceived risk by suggesting that the product is of high quality and that the company and its service performance are dependable. Whether expressed or implied, warranties and guarantees are legally enforceable.

marketing SPOTLIGHT

Apple

Apple Computers was founded, in 1976, by college dropouts Steve Jobs and Steve Wozniak, who wanted to make computers more user-friendly so people could use them at home and at work. The company's first major success—Apple II launched in 1977—revolutionized the computer industry with the introduction of the first-ever color graphics. On the heels of explosive growth, Apple went public in 1980. Several years later, in 1983, Jobs hired John Sculley, CEO of PepsiCo at the time, as Apple's CEO—a decision that backfired when, in 1985, Sculley ended up firing Jobs.

Apple's focus on short-term profits rather than innovation led to a gradual deterioration of its market position, and by 1996, experts were raising questions about the company's viability. To make up for lack of innovation, Apple bought out NeXT Software—the company founded by Jobs after he left Apple—and brought back Jobs as an interim CEO (he officially became CEO in 2000). Once back at the helm of Apple, Jobs forged an alliance with Microsoft to develop a Mac version of its popular Office software, introduced iBook—an entry-level laptop for consumer and education markets, and launched iMac—a suite of all-in-one computers featuring distinctly colored, translucent egg-shaped cases.

Over the past two decades, Apple has continued to invest heavily in research and development to become a world leader in innovative new-product launches. The company transformed the way people listen to music, play video games, talk on the phone, and even read books. Apple's revolutionary product innovations include the iPod, iMac, iPhone, and iPad and are the reason why the company topped *Fortune* magazine's World's Most Admired Companies list for many years.



Source: Sean Xu/Alamy Stock Photo

One of Apple's early and most important innovations was the iPod MP3 player. Not only did the iPod become a cultural phenomenon; it introduced many consumers to Apple and initiated a series of monumental product innovations. The iPod exemplified Apple's leading-edge design skills and looked, felt, and operated like no other device. To the delight of Apple (and the chagrin of competitor Sony), the iPod became "the Walkman of the 21st century." The dynamic duo of the iPod and the newly launched iTunes Music store helped drive iPod sales through the roof.

The iPod was also central in changing the way people listened to and used music. According to musician John Mayer, "People feel they're walking through musicology" when they use their iPods, leading them to listen to more music, and with more passion. The iPod has gone through a series of generations, and along the way Apple has added features like photo, video, and radio capabilities. Realizing the success of its foray into the music industry in general and the iPod in particular, Apple launched iTunes—a software-based digital marketplace for music. Introduced in 2003, the iTunes store became the largest music vendor in the United States by 2008 and the largest music vendor in the world by 2010.

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Apple achieved its impressive market domination through a combination of shrewd product innovation and clever marketing. The marketing effort appealed both to Apple fans and to people who had not used Apple products in the past. To reach such a broad consumer base, the company had to shift its channel strategies. Apple added “mass electronic” retailers such as Best Buy and (the now obsolete) Circuit City to its existing channels, which quadrupled its number of outlets.

Besides this enhanced “push” effort, Apple also developed memorable, creative “pull” advertising that helped drive the popularity of the iPod. The Silhouettes, which featured silhouettes of people listening to and dancing with their iPods, appeared all over the world. This simple message worked across cultures, portraying the iPod as cool but not beyond the reach of anyone who enjoyed music.

As the iPod’s popularity grew, a halo effect helped increase the market share of Apple’s other products. As a result, in 2007 Apple officially changed its name from Apple Computer Inc. to Apple Inc. to help communicate the company’s expanded focus on non-computer products. Apple’s next-largest product launch after the iPod was the iPhone, its 2007 entry into the cell phone industry. The iPhone, with its touch-screen pad, virtual keyboard, and internet and e-mail capabilities, launched to huge consumer excitement: People lined up for hours to be among the first to buy one. Investment analysts initially feared that Apple’s two-year contract with AT&T and high initial price would hinder the iPhone’s success. Seventy-four days after the product’s debut, however, Apple had sold its one-millionth iPhone. It had taken the iPod two years to reach the cumulative sales (\$1.1 million) that the iPhone had reached in its first quarter. In fact, half the iPod buyers switched to AT&T from a different wireless carrier, some incurring fees to break their contracts, just to have a chance to own an iPhone.

