

# 7. Introducing and managing the product

## Learning objectives

After reading this chapter, you should be able to:

- look at the meaning of the term "product" from three different perspectives: the manufacturer, the consumer, and the public
- understand the three levels inherent in all products
- learn the classification systems that are used to identify products and suggest appropriate marketing strategies
- clarify the difference between goods, products, and service products
- study some of the processes involved in product planning and strategy formulation: determination of product objectives and identification and resolution of factors that have an impact on the product
- understand the eight steps that makeup the new product development system

## Japanese cars on the decline

Japan's auto dealers have tried just about everything to revive sales. One Toyota Motor Corporation dealership in Tokyo throws monthly festivals in its parking lot and offers discounts of as much as USD 2,500 on new models. But potential customers such as Kai Matsuda, a smartly dressed 28 year old, is not buying. Sure, after spending a recent Sunday touring Toyota's swank four-story Amlux showroom in Tokyo, Matsuda came away impressed. The building housed everything from rugged recreational vehicles to sleek luxury sedans such as the USD 37,000 Aristo. Matsuda would love to buy a new car: "if I had the money". However, with Japan's economy on the skids, he does not.

For Japanese carmakers preparing to roll out their new fleets at the Tokyo Motor Show, consumers such as Matsuda illustrate why 2000 was such a tough year. Despite a flurry of new launches, the recent increase in Japan's consumption tax from 3 per cent to 5 per cent has caused car sales to decline for six months in a row. Dealers sold nine per cent fewer cars in September than in the same month a year earlier, and several have now fallen into the red or have gone bankrupt.

So carmakers are desperately hoping their 2000 models will boost sales. The Motor Show's new lines have the latest in breaking, engine, and transmission technology, more sporty designs, and more environmentally friendly engines—including a "hybrid" car that can get 66 miles per gallon on a combination of gasoline and electricity. "Every maker is preparing new launches to keep sales from falling through the floor," says Christopher Redl, automotive analyst at ING Barrings Limited.

But Japanese consumers are already overwhelmed with choices. "There are now over 190 car models available in the market," says Atsushi Fuyi, member of the board of directors in charge of domestic sales at Nissan Motor Company "And the average consumer can only remember about 11 of them."

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Yet at the Motor Show, Japanese carmakers will be coming out with even more. Toyota wants to target young people with fun European-looking models and convertible sports cars. Toyota also plans to roll out the world's first mass-produced hybrid, with sales projected at 1,000 a month. The company admits it will see the hybrid as one-third of the world's auto market by 2005. After working out the kinks in the hybrid in Japan, Toyota plans to take it for a spin in overseas markets. However, analysts worry the hybrid could cannibalize sales of other models. "Why would you want to buy a Corona when you might be able to buy a hybrid car for just about the same price?" asks Edward Brogan, automotive analyst at Salomon Brothers Inc.

In this chapter we will look at the special challenges that the marketing of products possess. Moreover, we will delineate the unique characteristics associated with products as they pass through the various stages of their lives. Particular attention will be given to the kinds of decisions that are necessary through this process.<sup>24</sup>

### Introduction

This chapter begins our discussion of the functional areas of marketing. Why do we begin our discussion with product rather than with promotion, distribution, or pricing? The answer is quite obvious. None of those other functions serve any useful purpose without a company product that provides consumer satisfaction. Without a product, there is nothing to promote, nothing to distribute, nothing to price. This does not suggest that product is more important, rather, it is the impetus for the other marketing functions. Logically, we should start at the beginning, and the beginning of a market place is a set of correct decisions about the product offerings of the firm.

### Defining the product

In essence, the term "product" refers to anything offered by a firm to provide customer satisfaction, be it tangible or intangible. It can be a single product, a combination of products, a product-service combination, or several related products and services. It normally has at least a generic name (e.g. banana) and usually a brand name (e.g. Chiquita). Although a product is normally defined from the perspective of the manufacturer, it is also important to note two other points-of-view, those of the consumer and of other relevant publics.

For a manufacturer like Kraft Foods, their macaroni and cheese dinner reflects a food product containing certain ingredients packaged, distributed, priced, and promoted in a unique manner, and requiring a certain return on their investment. For the consumer, the product is a somewhat nutritious food item that it is quick and easy to prepare and is readily consumed by the family, especially the kids. For a particular public, such as the US Food and Drug Administration, this product reflects a set of ingredients that must meet particular minimum standards in terms of food quality, storage, and distribution.

Making this distinction is important in that all three perspectives must be understood and satisfied if any product will survive and succeed. Furthermore, this sensitivity to the needs of all three is the marketing concept in action. For example, a company might design a weight-reduction pill that not only is extremely profitable but also has a wide acceptance by the consumer. Unfortunately, it cannot meet the medical standards established by the US Federal government. Likewise, Bird's Eye Food might improve the overall quality of their frozen vegetables and yet not improve the consumers' tendency to buy that particular brand simply because these improvements were not

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<sup>24</sup> Sources: Jean Halliday, "Carmakers Learn to Mine Databases" *Advertising Ages* April 17,2000, p. S6; Emily Thorton, "Too Many Cars, Too Few Buyer," *Business Week*, October 20,1997, p. 56; Alison S. Wellner, "Hot Wheels" *American Demographics*, August 2000, pp. 4 David Kiley, "Not Your Father's SUV," *American Demographics*, January 1999, pp. 44--45

perceived as either important or noticeable by the consumer. Therefore, an appraisal of a company's product is always contingent upon the needs and wants of the marketer, the consumer, and the relevant publics. We define product as follows: anything, either tangible or intangible, offered by the firm; as a solution to the needs and wants of the consumer; is profitable or potentially profitable; and meets the requirements of the various publics governing or influencing society.

There are four levels of a product: core, tangible, augmented, and promised (see Exhibit 15). We begin with the notion of the core product, which identifies what the consumers feel they are getting when they purchase the product. The core benefits derived when an overweight 45-year-old male purchases a USD 250 ten-speed bicycle is not transportation; it is the hope for better health and improved conditioning. In a similar vein, that same individual may install a USD 16,000 swimming pool in his backyard, not in order to obtain exercise, but to reflect the status he so desperately requires. Both are legitimate product cores. Because the core product is so individualized, and oftentimes vague, a full-time task of the marketer is to accurately identify the core product for a particular target market.

Once the core product has been indicated, the tangible product becomes important. This tangibility is reflected primarily in its quality level, features, brand name, styling, and packaging. Literally every product contains these components to a greater or lesser degree. Unless the product is one-of-a-kind (e.g. oil painting), the consumer will use at least some of these tangible characteristics to evaluate alternatives and make choices. In addition, the importance of each will vary across products, situations, and individuals. For example, for Mr Smith at age 25, the selection of a particular brand of new automobile (core product=transportation) was based on tangible elements such as styling and brand name (choice=Corvette); at age 45, the core product remains the same, while the tangible components such as quality level and features become important (choice=Mercedes).

At the next level lies the augmented product. Every product is backed up by a host of supporting services. Often, the buyer expects these services and would reject the core-tangible product if they were not available. Examples would be restrooms, escalators, and elevators in the case of a department store, and warranties and return policies in the case of a lawn mower. Dow Chemical has earned a reputation as a company that will bend over backwards in order to service an account. It means that a Dow sales representative will visit a troubled farmer after-hours in order to solve a serious problem. This extra service is an integral part of the augmented product and a key to their success. In a world with many strong competitors and few unique products, the role of the augmented product is clearly increasing.

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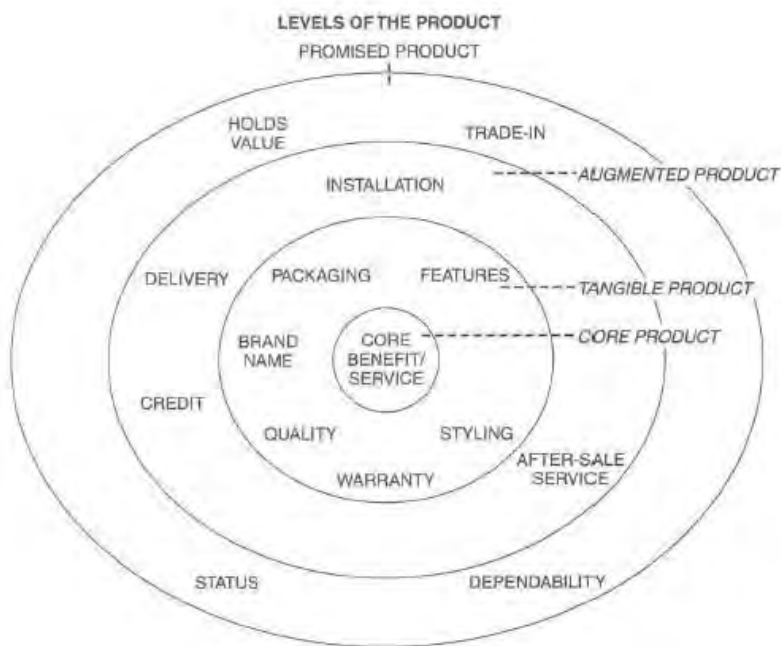


Exhibit 15: Levels of the product.

The outer ring of the product is referred to as the *promised product*. Every product has an implied promise. An implied promise is a characteristic that is attached to the product over time. The car industry rates brands by their trade-in value. There is no definite promise that a Mercedes-Benz holds its value better than a BMW. There will always be exceptions. How many parents have installed a swimming pool based on the implied promise that their two teenagers will stay home more or that they will entertain friends more often?

Having discussed the components of a product, it is now relevant to examine ways of classifying products in order to facilitate the design of appropriate product strategies.

### Classification of products

It should be apparent that the process of developing successful marketing programs for individual products is extremely difficult. In response to this difficulty, a variety of classification systems have evolved that, hopefully, suggest appropriate strategies. The two most common classifications are: (a) consumer goods versus industrial goods, and (b) goods products (i.e. durables and nondurables) versus service products.

### Consumer goods and industrial goods

The traditional classification of products is to dichotomize all products as being either *consumer goods* or *industrial goods*. When we purchase products for our own consumption or that of our family with no intention of selling these products to others, we are referring to consumer goods. Conversely, industrial goods are purchased by an individual or organization in order to modify them or simply distribute them to the ultimate consumer in order to make a profit or meet some other objective.

### Classification of consumer goods

A classification long used in marketing separates products targeted at consumers into three groups: convenience, shopping, and specialty.<sup>1</sup> A *convenience good* is one that requires a minimum amount of effort on the part of the consumer. Extensive distribution is the primary marketing strategy. The product must be available in

every conceivable outlet and must be easily accessible in these outlets. Vending machines typically dispense convenience goods, as do automatic teller machines. These products are usually of low unit value, are highly standardized, and frequently are nationally advertised. Yet, the key is to convince resellers, i.e. wholesalers and retailers, to carry the product. If the product is not available when, where, and in a form desirable by the consumer, the convenience product will fail.

From the consumer's perspective, little time, planning, or effort go into buying convenience goods. Consequently, marketers must establish a high level of brand awareness and recognition. This is accomplished through extensive mass advertising, sales promotion devices such as coupons and point-of-purchase displays, and effective packaging. The fact that many of our product purchases are often on impulse is evidence that these strategies work. Availability is also important. Consumers have come to expect a wide spectrum of products to be conveniently located at their local supermarkets, ranging from packaged goods used daily, e.g. bread and soft drinks, to products purchased rarely or in an emergency such as snow shovels, carpet cleaners, and flowers.

In contrast, consumers want to be able to compare products categorized as *shopping goods*. Automobiles, appliances, furniture, and homes are in this group. Shoppers are willing to go to some lengths to compare values, and therefore these goods need not be distributed so widely. Although many shopping goods are nationally advertised, often it is the ability of the retailer to differentiate itself that creates the sale. The differentiation could be equated with a strong brand name, such as Sears Roebuck or Marshall Field; effective merchandising; aggressive personal selling; or the availability of credit. Discounting, or promotional price-cutting, is a characteristic of many shopping goods because of retailers' desire to provide attractive shopping values. In the end, product turnover is slower, and retailers have a great deal of their capital tied-up in inventory. This combined with the necessity to price discount and provide exceptional service means that retailers expect strong support from manufacturers with shopping goods.

*Specialty goods* represent the third product classification. From the consumer's perspective, these products are so unique that they will go to any lengths to seek out and purchase them. Almost without exception, price is not a principle factor affecting the sales of specialty goods. Although these products may be custom-made (e.g. a hairpiece) or one-of-a-kind (e.g. a statue), it is also possible that the marketer has been very successful in differentiating the product in the mind of the consumer. Crisco brand shortening, popular in the US, may be considered to be a unique product in the mind of a consumer and the consumer would pay any price for it. Such a consumer would not accept a substitute and would be willing to go to another store or put off their pie baking until the product arrives. Another example might be the strong attachment some people feel toward a particular hair stylist or barber. A person may wait a long time for that individual and might even move with that person to another hair salon. It is generally desirable for a marketer to lift her product from the shopping to the specialty class (and keep it there). With the exception of price-cutting, the entire range of marketing activities are required to accomplish this goal.

### *Classification of industrial goods*

Consumer goods are characterized as products that are aimed at and purchased by the ultimate consumer.<sup>2</sup> Although consumer products are more familiar to most readers, industrial goods represent a very important product category, and in the case of some manufacturers, they are the only product sold. The methods of industrial

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marketing are somewhat more specialized, but in general the concepts presented in this text are valid for the industrial marketer as well as for the consumer goods marketer.

Industrial products can either be categorized from the perspective of the producer and how they shop for the product or from the perspective of the manufacturer and how they are produced and how much they cost. The latter criteria offers a more insightful classification for industrial products.

Farms, forests, mines, and quarries provide extractive products to producers. Although there are some farm products that are ready for consumption when they leave the farm, most farm and other extractive products require some processing before purchase by the consumer. A useful way to divide extractive products is into *farm products* and *natural products*, since they are marketed in slightly different ways.

*Manufactured products* are those that have undergone some processing. The demands for manufactured industrial goods are usually derived from the demands for ultimate consumer goods. There are a number of specific types of manufactured industrial goods.

*Semi-manufactured goods* are raw materials that have received some processing but require some more before they are useful to the purchaser. Lumber and crude oil are examples of these types of products. Since these products tend to be standardized, there is a strong emphasis on price and vendor reliability.

*Parts* are manufactured items that are ready to be incorporated into other products. For instance, the motors that go into lawn mowers and steering wheels on new cars are carefully assembled when they arrive at the manufacturing plant. Since products such as these are usually ordered well in advance and in large quantities, price and service are the two most important marketing considerations.

*Process machinery* (sometimes called "installations") refers to major pieces of equipment used in the manufacture of other goods. This category would include physical plant (boilers, lathes, blast furnaces, elevators, and conveyor systems). The marketing process would incorporate the efforts of a professional sales force, supported by engineers, technicians, and a tremendous amount of personalized service.

*Equipment* is made up of portable factory equipment (e.g. fork lift trucks, fire extinguisher) and office equipment (e.g. computers, copier machines). Although these products do not contribute directly to the physical product, they do aid in the production process. These products may be sold directly from the manufacturer to the user, or a middleman can be used in geographically dispersed markets. The marketing strategy employs a wide range of activities, including product quality and features, price, service vendor deals, and promotion,

*Supplies and service* do not enter the finished product at all but are never the less consumed in conjunction with making the product. Supplies would include paper, pencils, fuel, oil, brooms, soap, and so forth. These products are normally purchased as convenience products with a minimum of effort and evaluation. Business services include maintenance (e.g. office cleaning), repairs (e.g. plumbing), and advisory (e.g. legal). Because the need for services tends to be unpredictable, they are often contracted for a relatively long period of time.

### Goods versus services

Suggesting that there are substantial differences between goods, products, and service products has been the source of great debate in marketing. Opponents of the division propose that "products are products", and just because there are some characteristics associated with service products and not goods products and vice-versa, does not mean customized strategies are generally necessary for each. Advocates provide evidence that these

differences are significant. It is the position in this book that service products are different than goods products, and that service products represent an immense market sector.

Service products are reflected by a wide variety of industries: utilities, barbers, travel agencies, health spas, consulting firms, medical care, and banking, to name but a few, and they account for nearly 50 per cent of the average consumer's total expenditures, 70 per cent of the jobs, and two-thirds of the US Gross National Product (GNP). Clearly, the service sector is large and is growing. While all products share certain common facets, service products tend to differ from goods products in a number of ways.

### *Characteristics of service products*

Like goods products, service products are quite heterogeneous. Nevertheless, there are several characteristics that are generalized to service products.

#### *Intangible*

As noted by Berry: "a good is an object, a device, a thing; a service is a deed, a performance, an effort." With the purchase of a good, you have something that can be seen, touched, tasted, worn or displayed; this is not true with a service.

Although you pay your money and consume the service, there is nothing tangible to show for it. For example, if you attend a professional football game, you spend USD 19.50 for a ticket and spend nearly three hours taking in the entertainment.

#### *Simultaneous production and consumption*

Service products are characterized as those that are being consumed at the same time they are being produced. The tourist attraction is producing entertainment or pleasure at the same time it is being consumed. In contrast, goods products are produced, stored, and then consumed. A result of this characteristic is that the provider of the service is often present when consumption takes place. Dentists, doctors, hair stylists, and ballet dancers are all present when the product is used.



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AD 10: Shoes are a traditional goods product.

### Little standardization

Because service products are so closely related to the people providing the service, ensuring the same level of satisfaction from time to time is quite difficult. Dentists have their bad days, not every baseball game is exciting, and the second vacation to Walt Disney World Resort may not be as wonderful as the first.

### High buyer involvement

With many service products, the purchaser may provide a great deal of input into the final form of the product. For example, if you wanted to take a Caribbean cruise, a good travel agent would give you a large selection of brochures and pamphlets describing the various cruise locations, options provided in terms of cabin location and size, islands visited, food, entertainment, prices, and whether they set up for children. Although the task may be quite arduous, an individual can literally design every moment of the vacation.

It should be noted that these four characteristics associated with service products vary in intensity from product to product. In fact, service products are best viewed as being on a continuum in respect to these four characteristics. (See Exhibit 16)

The point of this disclaimer is to suggest: (a) that service products on the right side of the continuum (e.g. high intangibility) are different from good products on the left side of the continuum, (b) that most marketing has traditionally taken place on the left side, and (c) service products tend to require certain adjustments in their marketing strategy because of these differences.





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*Using excess capacity* is another commonly stated product objective. This objective is prompted by the rapid turnover of products and the resulting changes in market share. Of course, such utilization is always a short-run consideration. In the long run, only those products that can generate a continuing level of profitability should be retained, regardless of the problem of excess capacity.

*Maintaining or improving market share* may also be an objective shared by many companies. In such cases, the emphasis of the firm is on their competitive position rather than attaining a target level of profits. Creating product differentiation is often the primary strategy employed to reach this objective.

*Developing a full line of products* is another typical objective. A company with a partial product line may well consider the objective of rounding out its product offerings. Often, the sales force provides the impetus for this objective in that they may need a more complete product line to offer their customers or the resellers themselves may request a greater assortment.

*Expanding a product's appeal to new market segments* is a common objective. John Deere is attempting to increase its small share of the consumer power products market by aiming at suburbanites and women farmers. They have introduced a series of redesigned lawn and garden tractors, tillers, and snow blowers that are easier for women to operate.

Although this represents a limited selection of objectives, it does suggest that there must be a reason for all product-related activities. These reasons are best expressed in the form of specific objectives.

### The product plan

Once a marketer has determined a set of product objectives, it is then possible to initiate the activities that constitute the product plan. Although there are a number of ways to look at this process, we have elected to explain this process through the product lifecycle concept (PLC). It should be noted that the value of the PLC framework as a planning tool lies at the industry and/or product category level.

### The product lifecycle

A company has to be good at both developing new products and managing them in the face of changing tastes, technologies, and competition. Evidence suggests that every product goes through a lifecycle with predictable sales and profits, as illustrated in Exhibit 17. As such, the manager must find new products to replace those that are in the declining stage of the *product lifecycle* and learn how to manage products optimally as they move from one stage to the next.