The launch of the iPad also created a media frenzy in 2013. The multitouch device combined the look and feel of the iPhone with the power of a MacBook and gave consumers access to music, books, movies, pictures, video games,

documents, and hundreds of thousands of applications at the touch of a finger, without mouse or keyboard. Apple followed up with the launch of the iPad mini, a smaller version of the original, and the iPad Air, which corresponded with a powerful marketing campaign that inspired consumers to feel they could do anything with their iPad, including creating movies, building wind turbines, studying coral reefs, and making mountain climbing safer.

On the heels of the success of the iPad, in 2015 Apple introduced its first wearable device, Apple Watch, offering fitness tracking and health-oriented capabilities. After a sluggish start, Apple Watch ultimately became one of Apple’s fastest-growing product categories, selling over 30 million units in 2019. True to its mission of staying at the forefront of user-friendly consumer technologies, Apple now invests heavily in artificial intelligence and machine learning. Indeed, in the past several years, the use of artificial intelligence in consumer products has exploded through the rise of digital assistants such as Amazon’s Alexa, Google’s Assistant, and Apple’s own Siri.

Apple’s investment in research and development is one way the company remains a leader in this cutthroat industry. Apple spent over \$18 billion on research and development in 2020 and continues to increase its R&D budget in order to stay ahead of the competition. Creating, producing, and launching new products is a top priority for Apple. Supported by creative marketing, the company’s pioneering is the reason why consumers and analysts stay on their toes awaiting news of Apple’s latest products.⁴⁷

Questions

1. What are the key factors contributing to Apple’s phenomenal success?
2. Apple’s product launches over the past decade have been monumental. What makes the company so good at innovation?
3. How important was the iPhone to Apple’s current success? Discuss the significance of the iPad and Apple Watch launches to Apple’s new-product development strategy.

marketing SPOTLIGHT

Casper

Casper is an American e-commerce company that primarily sells mattresses. The idea of Casper was thought up by four members of a New York City venture accelerator in 2013. The company aimed to be an alternative to what they called “Big Mattress,” the dominant manufacturers and retailers at the time.

The four brands that made up “Big Mattress” were Serta, Simmons, Tempur-Pedic, and Sealy. The Casper



Source: McClatchy-Tribune/Tribune Content Agency LLC/Alamy Stock Photo

founders believed that mattresses sold by these companies were priced too high. The price of a queen mattress at the time from one of these companies could go as high as \$2500. In addition, most mattresses were purchased in stores. Casper's founders believed that the in-store purchasing process was one of the worst buying experiences found anywhere. Customers weren't able to do much more than lie on the mattress in the store for a couple of minutes.

Casper applied the business model of Warby Parker to the mattress industry. The four founders particularly admired Warby Parker's success in offering designer sunglasses at radically low prices and its online sales model. By selling mattresses online, Casper eliminated the traditional painful consumer experience of purchasing a mattress in stores. Casper also distinguished its mattresses by offering them at one-third of "Big Mattress" prices.

Casper designed its first mattress to be the "One Perfect Mattress for Everyone." The first Casper mattress was composed of a resilient foam that could be compressed into the largest box size that could be handled by UPS. The combination of one mattress and a simple delivery method meant that consumers had an easy decision-making process and the company enjoyed logistical benefits. Casper also offered free delivery and a 100-night free trial to customers. If customers were not happy with the mattress, a customer service agent retrieved the mattress and the money was refunded with no questions asked.