The five stages of the PLC and their components can be defined as follows:

- **Product development:** the period during which new product ideas are generated, operationalized, and tested prior to commercialization.
- **Introduction:** the period during which a new product is introduced. Initial distribution is obtained and promotion is obtained.
- **Growth:** the period during which the product is accepted by consumers and the trade. Initial distribution is expanded, promotion is increased, repeat orders from initial buyers are obtained, and word-of-mouth advertising leads to more and more new users.

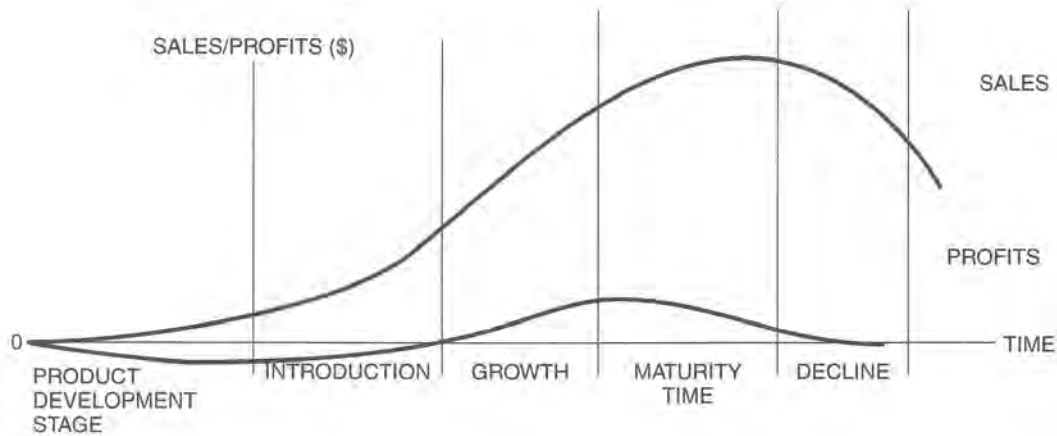


Exhibit 17: The product lifecycle.

- Maturity: the period during which competition becomes serious. Towards the end of this period, competitors' products cut deeply into the company's market position.
- Decline: the product becomes obsolete and its competitive disadvantage result in decline in sales and, eventually, deletion.

It should be noted that the predictive capabilities of the product lifecycle are dependent upon several factors, both controllable and uncontrollable, and that no two companies may follow the same exact pattern or produce the same results. For example, differences in the competitive situation during each of these stages may dictate different marketing approaches. Some argue that the competitive situation is the single most important factor influencing the duration of height of a product lifecycle curve. A useful way of looking at this phenomenon is in the terms of competitive distinctiveness. Several years ago, Dean suggested that a separation exists between products of lasting and perishable distinctiveness. Often, new products may, upon introduction, realistically expect a long period of lasting distinctiveness or market protection—through such factors as secrecy, patent protection, and the time and cash required to develop competitive products. However, almost all new products can expect fewer than 5, 10, or 15 years of market protection.<sup>5</sup>

Of course, changes in other elements of the marketing mix may also affect the performance of the product during its lifecycle. For example, a vigorous promotional program or a dramatic lowering of price may improve the sales picture in the decline period, at least temporarily. The black-and-white TV market illustrated this point. Usually the improvements brought about by non-product tactics are relatively short-lived and basic alterations to product offerings provide longer benefits.

Whether one accepts the S-shaped curve as a valid product-sales pattern or as a pattern that holds only for some products (but not for others), the product lifecycle concept can still be very useful. It offers a framework for dealing systematically with product management issues and activities. Thus, the marketer must be cognizant of the generalizations that apply to a given product as it moves through the various stages. This process begins with product development and ends with the deletion (discontinuation) of the product.

### Product strategies

Product planning should be an ongoing process that consistently evaluates existing products, modifies where necessary, deletes products that no longer contribute to the firm, and introduces new products. Since most

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companies have at least one product line (and perhaps several), each containing several items, product management is a necessary activity—a daily activity. The task involves gathering the necessary data, utilizing a framework to evaluate it in light of a particular product or groups of products, selecting an appropriate strategy, and implementing that strategy. In general, there are two product strategy issues: approaches to the market and key product decisions.

### *Approaches to the market*

The primary task of a product is to facilitate the success of a particular market strategy. A market strategy delineates what the seller wants to accomplish relative to buyers. Strategy is partly based on the approach used to represent the product. There are three general approaches, each of which may change during the life of the product.

*Product differentiation* is used when a marketer chooses to appeal to the whole market by attempting to cater to the particular desires of all the buyers who hopefully would prefer his brand. This strategy is appropriate if the brand is widely popular and can be continued in general market leadership through strong promotion. Crest toothpaste is an example of a product that has successfully engaged in this strategy. Minor taste changes and formula changes have differentiated a basic product in the minds of many Crest users.

*Market extension* is a second approach available to the product manager. This entails attracting additional types of buyers into the market or discovering and promoting new uses of the product. Sometimes the addition of new buyers itself provides new uses for the product. 3M's Scotch tape, for example, expanded its uses when it became popular with the general consumer as well as the business consumer. Unfortunately, market extension strategies are extremely easy for competitors to copy. Thus, the brand promoting the new use is benefiting competitors as well.

*Market segmentation* is the final approach. As discussed in an earlier chapter, segmentation is identifying a group of consumers that tend to respond to some aspect of the market mix in a similar way. Rather than trying to appeal to the whole market, you concentrate your efforts and resources on a part of that market. The trend towards segmenting markets occurs most among branded goods. Even industrial products, such as the many varieties of diesel trucks, is an industry in which small firms survive by concentrating on some special segment of that heterogeneous total market. A company like the Coca-Cola Company found that there were pockets of consumers that, for various reasons, did not purchase Coke. Through the introduction of Tab many years ago, followed by Diet Coke and Caffeine-Free Coke, they feel that most of the market is now covered.

### *Key product management decisions*

With every product, regardless of where it is in its lifecycle, there are certain key decisions that must be made, perhaps repeatedly. These decisions include specifying product features, package design, branding decisions, establishing related services, and legal considerations. Although these decision areas are discussed separately, it should be noted that they all interact with one another, and are monitored and modified when necessary throughout the life of the product.

#### *Product features*

In a functional sense, the key question is: "Does the product do what the consumer wants it to do?" Does it get clothes clean? Does it quench your thirst? Does it save you money? Some of these questions can be answered only through product research, but consumer research provides more answers.

While the development of ultra-high-speed photographic film was a research breakthrough, how the consumer perceives this benefit can be answered only by the consumer. It is possible that the product benefit is so great that it overwhelms the consumer or it is not believed by the consumer. Several new toothpaste manufacturers have recently come out with products that partially restore decayed tooth areas. They have intentionally kept this innovation very low-key because they feared the consumer would not believe it.

Product features include such factors as form, color, size, weight, odor, material, and tactile qualities. A new car can offer thousands of alternatives when one considers the exterior and interior options. The smell of fresh bakery products or a good Italian restaurant has clearly enticed many a customer. The product must also be aesthetically pleasing. When the entire product is put together, it must create an appealing, visually attractive and distinctive need-satisfier.

### Packaging

With the increased importance placed on self-service marketing, the role of packaging is becoming quite significant. For example, in a typical supermarket a shopper passes about 600 items per minute, or one item every tenth of a second. Thus, the only way to get some consumers to notice the product is through displays, shelf-hangers, tear-off coupon blocks, other point-of-purchase devices, and, last but not least, effective packages. Common uses of packaging include protection, communication, and utility/ease of use.<sup>6</sup>

Considering the importance placed on the package, it is not surprising that a great deal of research is spent on motivational research, color testing, psychological manipulation, and so forth, in order to ascertain how the majority of consumers will react to a new package. Based on the results of this research, past experience, and the current and anticipated decisions of competitors, the marketer will initially determine the primary role of the package relative to the product. Should it include quality, safety, distinction, affordability, convenience, or aesthetic beauty? For the automobile oil industry, the package has become more important to promote than product performance. To a lesser extent, this is also true for products such as powdered drinks, margarine, soft drinks, perfumes, and pet foods. In the case of Pringles, made by Procter & Gamble, a package had to be designed that would protect a very delicate product. It also faced the uncertain response of retailers which have never stocked stacked potato chips before. Recall the many shapes and sizes ketchup containers have taken during the last twenty years.

Clearly delineating the role of the product should lead to the actual design of the package: its color, size, texture, location of trademark, name, product information, and promotional materials. Market leaders in the dry food area, such as cake mixes, have established a tradition of recipes on the package. However, there are other package-related questions. Do the colors compliment one another? Are you taking advantage of consumer confusion by using a package design similar to that of the market leader? Can the product be made for an acceptable cost? Can it be transported, stored, and shelved properly? Is there space for special promotional deals? Finally, various versions of the product will be tested in the market. How recognizable is the package? Is it distinctive? Aesthetically pleasing? Acceptable by dealers?

### Branding

Any brand name, symbol, design, or combination of these constitutes a branding strategy. The primary function of the *brand* is to identify the product and to distinguish it from those of competitors. In addition, from the perspective of the buyer, it may simply be consistent quality or satisfaction, enhance shopping efficiency, or call

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attention to new products. For the seller, selecting a brand name is one of the key new product decisions, and reflects the overall position and marketing program desired by the firm. It is through a brand name that a product can: (a) be meaningfully advertising and distinguished from substitutes, (b) make it easier for the customer to track down products, and (c) be given legal protection. Also, branding often provides an interesting carryover effect: satisfied customers will associate quality products with an established brand name.

Before going any further it is necessary to distinguish several terms:

- *Brand*: A name, term, sign, symbol, design, or a combination of these that is intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors.
- *Brand names*: That part of a brand which can be vocalized—the utterable.
- *Brand mark*: That part of a brand which can be recognized but is not utterable, such as a symbol, design, or distinctive coloring or lettering.
- *Trademark*: A brand or part of a brand that is given legal protection because it is capable of exclusive appropriation.<sup>7</sup>

As was the case with product design and packaging decisions, branding requires a systematic effort at generating alternative brand names, screening them, and selecting the best alternative. However, before this process begins, a more basic decision must be made. What is the basic branding strategy to be employed? Three viable options are available.

First, a strict *manufacturer's branding policy* can be followed. This would mean that the producer refuses to manufacture merchandise under brands other than his own, although he may sell seconds or irregulars on an unbranded basis.

Second, an *exclusive distributors brands policy* could be followed. In this case, the producer does not have a brand of his own but agrees to sell his products only to a particular distributor and carry his brand name (private brands).

The final option is a *mixed brand policy*, which includes elements of both extremes and leads to the production of manufacturer's as well as distributor's brands. For example, Firestone sells some tires under their own brand names and some under private labels.

For most companies, both brand names and trademarks are vital in the identification of products. The design process should be guided by research; often the advertising agency is brought in to help. Brand names are mandatory if the manufacturer or distributor intends to use mass advertising. Brand names also make word-of-mouth advertising effective. Without them, repeat purchases of a particular product would be virtually impossible. Product identification through the brand name is a most important element in the product plan.

### Related services

Behind every product is a series of supporting services, such as warranties and money-back guarantees. In many instances, such services may be as important as the product itself. In fact, at times it is difficult to separate the associated services from the product features. Consequently, companies must constantly monitor the services offered by the company and its competitors.

Based on the results of data-gathering devices such as customer surveys, consumer complaints, and suggestion boxes, the product manager can determine the types of services to offer, the form the service will take, and the price charged. For example, consumers are very reluctant to purchase a stereo that can be serviced only by sending it to



the factory, and paying the postage and a high service fee. Maytag, however, has been very effective in selling their appliances with service contracts and local repair. Banks are still uncertain as to whether they should charge the customer for checks, ATM (automated teller machine) use, safety deposit boxes, and overdrafts. An industrial customer might be keenly interested in related services such as prompt delivery, reliable price quotations, credit, test facilities, demonstration capabilities, liberal return policies, engineering expertise, and so forth.

Although there are a wide range of supportive services, the following are most prevalent:

- *Credit and financing.* With the increased acceptance of debt by the consumer, offering credit and/or financing has become an important part of the total product. For certain market segments and certain products, the availability of credit may make the difference between buying or not buying the product.
- *Warranty.* There are several types of durable products, retail stores, and even service products where warranties are expected. These warranties can provide a wide array of restitution with a very limited warranty at one end of the continuum and extended warranties at the other. An example of the former is a VCR manufacturer that provides a 30-day warranty on the motor drive and no other coverage. The Craftsman tools division of Sears Roebuck reflects the other extreme. A broken shovel will be replaced, no questions asked, after a full summer of use. A good jewelry store has a warranty backing up every diamond ring they sell.
- *Money-back guarantees.* The ultimate warranty is the money-back guarantee. To the customer, a money-back guarantee reduces risk almost totally. There are certain market segments (e.g. low risk takers) that perceive this service as very important. It is obvious that this service is effective only if the product is superior and the product will be returned by only a few people. Extensive research should support this decision.
- *Delivery, installation, training, and service.* Products that tend to be physically cumbersome or located far from the customer might consider delivery (free or a small charge) to be an integral part of the new product. Very few major appliance stores, lumberyards, or furniture stores could survive without provisions for this service. Similarly, there are products that are quite complicated and/or very technical, and whose average consumer could neither learn how to install or use it without assistance from the manufacturer. Both professional and home computer companies have been forced to provide such services. The slow development of video products or product types that have a history of breakdown and extensive maintenance must offer this service to the customer. In addition, it must be provided quickly and effectively. Although product service and maintenance has been provided to industrial customers for several years, this service is still new to many customer product manufacturers.

### Product mix strategies

As more brands enter the market place and lock into a particular share of the market, it becomes more difficult to win and hold buyers. Other changes that occur are: (a) changes in consumer tastes and in particular, the size and characteristics of particular market segments, (b) changes in availability or cost of raw materials and other production or marketing components; and (c) the proliferation of small-share brands that reduce efficiencies in production, marketing, and servicing for existing brands. Because of factors such as these, a decision is made either to identify ways of changing the product in order to further distinguish it from others or to design a strategy that

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will eliminate the product and make way for new products. The specific strategy to accomplish these aims may be in several general categories.

*Product modification:* It is normal for a product to be changed several times during its life. Certainly, a product should be equal or superior to those of principal competitors. If a change can provide superior satisfaction and win more initial buyers and switchers from other brands, then a change is probably warranted.

Yet the decision should not be approached in a haphazard manner. There are definite risks. For example, a dramatic increase in product quality might price the existing target consumer out of the market, or it might cause him/her to perceive the product as being too good. Similarly, the removal of a particular product feature might be the one characteristic of the product considered most important by a market segment. A key question the marketer must answer before modifying the product is what particular attributes of the product and competing products are perceived as most important by the consumer. Factors such as quality, functions, price, services, design, packaging, and warranty may all be determinants.

This evaluative process requires the product manager to arrange for marketing research studies to learn of improvements buyers might want, evaluate the market reception given to the competitors' improvement and evaluate improvements that have been developed within the company. Also required is a relationship with the product research and development (R&D) department. Ideally, R&D should be able to respond quickly to the marketing department's request for product upgrading and should maintain ongoing programs of product improvement and cost reduction. Even suppliers and distributors should be encouraged to submit suggestions.

*Product positioning* is a strategic management decision that determines the place a product should occupy in a given market—its market niche. Given this context, the word "positioning" includes several of the common meanings of position: a place (what place does the product occupy in its market?), a rank (how does the product fare against its competitors in various evaluative dimensions?), a mental attitude (what are consumer attitudes?), and a strategic process (what activities must be attempted in order to create the optimal product position?). Thus, positioning is both a concept and a process. The positioning process produces a position for the product, just as the segmentation process produces alternative market segments. Positioning can be applied to any type of product at any stage of the lifecycle. Approaches to positioning range from gathering sophisticated market research information on consumers' preferences and perceptions of brands to the intuition of the product manager or a member of his staff.

Aaker and Shansby suggest several positioning strategies employed by marketers. A product or idea can be positioned:<sup>8</sup>

- by attributes—Crest is a cavity fighter;
- by price—Sears is the "value" store;
- by competitors—Avis positions itself against Hertz;
- by application—Gatorade is for after exercising;
- by product user—Miller is for the blue-collar, heavy beer drinker;
- by product class—Carnation Instant Breakfast is a breakfast food;
- by services provided—Circuit City backs up all its products.

Products and brands are constantly being repositioned as a result of changes in competitive and market situations. *Repositioning* involves changing the market's perceptions of a product or brand so that the product or brand can compete more effectively in its present market or in other market segments. Changing market

perceptions may require changes in the tangible product or in its selling price. Often, however, the new differentiation is accomplished through a change in the promotional message. To evaluate the position and to generate diagnostic information about the future positioning strategies, it is necessary to monitor the position over time. A product position, like sports heroes, may change readily; keeping track and making necessary adjustments is very important.

#### Product line decisions

A product line can contain one product or hundreds. The number of products in a product line refer to its *depth*, while the number of separate product lines owned by a company is the product line *width*. Several decisions are related to the product line.

There are two basic strategies that deal with whether the company will attempt to carry every conceivable product needed and wanted by the consumer or whether they will carry selected items. The former is a *full-line* strategy while the latter is called a limited-line strategy. Few full-line manufacturers attempt to provide items for every conceivable market niche. Few limited-line manufacturers would refuse to add an item if the demand were great enough. Each strategy has its advantages and disadvantages.

*Line extensions strategies* involve adding goods related to the initial product, whose purchase or use is keyed to the product. For example, a computer company may provide an extensive selection of software to be used with its primary hardware. This strategy not only increases sales volume, it also strengthens the manufacturer's name, strengthens the association with the owner of the basic equipment, and offers dealers a broader line. These added items tend to be similar to existing brands with no innovations. They also have certain risks. Often the company may not have a high level of expertise either producing or marketing these related products. Excessive costs, inferior products, and the loss of goodwill with distributors and customers are all possible deleterious outcomes. There is also a strong possibility that such a product decision could create conflict within the channel of distribution. In the computer example just described, this company may have entered the software business over the strong objection of their long-term supplier of software. If their venture into the software business fails, re-establishing a positive relationship with this supplier could be quite difficult.

A line extension strategy should only be considered when the producer is certain that the capability exists to efficiently manufacture a product that compares well with the base product. The producer should also be sure of profitable competition in this new market.

*Line-filling strategies* occur when a void in the existing product line has not been filled or a new void has developed due to the activities of competitors or the request of consumers. Before considering such a strategy several key questions should be answered:

- Can the new product support itself?
- Will it cannibalize existing products?
- Will existing outlets be willing to stock it?
- Will competitors fill the gap if we do not?
- What will happen if we do not act?

Assuming that we decide to fill out our product line further, there are several ways of implementing this decision. Three are most common:

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- *Product proliferation*: the introduction of new varieties of the initial product or products that are similar (e.g. a ketchup manufacturer introduces hickory-flavored and pizza-flavored barbecue sauces and a special hot dog sauce).
- *Brand extension*: strong brand preference allows the company to introduce the related product under the brand umbrella (e.g. Jell-O introduces pie filling and diet desserts under the Jell-O brand name).
- *Private branding*: producing and distributing a related product under the brand of a distributor or other producers (e.g. Firestone producing a less expensive tire for Kmart).

In addition to the demand of consumers or pressures from competitors, there are other legitimate reasons to engage in these tactics. First, the additional products may have a greater appeal and serve a greater customer base than did the original product. Second, the additional product or brand can create excitement both for the manufacturer and distributor. Third, shelf space taken by the new product means it cannot be used by competitors. Finally, the danger of the original product becoming outmoded is hedged. Yet, there is serious risk that must be considered as well: unless there are markets for the proliferations that will expand the brand's share, the newer forms will cannibalize the original product and depress profits.