The combination of providing a well-designed mattress and a superior shopping experience, all at a low price point, made Casper an attractive choice for customers. To create awareness for its product, Casper first focused on word of mouth and outdoor advertising. The company invested in advertisements that featured colorful ensembles of cartoon people and animals enjoying their sleep on a Casper mattress. These advertisements were located on billboards, subways, and taxis all over the country. Casper's advertising imagery was designed to be playful and lighthearted, while also emphasizing the importance of a quality mattress. Compared to competitors, Casper was careful not to overwhelm potential customers with excessive statistics and specifications.

Casper enjoyed rapid growth in sales after launch—earning over \$600 million in revenue in three short years. Casper grew its product portfolio to include three different types of mattresses and began selling pillows, sheets, and bed frames to capture new customers. Casper partnered with retailers such as Nordstrom, Target, and Amazon to increase its distribution.

As Casper grew, the company shifted its advertising efforts to digital platforms. Digital advertisements were less

expensive, and television advertisements were dominated by "Big Mattress" companies. Casper invested in the common practice of using internet "cookies" to track consumer visits to the online website and showing them targeted ads as they browsed other websites. Casper has also sponsored numerous popular podcasts and radio shows, including *This Week in Tech*, *My Brother*, *The Howard Stern Show*, and *The Dr. Laura Show*.

Casper's social media team frequently engaged with customers on platforms such as Facebook, Instagram, and Twitter. Casper uploaded popular "unboxing" videos on these platforms that showed consumers how their tiny mattress remarkably unfurls and expands to full size when moved from the box. Casper also ran a weekly series on the Instagram Stories platform, where the company appealed to customers suffering from Monday morning blues by destroying alarm clocks in spectacular fashion. Casper launched the website *Insomnobot 3000*, where a chatbot sends funny text messages to those who have trouble falling sleep at night. The customer engagement and advertising efforts resulted in high net promoter scores, a common metric for consumer satisfaction.

Casper's innovative business model inspired competitors to follow in its footsteps, including the Big Mattress companies. Serta-Simmons and Tempur-Sealy began offering "beds-in-a-box" in 2016. In 2018 Walmart introduced Allswell, a digital home brand that specialized in mattresses and bedding. That same year, Amazon added its own memory foam mattress to the popular AmazonBasics line. Faced with these new competitors, Casper opened its first physical retail location to increase visibility and build customer loyalty. Casper announced that it plans to expand to over 200 stores by 2021. Although many mattress companies have followed Casper's business model, Casper aims to continue its initial success by increasing its product line, engaging with customers, and expanding its physical retail presence.⁴⁸

Questions

1. What makes Casper's products desirable to consumers? What are the specific product attributes that are particularly valued by consumers?
2. How should Casper compete with established companies and start-ups ramping up their direct-to-consumer offerings? Should Casper shift some of its efforts from product innovation to more aggressive communication and brand building?
3. Should Casper focus on extending its product line to try to offer a mattress "for every purse and purpose"? Or should it focus on offering a single type of mattress (in different sizes) in order to streamline innovation efforts and simplify consumer choice?

marketing SPOTLIGHT

Toyota

Toyota, one of the world's three largest automakers (along with Renault Nissan and Volkswagen), has come a long way over the course of its 75-year history. The company launched its first passenger car, the Model AA, in 1936. For it, Toyota copied the body design of Chrysler's landmark Airflow and modeled its engine after a 1933 Chevrolet engine. Toyota suffered several challenges in its early years, including a financial crisis in 1950. However, during the oil crisis of 1973, consumers wanted smaller, more fuel-efficient automobiles. Toyota answered with two smaller cars—the Toyota Corona and Toyota Corolla—that came with basic features and also acted as Toyota's new entry-level vehicles. The company also launched the Toyota Cressida, which combined the fuel efficiency consumers desired with additional space and luxury amenities such as air conditioning and an AM-FM radio.