*Line-pruning strategies* involve the process of getting rid of products that no longer contribute to company profits. A simple fact of marketing is that sooner or later a product will decline in demand and require pruning. Timex has stopped selling home computers. Hallmark has stopped selling talking cards.

A great many of the components used in the latest automobile have replaced far more expensive parts, due to the increased costs in other areas of the process, e.g. labor costs. Using modern robotics technology has halved the manufacturing costs of several products. Through such implementation, Keebler Cookies moved from packaging their cookies totally by hand to 70 per cent automation. Other possible ways a company might become more efficient are by replacing antiquated machinery, moving production closer to the point of sale, subcontracting out part of the manufacturing process, or hiring more productive employees.

### Product deletion

Eventually a product reaches the end of its life. This is the least understood stage of product management, because we human beings are very reluctant to think about death, even that of a product.

There are several reasons for deleting a mature product. First, when a product is losing money, it is a prime deletion candidate. In regard to this indication, it is important to make sure that the loss is truly attributable to the product and not just a quirk in the company's accounting system.

Second, there are times when a company with a long product line can benefit if the weakest of these products are dropped. This thinning of the line is referred to as *product-line simplification*. Product overpopulation spreads a company's productive, financial, and marketing resources very thin. Moreover, an excess of products in the line, some of which serve overlapping markets, not only creates internal competition among the company's own products, but also creates confusion in the minds of consumers. Consequently, a company may apply several criteria to all its products and delete those that fare worst.

A third reason for deleting a product is that problem products absorb too much management attention. Many of the costs incurred by weak products are indirect: management time, inventory costs, promotion expenses, decline of company reputation, and so forth.

Missed opportunity costs reflect the final reason for product deletion. Even if a mature product is making a profit contribution and its indirect cost consequences are recognized and considered justifiable, the company might still be better off without the product because of its opportunity cost. The opportunity cost of a mature product is the profit contribution that a new and healthy product could produce if the effort and resources being devoted to the mature item were redirected.

The final issue is actually going through a product deletion procedure. Sometimes, however, a product can be revived (see “Integrated marketing”).

### Strategies for developing new products

For several decades, business has come increasingly to the realization that new and improved products may hold the key to their survival and ultimate success. Consequently, professional management has become an integral part of this process. As a result, many firms develop new products based on an orderly procedure, employing comprehensive and relevant data, and intelligent decision making.<sup>9</sup>

#### Capsule 11: Review

1. A product is anything, either tangible or intangible, offered by the firm as a solution to the needs and wants of the consumer, that is profitable or potentially profitable and meets the requirements of the various publics, governing, or influencing society. There is a core product, a tangible product, an augmented product, and a promised product.
2. Consumer goods are purchased for personal consumption.
3. Industrial goods are modified or distributed for resale.
4. Service products, in contrast to goods products are characterized as being intangible and having simultaneous production/consumption, little standardization, and high buyer involvement.
5. The product plan process includes the following:
  - a. determination of product objectives,
  - b. development of product plans to reach objectives,
  - c. and development of appropriate strategies.

## Integrated marketing

### Putting Levi's back in the saddle

Levi Strauss & Company is opting for a new marketing direction. The situation is reflected by Maressa Emmar, high school sophomore from Setaukat, NY, and her friends, who won't wear anything from Levi's. "It doesn't make the styles we want," says Emmar, who prefers baggy pants from JNCO and Kikwear. "Levi's styles are too tight and for the older generation, like middle-aged people."

After three years of tumbling sales, layoffs, plant closing, and a failed effort to woo kids online, Levi's is gearing up for several product launches. Notes new chief executive Philip Martineau, "Levi's is a mythical brand, but our performance has been poor. We need to turn our attention back to customers and have more relevant products and marketing."

In coming months, Levi's will unveil a slew of youth oriented fashions, ranging from oddly cut jeans to nylon pants that unzip into shorts. But Martineau is not giving up on the geezers. He wants to broaden Levi's appeal to grown-ups by extending the Dockers and Slaters casual pants brands. Martineau also needs to smooth out kinks in manufacturing and shipping that prevent Levi's from rushing new products into stores. How do you sell the idea that you're hip while not turning off the oldsters? New ads will showcase the products themselves rather than relentlessly trying to convey "attitude". A television campaign for frayed cutoff shorts shows a young

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woman throwing her jeans in front of an oncoming train, which slices them to cutoffs. Print will support its Lot 53 fashion forward Levi's Engineered jeans. This new style has curved bottom hems, slanted back pockets and a larger watch pocket to hold pagers and other electronic items.

As Levi's try to rise like a phoenix from the ashes, one of the greatest American brand icons is passing into a new era in its history. Classic Levi's Jeans may find its greatest influence, much like the American cowboy, is more myth than reality.<sup>25</sup>

### *Defining the "new" in a new product*

The determination of what constitutes a "new" product remains one of the most difficult questions faced by the marketer. Does the most recent TV model introduced by Sony represent a new product even though 95 per cent of the product remains the same as last year's model? Are packaged salads a new product, or is the package the only part that is really new?

Indeed, companies have often been guilty of using the word "new" in conjunction with some questionable products. For example, older products have simply been marketed in new packages or containers but have been identified as new products by the manufacturer. Flip-top cans, plastic bottles, and screw-on caps have all been used to create this image of newness. Industrial companies have been guilty of similar actions. Computer manufacturers, for instance, have slightly modified some of the basic hardware or developed some software for a particular customer (banks, churches), and have felt free to claim newness. Finally, manufacturers may add an existing product to their product line and call it new, even though it is not new to the consumer.

Does technology make a product new, or features, or even the price? It is important to understand the concept of "new" in a new product, since there is sufficient evidence that suggests that each separate category of "newness" may require a different marketing strategy.

Perhaps the best way to approach this problem is to view it from two perspectives; that of the consumer and that of the manufacturer.

### *The consumer's viewpoint*

There are a variety of ways that products can be classified as new from the perspective of the consumer. *Degree of consumption modification* and *task experience* serve as two bases for classification. Robertson provides an insightful model when he suggests that new products may be classified according to how much behavioral change or new learning is required by the consumer in order to use the product.<sup>10</sup>

The continuum proposed by Robertson and shown in Exhibit 17 depicts the three primary categories based on the disrupting influence the use of the product has on established consumption patterns. It is evident that most new products would be considered continuous innovations. Annual model changes in automobiles, appliances, and sewing machines are examples. Portable hair dryers, diet soda, and aerobic dance CDs reflect products in the middle category. True innovations are rare.

Although conceptualizing new products in terms of how they modify consumer consumption patterns is useful, there is another basis for classification. New task experience can also be a criteria. An individual may live in a house

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25 Sources: Michael McCarthy and Emily Fromm, "An American Icon Fades Away," *Adweek*, April 26, 1999, pp. 28-35; Alice Z. Cuneo, "Levi's Makes Move to Drop All the Hype and Push Products," *Advertising Age*, April 17, 2000, pp. 4, 69; Louis Lee, "Can Levi's Be Cool Again?" *Business Week*, March 13, 2000, pp.144-145; Diane Brady, "Customizing for the Masses," *Business Week*, March 20, 2000, pp. 130-131.



for several years without ever having to repair a broken window. One day a mishap occurs, and Mr. Smith is forced to go to the hardware store to buy the necessary supplies required to install a new window pane. As he has no experience at all with this task, all those products are new to Mr. Smith. The glazing compound, the new glass and molding, and metal tacks, as well as the appropriate tools, are as new to Mr. Smith as a home computer. Using the model proposed by Robertson, products can also be placed on a continuum according to degree of task experience. Clearly, a product that has existed for a great many years, such as a carpenter's level, may be perceived as totally new by the person attempting to build a straight wall. In this case, newness is in the eye of the beholder.

The obvious difficulty with this classification is that it tends to be person-specific. Just because replacing a new washer in your bathroom faucet constitutes a new product for you does not mean it is a new product for me. However, it is conceivable that marketing research would show that for certain types of products, large groups of people have very limited experience. Consequently, the marketing strategy for such products might include very detailed instructions, extra educational materials, and sensitivity on the part of the sales clerk to the ignorance of the customer.

Another possible facet of a new task experience is to be familiar with a particular product but not familiar with all of its functions. For example, a homemaker may have a microwave oven which she uses primarily for reheating food items and making breakfast foods. Suppose that one afternoon her conventional oven breaks and she must deliver several cakes she has donated to a church bazaar. Unfortunately, she has not baked them yet and is forced to use her microwave, a brand-new task.

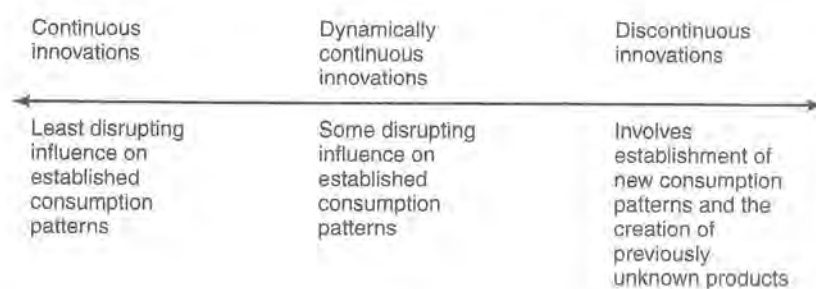


Exhibit 17: Continuum for classifying new products.

### The firm's viewpoint

Classifying products in terms of their newness from the perspective of the manufacturer is also important. There are several levels of possible newness that can be derived through changes either in production, marketing, or some combination of both.

Based on a schema developed by Eberhard Scheuing, new products, from the perspective of the business, can take the following forms:<sup>11</sup>

- *Changing the marketing mix*: one can argue that whenever some element of the marketing mix (product planning, pricing, branding, channels of distribution, advertising, etc.) is modified, a new product emerges.
- *Modification*: certain features (normally product design) of an existing product are altered, and may include external changes, technological improvements, or new areas of applicability.
- *Differentiation*: within one product line, variations of the existing products are added.
- *Diversification*: the addition of new product lines for other applications.

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A final consideration in defining "new" is the legal ruling provided by the Federal Trade Commission. Since the term is so prevalent in product promotion, the FTC felt obliged to limit the use of "new" to products that are entirely new or changed in a functionally significant or substantial respect. Moreover, the term can be used for a six-month period of time. Given the limited uniqueness of most new products, this ruling appears reasonable.

### *Strategies for acquiring new products*

Most large and medium-sized firms are diversified, operating in different business fields. It would be unrealistic to assume that the individual firm is either capable or willing to develop all new products internally. In fact, most companies simultaneously employ both internal and external sources for new products. Both are important to the success of a business.<sup>12</sup>

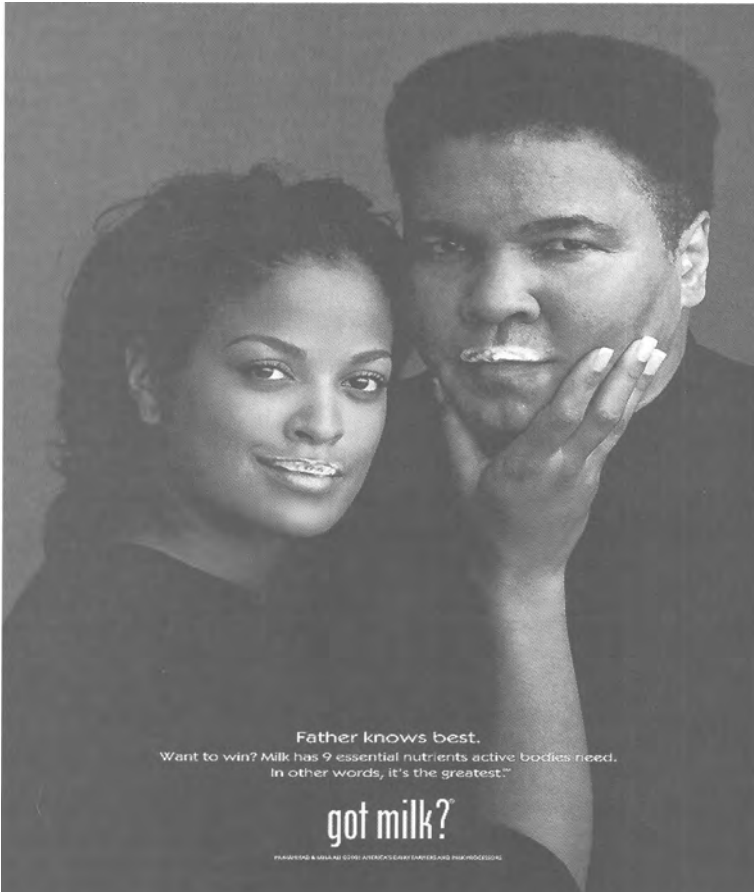
#### Internal sources

Most major corporations conduct research and development (R&D) to some extent. However, very few companies make exclusive use of their own internal R&D. On the contrary, many companies make excellent use of specialists to supplement their own capabilities. Still, to depend extensively upon outside agencies for success is to run a business on the blink of peril. Ideally, the closer the relationship between the new business and existing product lines, the better the utilization of R&D will be. The US National Science Foundation (NSF) (1957-77) divides R&D into three parts:

- *Basic research*: original investigations for the advancement of scientific knowledge that do not have specific commercial objectives, although they may be in fields of present or potential interest to the reporting company.
- *Applied research*: directed toward practical applications of knowledge, specific ends concerning products and processes.
- *Development*: the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes.

#### External sources

External approaches to new product development range from the acquisition of entire businesses to the acquisition of a single component needed for the internal new product development effort of the firm. The following external sources for new products are available to most firms.



AD 11: The "Got Milk" campaign made an old product new.

- *Mergers and acquisitions.* Acquiring another company already successful in a field a company wishes to enter is an effective way of introducing products while still diversifying. Research suggests that mergers and acquisitions can take place between companies of various sizes and backgrounds and that first experiences with this process tend to be less than satisfactory. Even large marketers such as General Motors engage in acquisitions.
- *Licenses and patents.* A patent and the related license arise from legal efforts to protect property rights of investors or of those who own inventions. A patent is acquired from the US Patent Office and provides legal coverage for a period of seventeen years, which means all other manufacturers are excluded from making or marketing the product. However, there are no foolproof ways to prevent competition. There are two main types of patents: those for products and those for processes. The first covers only the product's physical attributes while the latter covers only a phase of a production procedure, not the product. The patent holder has the right to its assignment or license. An *assignment* is any outright sale, with the transfer of all rights of ownership conveyed to the assignee. A *license* is a right to use the patent for certain considerations in accordance with specific terms, but legal title to the patent remains with the licensor.
- *Joint ventures.* When two or more companies create a third organization to conduct a new business, a joint venture exists. This organization structure emerges, primarily, when either the risk or capital requirements are too great for any single firm to bear. Lack of technical expertise, limited distribution networks, and unfamiliarity with certain markets are other possible reasons. Joint ventures are common in industries

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such as oil and gas, real estate, and chemicals, or between foreign and domestic partners. Joint ventures have obvious application to product development. For example, small firms with technological resources are afforded an opportunity to acquire capital or marketing expertise provided by a larger firm.

### *The new product development process*

Evidence suggests that there may be as many varieties of new product development systems as there are kinds of companies. For the most part, most companies do have a formal comprehensive new product development system, and the evolution of such systems were not necessarily the result of systematic planning. The list of activities suggested in Exhibit 18 illustrates the extensiveness of this process. Because of the complexity of the process, it is important that the general guidelines of effective management be applied to new product development.<sup>13</sup>

Before starting our discussion of the eight-step process of new product development, a necessary caveat should be considered: a great many new products fail. Depending on definitions used for products actually introduced, failure rates range between 20 per cent and 30 per cent, but have been as high as 80 per cent. Of more concern than the level of failure are the reasons for failure. Possibilities include: technical problems, bad timing, misunderstanding the consumer, actions by competitors, and misunderstanding the environment.

### **Step 1: generating new product ideas**

Generating new product ideas is a creative task that requires a specific way of thinking. Gathering ideas is easy, but generating good ideas is another story. Examples of internal sources are:

- *Basic research*: many companies, such as DuPont, have several scientists who are assigned the task of developing new product ideas and related technology.
- *Manufacturing*: people who manufacture products often have ideas about modifications and improvements, as well as completely new concepts.

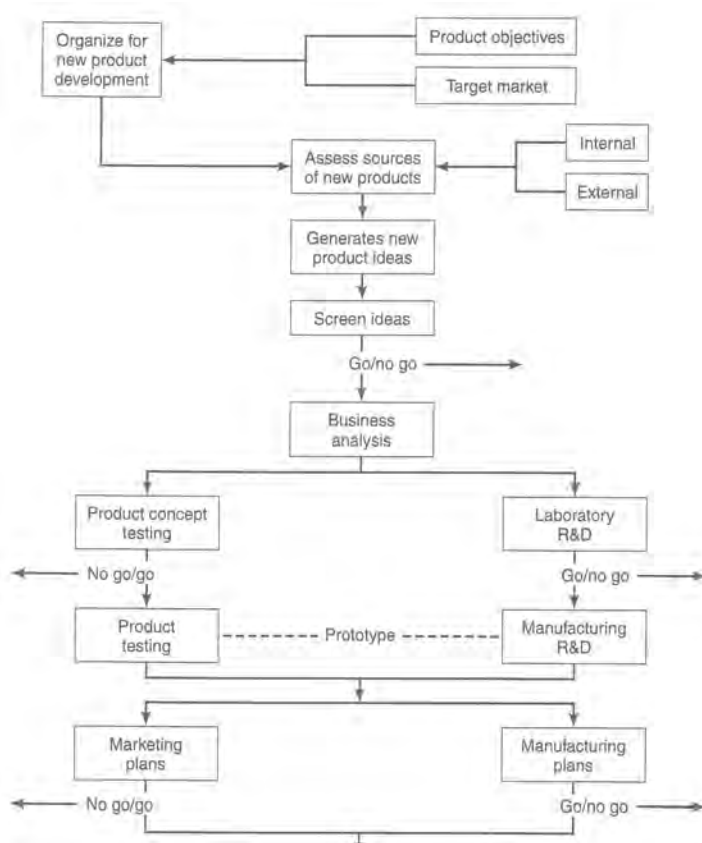


Exhibit 18: The new product development process.

- *Salesperson*: company salespeople and representatives can be a most helpful source of ideas, since they not only know the customer best, but they also know the competition and the relative strengths and weaknesses of existing products.
- *Top management*: the good top executive knows the company's needs and resources, and is a keen observer of technological trends and of competitive activity.

External sources of new product ideas are almost too numerous to mention. A few of the more useful are:

- *Secondary sources of information*: there are published lists of new products, available licenses, and ideas for new product ventures.
- *Competitors*: good inferences about competitive product development can be made on the basis of indirect evidence gained from salespeople and from other external sources, including suppliers, resellers, and customers.
- *Customers*: frequently customers generate new product ideas or at least relay information regarding their problems that new and improved products would help to solve.
- *Resellers*: a number of firms use "councils", or committees made up of representative resellers to assist in solving various problems, including product development.
- *Foreign markets*: many companies look toward foreign markets, especially western Europe, because they have been so active in product development.

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There are probably as many approaches to collecting new product ideas as there are sources. For most companies, taking a number of approaches is preferable to a single approach. Still, coming up with viable new product ideas is rare (see Newslines).

### Step 2: screening product development ideas

The second step in the product development process is screening. It is a critical part of the development activity. Product ideas that do not meet the organization's objectives should be rejected. If a poor product idea is allowed to pass the screening state, it wastes effort and money in subsequent stages until it is later abandoned. Even more serious is the possibility of screening out a worthwhile idea.

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#### Newsline: New ideas are rare

New product ideas can come from anywhere and everywhere. It is exciting when a new product idea comes from out of the blue, prototypes test well among consumers, and purchase interest scores are off the charts. But relying on the "anywhere and everywhere" approach will not do in the long run. What is required for product development are methodologies that enable us to systematically discover new product opportunities.