During the 1980s and 1990s, Toyota gradually added more types of vehicles, ranging widely in price, size, and amenities, in order to give customers more options to fit their driving needs. In 1982 Toyota introduced the Camry, a four-door, mid-sized car that offered consumers more space than the Corona. The Camry would go on to become the best-selling passenger car in North America. The first of Toyota's popular SUVs was introduced with the 4Runner in 1984. At first the 4Runner wasn't much different from Toyota's pickup trucks in both design and performance. Eventually, however, the 4Runner morphed into looking more like a passenger vehicle and led the way for the launch of other SUVs, including the Rav4, Highlander, and LandCruiser. Around the same time, Toyota introduced a full-sized pickup truck, which later became today's Tundra, as well as several sporty and affordable cars that targeted young adults.

In 1989, Toyota launched Lexus, its luxury division. Lexus promised to give consumers an unparalleled luxurious experience, starting with the dealerships, which offered white-glove treatment. Toyota understood, however, that each country defines perfection differently. In the United States, perfection and luxury meant comfort, size, and dependability. In Europe, luxury meant attention to detail and brand heritage. As a result, the company varied its advertising depending on the country and culture.

In 1997, Toyota innovated and launched the Prius, the first mass-produced hybrid car. The Prius was initially priced at \$19,995, which fell between the Corolla and Camry. The company's keen focus on developing a clean-energy car was brilliant. By 2002, when the second-generation Prius hit showrooms, dealers received 10,000 orders before the car was even available. Over the next decade, competitors like Ford, Nissan, GM, and Honda would follow in Toyota's



Source: tomas devera photo/Shutterstock

footsteps and enter the hybrid market with models of their own.

Toyota also started creating vehicles for specific target groups. To this end, Toyota launched the Scion brand in 2000 to target young adults aged 16 to 21 years old. After the first few years of carefully listening to feedback, Toyota learned that the Scion's target group wanted more personalization. Using this insight, Toyota designed the car "mono-spec" at the factory, with just one well-equipped trim level, and let customers choose from dozens of customization elements—ranging from stereo components to wheels and even floor mats—at dealerships. Toyota marketed the Scion at music events and in showrooms where younger consumers would feel comfortable spending time while learning more about the car.

Another important reason behind Toyota's success is its manufacturing. The firm is a master of lean manufacturing and continuous improvement. Its plants can make as many as eight different models at the same time, effecting huge increases in productivity and market responsiveness. Toyota also innovates relentlessly. A typical Toyota assembly line makes thousands of operational changes in the course of a single year. Toyota employees see their purpose as threefold: making cars, making cars better, and teaching everyone how to make cars better. The company encourages problem solving, always looking to improve the process by which it improves all other processes.

Toyota has integrated its assembly plants around the world into a single giant network. The plants customize cars for local markets and shift production quickly to satisfy any surges in demand from markets worldwide. With its manufacturing network, Toyota can build a wide variety of models much more inexpensively. That means the company is able to fill market niches as they emerge without building entirely new assembly operations. This, in turn, has enabled the company to establish a foothold across a variety of diverse market segments.

Over the years, Toyota's automobiles have consistently ranked high in quality and reliability. The company suffered some major challenges in 2009 and 2010 when it

experienced a massive recall of over 8 million vehicles. A variety of problems, ranging from sticking accelerator pedals to sudden acceleration to software glitches in the braking system, affected many Toyota brands, including Lexus, Prius, Camry, Corolla, and Tundra. Despite these challenges, Toyota recouped its losses and three years later retook the lead as the largest automaker in the world. Toyota's strong focus on hybrid vehicles has proved to be profitable and helped the company rebound.

Today, Toyota offers a full line of cars for the global market, from family sedans and sport utility vehicles to trucks and minivans. Designing these different products means listening to different customers in different regions, building

the cars that customers want, and then crafting marketing to reinforce the image of each make.⁴⁹

Questions

1. Toyota has built a huge manufacturing company that can produce millions of cars each year for a wide variety of consumers. Why was it able to grow so much bigger than any other auto manufacturer?
 2. Has Toyota done the right thing by manufacturing a car brand for everyone? Why or why not?
 3. What should the company do over the next year, the next five years, and the next decade? How can growing companies avoid quality problems in the future?
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