One such method is the category appraisal, which points to new product opportunities within an existing category and sometimes to opportunities in a new, adjacent category. The objective of the category appraisal study is to find out what makes the category "tick". Questions to ask include:

What drives consumer acceptability?

What are the strengths and weaknesses of each product in the category?

What are the opportunities to outperform existing products?

To what extent does brand equity play a role in product acceptability?

Does collected data point to unexplored regions of the category "space" that new products can successfully fill?

An example from the confectionery industry illustrates this technique. The mission was to identify the properties of a new candy item for consumers who buy candy in supermarkets, convenience stores, and movie theaters. A database of in-depth sensory profile of a wide range of candy products and "liking scores" of each of those products was created. The researchers shopped 'till they dropped. They thoroughly filled a sensory space in terms of texture, flavor, size, and appearance with 25-30 products.

A questionnaire was developed that required quantitative ratings (such as 100 per cent scale rating) of product attributes that were unique to some products. There were questions about hardness, chewiness, crispness, flavor intensity, degree of fruit flavor, sweetness, tartness, color, and many more. Overall liking for each product was also measured.

How well each product and brand performed—the overall liking score for each product—was not an objective of the study. The point was to discover the most generalized drivers of consumer acceptability in the confectionery category. Products were ranked by their performance and key sensory properties. Close study of the data revealed that these consumers were not the least bit influenced by brand. Overall taste was the dominant factor. Second, a new chocolate product held



the most promise. Of all flavors explored, chocolate captivated consumers most. In fact, the ideal product is chocolate-filled chocolates with chocolate dipping sauce.<sup>26</sup>

There are two common techniques for screening new product ideas; both involve the comparison of a potential product idea against criteria of acceptable new products. The first technique is a simple checklist. For example, new product ideas can be rated on a scale ranging from very good to poor, in respect to criteria such as: value added, sales volume, patent protection, affect on present products, and so forth. Unfortunately, it is quite difficult for raters to define what is fair or poor. Also, it does not address the issue of the time and expense associated with each idea, nor does it instruct with regard to the scores. A second technique goes beyond the first: the criteria are assigned importance weights and then the products are rated on a point scale measuring product compatibility. These scores are then multiplied by their respective weights and added to yield a total score for the new product idea. Table 7 provides an example of both these techniques for screening new product ideas.

### Step 3: business analysis

After the various product ideas survive their initial screen, very few viable proposals will remain. Before the development of prototypes can be decided upon, however, a further evaluation will be conducted to gather additional information on these remaining ideas in order to justify the enormous costs required. The focus of the business analysis is primarily on profits, but other considerations such as social responsibilities may also be involved.

The first step in the business analysis is to examine the projected demand. This would include two major sources of revenue: the sales of the product and the sales or license of the technology developed for or generated as a by-product of the given product.

Table 7: Screening product ideas

Rating								
	Weight	Very good		Fair	Poor		Unweighted Value	Weighted Value
		(5)	(4)	(3)	(2)	(1)		
<b>Customer utilities</b>								
<b>-amusement</b>	.1	X					5	0.5
<b>-comfort</b>	.1			X			3	.3
<b>-convenience</b>	.2		X				4	.8
<b>-satisfaction</b>	.3		X				4	1.2
<b>-easy to use</b>	.1			X			3	.3

<sup>26</sup> Sources: Jeff Braun, "Overcoming the Odds." *Marketing News*, March 29,1999. pp. 15-16; David Fishben, "Sweet Success: Category Appraisal is Proven Source of New Ideas," *Marketing News*. March 29, 1999, pp. 15-16; Tomina "On Your Mark," *Entrepreneur*, April 1999, pp. 161-162; Laurie Freeman, "Brach's Fruit Snacks Shapes," *Advertising Age*. June 28, 1999,pp. 5-7.

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<b>Ability to create effective sales appeals</b>	.3	X			4	1.2
<b>Price</b>	.1			X	2	.2
<b>Product quality</b>	.2		X		3	.6
<b>Product profitability</b>	.2		X		3	.6
<b>Attractiveness of product to customers</b>	.1	X			4	.4
<b>Ability to produce product in large volumes</b>	.3	X			5	1.5
<b>Ability of new product in helping sale of other products</b>	.1			X	1	.1
<b>Requires low capital investment</b>	.3	X			4	1.2
<b>Product can be produced through existing advertising</b>	.2	X			3	.6
<b>Product can be produced in existing facilities</b>	.3	X			4	1.2
<b>Product can be distributed through existing channels</b>	.3			X	3	.9
<b>Strength of competition</b>	.2			X	3	.6
<b>Patent situation</b>	.1			X	2	.2
<b>Total score</b>					60	12.4

A complete cost appraisal is also necessary as part of the business analysis. It is difficult to anticipate all the costs that will be involved in product development, but the following cost items are typical:

- expected development cost, including both technical and marketing R&D;

- expected set-up costs (production, equipment, distribution);
- operating costs that account for possible economies of scale and learning curves;
- marketing costs, especially promotion and distribution;
- and management cost.

#### Step 4: technical and marketing development

A product that has passed the screen and business analysis stages is ready for technical and marketing development. Technical development involves two steps. The first is the applied laboratory research required to develop exact product specifications. The goal of this research is to construct a prototype model of the product that can be subjected to further study. Once the prototype has been created, manufacturing-methods research can be undertaken to plan the best way of making the product in commercial quantities under normal manufacturing conditions. This is an extremely important step, because there is a significant distinction between what an engineer can assemble in a laboratory and what a factory worker can produce.

While the laboratory technicians are working on the prototype, the marketing department is responsible for testing the new product with its intended consumers and developing the other elements of the marketing mix. The testing process usually begins with the concept test. The *product concept* is a synthesis or a description of a product idea that reflects the core element of the proposed product. For example, a consumer group might be assembled and the interview session might begin with the question: "How about something that would do this?"

The second aspect of market development involves consumer testing of the product idea. This activity must usually await the construction of tile prototype or, preferably, limited production models. Various kinds of consumer preference can be conducted. The product itself can be exposed to consumer taste or use tests. Packaging, labeling, and other elements in the mix can be similarly studied. Comparison tests are also used.

#### Step 5: manufacturing planning

Assuming that the product has cleared the technical and marketing development stage, the manufacturing department is asked to prepare plans for producing it. The plan begins with an appraisal of the existing production plant and the necessary tooling required to achieve the most economical production. Fancy designs and material might be hard if not impossible to accommodate on existing production equipment; new machinery is often time consuming and costly to obtain. Compromise between attractiveness and economy is often necessary.

Finally, manufacturing planning must consider the other areas of the organization and what is required of each. More specifically, they should determine how to secure the availability of required funds, facilities, and personnel at the intended time, as well as the methods of coordinating this effort.

#### Step 6: marketing planning

It is at this point that the marketing department moves into action again. The product planner must prepare a complete marketing plan—one that starts with a statement of objectives and ends with the fusion of product distribution, promotion, and pricing into an integrated program of marketing action.

#### Step 7: test marketing

Test marketing is the final step before commercialization; the objective is to test all the variabilities in the marketing plan including elements of the product. Test marketing represents an actual launching of the total marketing program. However, it is done on a limited basis.

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## Integrated marketing

### Trickier than you think

Everyone knows the fastest way to get rich is to start a dot-com business. According to the US Commerce Department, traffic on the Internet doubles every 100 days. To acquire an audience of 50 million, it took radio 30 years, television 13 years, personal computers 16 years, and the Internet *four years*.

Still, marketers who go online expecting to make an "overnight killing" are in for a bruising lesson. Getting on the Web takes an investment, and once there, you have to build your Web presence and brand. And there are still technical and logistical hurdles to clear. Just ask Julie Wainwright, who got a firsthand look at the new math after the pet-products website she heads, Pet.com, went public in 2000. After making its debut at USD 11 a share, the San Francisco-based Internet company's stock rose to USD 14 and then promptly dropped below USD 3.

Volatility in the Internet business has produced a new industry—Internet consultants. As a result, a plethora of recommendations have emerged for entering an Internet business. Here are some of the suggestions:

- (a) Keep it simple—focus on providing compelling information.
- (b) Put customers first—understand them and meet their needs.
- (c) Make your site Web-friendly—do not assume everyone is technically competent.
- (d) Spread the word—publicize your Web address, offline as well as on the Net, by putting it everywhere you do business.
- (e) Be ready for success—a Web site can give you more business than you can handle.
- (f) Although e-business moves fast: managers shouldn't move carelessly—do not take risks that jeopardize reaching your goals.
- (g) Cash-flow problems are common with Internet start ups—project the amount of cash needed, then double it.
- (h) Creating a true brand is specially difficult with Internet start-ups—excellent customer service, not advertising, is likely the answer.
- (i) Deliver the goods—getting goods delivered to a customer's doorstep in a timely manner is much more complicated for Internet businesses.
- (j) Actively monitor the customer—this ongoing dialogue leads to a deeper understanding of a customer's preferences and shopping habits, and that, in turn, leads to more personalized offerings and services..

Do not assume that the Web will solve all your problems or substitute for sound business judgment. "It is not some sort of get-rich-quick scheme," says Mark Weaver, professor of entrepreneurship at the University of Alabama. "You have to be even more a perfectionist, more meticulous, and more prepared to adjust to the changing rules of business online."<sup>27</sup>

Three general questions can be answered through test marketing. First, the overall workability of the marketing plan can be assessed. Second, alternative allocations of the budget can be evaluated. Third, determining whether a new product introduction is inspiring users to switch from their previous brands to the new one and holding them there through subsequent repeat purchases is determined. In the end, the test market should include an estimate of sales, market share, and financial performance over the life of the product.

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<sup>27</sup> Sources: Sreenath Sreenivasan, "Wrestling with the Web," *Business Week*, May 24, 1999, pp. F16-- Peggy Pulliam, "To Web or Not to Web," *Internet Marketing*, June 2000, pp. 37-41; Kara Swisher, "Reality Check," *The Wall Street Journal*, April 17, 2000, p. R19; Erin Strout, "Launching an E-Business," *Sales & Marketing Management*, July 2000, pp. 89-91.

Initial product testing and test marketing are not the same. Product testing is totally initiated by the producer: he or she selects the sample of people, provides the consumer with the test product, and offers the consumer some sort of incentive to participate.

*Test marketing*, on the other hand, is distinguished by the fact that the test cities represent the national market, the consumer must make the decision herself, must pay him or her money, and the test product must compete with the existing products in the actual marketing environment. For these and other reasons a market test is an accurate simulation of the national market and serves as a method for reducing risk. It should enhance the new product's probability of success and allow for final adjustment in the marketing mix before the product is introduced on a large scale.

However, running test marketing is not without inherent risks. First, there are substantial costs in buying the necessary plant and machinery needed to manufacture the product or locating manufacturers willing to make limited runs. There are also promotional costs, particularly advertising, and personal selling. Although not always easy to identify, there are indirect costs as well. For example, the money used to test market could be used for other activities. The risk of losing consumer goodwill through the testing of an inferior product is also very real. Finally, engaging in a test-market might allow competitors to become aware of the new product and quickly copy it.

Because of the special expertise needed to conduct test markets and the associated expenses, most manufacturers employ independent marketing research agencies with highly trained project directors, statisticians, psychologists, and field supervisors. Such a firm would assist the product manager in marketing the remaining test market decisions.

- *Duration of testing*: the product should be tested long enough to account for market factors to even out, allow for repeat purchases, and account for deficiencies in any other elements in the new product (three to six months of testing may be sufficient for a frequently purchased and rapidly consumed convenience item).
- *Selection of test market cities*: the test market cities should reflect the norms for the new product in such areas as advertising, competition, distribution system, and product usage.
- *Number of test cities*: should be based on the number of variations considered (i.e. vary price, package, or promotion), representativeness, and cost.
- *Sample size determination*: the number of stores used should be adequate to represent the total market.

Even after all the test results are in, adjustments in the product are still made. Additional testing may be required, or the product may be deleted.

### Step 8: commercialization

At last the product is ready to go. It has survived the development process and it is now on the way to commercial success. How can it be guided to that marketing success? It is the purpose of the lifecycle marketing plan to answer this question. Such a complete marketing program will, of course, involve additional decisions about distribution, promotion, and pricing.

#### Capsule 12: Review

- New product strategies begin by putting "new" on a continuum.
- There are both internal and external sources for acquiring new products.
- The new product development process includes the following steps:
  1. generate new product ideas

## 7. Introducing and managing the product

2. screen ideas
3. perform a business analysis
4. technical and marketing development
5. manufacturing planning
6. marketing planning
7. test marketing
8. commercialization

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### The Wall Street Journal

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#### **In practice**

Organizations must introduce new products and manage existing products successfully to remain competitive in today's marketplace. Products are planned, and the product strategy aims to ensure that product objectives are achieved.

Unprecedented advancements in technology render shorter product life cycles. As a result, product plans must provide competitive distinctiveness.

The Interactive Journal examines product development for large and small organizations in **Marketplace**. Under the **Marketplace** heading, click on **Small Business**. This section provides articles targeted toward small and emerging businesses.

Special reports on small and emerging businesses can be found in the **Breakaway** section, also under **Small Business**.

Here you will find more in-depth analysis about small business. The Interactive Journal also sponsors several online discussions. Click on one of the links to join an online discussion.

Return to the **Marketplace** home page and click on the **Business Focus** link on the left menu. This link directs you to articles discussing general business developments taking place in various companies.

Return to the **Front Section** and select **Starting a Business** under **Resources** in the left menu. This link sends you to the **Startup Journal**, a site designed to provide new business with a variety of tools. Navigate the bar at the top of the site for information about franchising, financing, and running a business.

#### **Additional sites**

Check out [www.adweek.com](http://www.adweek.com) for industry articles about advertising and brand development. The Brandweek link on the site provides weekly excerpts of headlines from the print edition.

Advertising Age is another resource for information about product strategies. Check out [www.adage.com](http://www.adage.com).

Business Week magazine's Web site [www.businessweek.com](http://www.businessweek.com) is a comprehensive site. Daily briefings cover a wide range of topics.

#### **Deliverable**

Use the Interactive Journal and Additional Sites listed here to find three articles about product development. Read each article and compare the strategies employed by the companies profiled. Why are the products successful, or why did they fail? Write a one-page brief supporting your conclusions.

### Questions

- How do organizations identify product objectives when developing a product strategy? Why are these objectives important?



- What impact do market trends have on new product development? How do organizations decide whether to introduce a new product or extend an existing product line?
- How does the media react to new products like Apple's iMac? What about product failures like Coca-Cola's New Coke? Use the Interactive Journal to find articles about these companies and products.

## Summary

The ability of the organization to consistently produce new products and effectively manage existing products looms as one of the most important and difficult tasks faced by the company. This chapter provides an overview of the components that constitute a product, and the product planning process.

The process begins with the task of defining the product. In order to provide an accurate portrayal of the product, it is important to consider the perspective of the consumer, the manufacturer, and the various publics. All three perspectives must be understood and satisfied. In addition, the three components of the product are discussed. The core product identifies what the consumer expects when purchasing the product. The tangible product is reflected in its quality level, features, brand name, styling, and packaging. The augmented product is reflected by the services supporting the core/tangible product. The promised product suggests what the product delivers in the long term.

There are also several classification schemes that are useful in improving our understanding of the product into three categories: convenience, shopping, and specialty. A convenience good is one that requires a minimum amount of effort on the part of the consumer. In contrast, consumers want to be able to compare products categorized as shopping goods. Specialty goods are so unique, at least from the perspective of the consumer, that they will go to great lengths to seek out and purchase them.

Another relevant classification scheme has been applied to business goods. Three characteristics of business products are: (a) demand is derived from purchase of another product, (b) demand tends to be price-inelastic, and (c) tendency toward pure competition. Business products are classified as extractive products and manufactured products.

Goods products versus service products is the final categorization. Although there is still controversy about the validity of this separation, we contend that the differences justify adjustments in the marketing strategy for service products. Services are intangible, require simultaneous production and consumption, cannot be easily standardized, and require high consumer involvement.

This chapter continues with a discussion of the product planning process. Three elements were delineated: (a) the determination of product objective, (b) the identification and resolution of factors that have an impact on the product, and (c) the development of programs appropriate for that particular product. Examples of product objectives, as well as a discussion of the importance of product objectives, are provided. The third element of program development provides the basis for the two chapters that follow. The continuing development of successful new product looms as the most important factor in the survival of the firm. This chapter introduces the concept of a "new" product as well as the process of actually producing a new product.

It is noted that what constitutes a new product must be appraised from both the consumer's point of view as well as that of the manufacturer. In the former case, newness is measured in respect to: (a) degree of consumption modification and (b) the extent of new task experience. The firm defines the product in terms of: (a) changes in the marketing mix, (b) modifications, (c) differentiation, and (d) diversification.

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New products can be acquired from several internal and external sources. The firm can employ basic research, applied research, and development to develop new products. Or they can use the external route: mergers and acquisitions, licenses and patents, and joint ventures.

### Key terms

**Product** Anything, either tangible or intangible, offered by the firm as a solution to the needs and wants of the consumer, that is profitable or potentially profitable and meets the requirements of the various publics governing or influencing society.

**Consumer goods** Products purchased for personal consumption with no intention of selling to others.

**Industrial goods** Products purchased by an individual or organization in order to modify the product or distribute it for a profit.

**Packaging** Provides protection, containment, communication, and utility for the product.

**Product lifecycle** A product planning tool that parallels the stages of the human lifecycle.

**Brand** Identifies the product and distinguishes it from competitors.

**Position** A strategic management decision that determines the place a product should occupy in a given market.

### Questions

- What overriding objectives should be kept in mind when designing a product strategy?
- How do the strategies of market extension and market segmentation differ?
- Identify the steps a product manager should take in deciding positioning of a product.
- In what kind of market situation will a strategy of product differentiation be most effective?
- What are the four product mix strategies discussed in the chapter? Name three reasons why a company might decide to alter its product mix.
- What factors would impact a marketing manager's decision to engage in a temporary or permanent price change for a mature product?
- How would you define the term "product"? Differentiate between the points of view of the manufacturer and the customer.
- Distinguish between convenience goods, shopping goods, and specialty goods. Can you think of examples that belong in each category, other than those discussed in the chapter?
- Compare and contrast the consumer's view and the firm's view of a new product.
- Describe the steps in the new product development process. Are all these steps necessary?

### Project

Identify a product that you feel is in the maturity or decline stage. Determine the characteristics of this product in light of the discussion throughout this chapter. Write a three to five page analysis.

### Case application

#### *Hershey chocolate milk*

Hershey Foods Corporation is making an unusual move in using national TV advertising for its chocolate milk, a product that historically has not received much ad support. The national TV commercial, which first aired in June 1983, was shot in 12 weeks in London by Clearwater Productions. Doyle Dane Bernbach

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(DDB) in New York developed the commercial, which has been shown nationally on a children's network and in the early fringe time period.

"The commercial's creative; it's aggressive. It breaks one cardinal rule by not mentioning this new product until 75 per cent into the commercial. But the commercial works. We think its unique", says Bob Jeffery, DDB VP account supervisor. He admits that the Hershey packaging also has had an important consumer impact. "The carton practically screams chocolate."

According to Hershey sales figures, Hershey chocolate milk is the number-one chocolate milk in the country. These results are indeed admirable considering the gamble Hershey took with their chocolate milk. It was the first time Hershey had attempted to sell a premixed beverage or promote a product not under its direct control. Hershey is licensing the use of its name on the chocolate milk another big first for the company. Hershey sells powdered chocolate to large dairies which mix the product with their milk, package it, and handle distribution. Following strict standards, Hershey has selected only certain dairies to be licensed to use the Hershey chocolate powder and label. Each dairy must follow detailed specification on mixing. To make sure there are no slip-ups, Hershey has printed a toll-free telephone number for consumers to call if they have complaints about the chocolate milk.

For Hershey, the taste of success is sweet.

## Questions

- What type of innovation is Hershey chocolate milk?
- How would you describe the product development process Hershey followed?
- Describe any potential problems.

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