

be checked against norms for the product category to see whether the concept appears to be a winner, a long shot, or a loser. One food manufacturer rejects any concept that draws a definitely-would-buy score lower than 40 percent.

CONJOINT ANALYSIS Consumer preferences for alternative product concepts can be measured with **conjoint analysis**, a method for deriving the utility values that consumers attach to varying levels of a product's attributes.⁸⁵ Conjoint analysis has become one of the most popular concept-development and testing tools. For example, Marriott used it to design its Courtyard hotel concept.⁸⁶

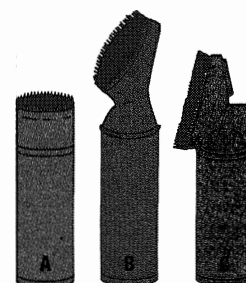
With conjoint analysis, respondents see different hypothetical offers formed by combining varying levels of the attributes and rank them. Management can then identify the most appealing offer and its estimated market share and profit. In a classic illustration, academic research pioneers Green and Wind used this approach in connection with developing a new spot-removing, carpet-cleaning agent for home use.⁸⁷ Suppose the new-product marketer is considering five design elements:

- Three package designs (A, B, C—see Figure 15.4)
- Three brand names (K2R, Glory, Bissell)
- Three prices (\$1.19, \$1.39, \$1.59)
- A possible Good Housekeeping seal (yes, no)
- A possible money-back guarantee (yes, no)

Although the researcher can form 108 possible product concepts with these five elements ($3 \times 3 \times 3 \times 2 \times 2$), it would be too much to ask consumers to rank them all from most to least preferred. A sample of, say, 18 contrasting product concepts is feasible.

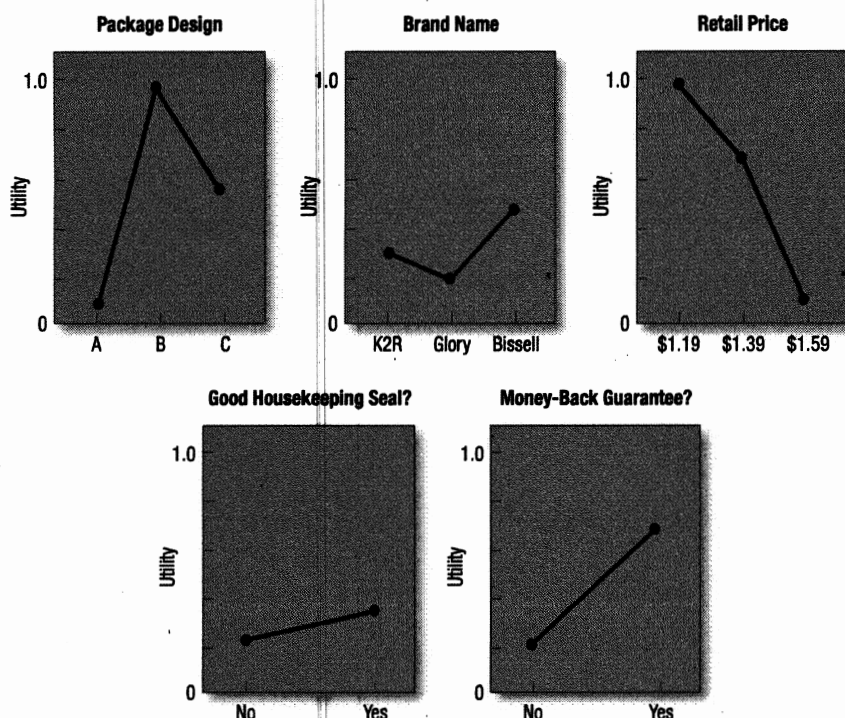
The marketer now uses a statistical program to derive the consumer's utility functions for each of the five attributes (see Figure 15.5). Utility ranges between zero and one; the higher the utility, the stronger the consumer's preference for that level of the attribute. Looking at packaging, package B is the most favored, followed by C and then A (A has hardly any utility). The preferred names are Bissell, K2R, and Glory in that order. The consumer's utility varies inversely with price. A Good Housekeeping seal is preferred, but it does not add that much utility and may not be worth the effort to obtain it. A money-back guarantee is strongly preferred.

The consumer's most desired offer is package design B, brand name Bissell, priced at \$1.19, with a Good Housekeeping seal and a money-back guarantee. We can also determine the relative importance to this consumer of each attribute—the difference between the highest and lowest utility level for that attribute. The greater the



| Fig. 15.4 |

Samples for Conjoint Analysis



| Fig. 15.5 |

Utility Functions Based on Conjoint Analysis

difference, the more important the attribute. Clearly, this consumer sees price and package design as the most important attributes, followed by money-back guarantee, brand name, and a Good Housekeeping seal.

Preference data from a sufficient sample of target consumers help to estimate the market share any specific offer is likely to achieve, given any assumptions about competitive response. Still, the company may not launch the market offer that promises to gain the greatest market share because of cost considerations. The most customer-appealing offer is not always the most profitable offer to make.

Under some conditions, researchers will collect the data by presenting not a full-profile description of each offer, but two factors at a time. For example, respondents may see a table with three price levels and three package types and indicate which of the nine combinations they would like best, second-best, and so on. Another table consists of trade-offs between two other variables. This trade-off approach may be easier to use when there are many variables and possible offers. However, it is less realistic in that respondents are focusing on only two variables at a time. Adaptive conjoint analysis (ACA) is a "hybrid" data collection technique that combines self-stated or explicated importance ratings of attributes with pair-wise trade-off tasks comparing two options.⁸⁸

MARKETING STRATEGY DEVELOPMENT

Following a successful concept test, the new-product manager will develop a preliminary three-part strategy plan for introducing the new product into the market. The first part describes the target market's size, structure, and behavior; the planned brand positioning; and the sales, market share, and profit goals sought in the first few years:

The target market for the instant breakfast drink is families with children who are receptive to a new, convenient, nutritious, and inexpensive form of breakfast. The company's brand will be positioned at the higher-price, higher-quality end of the instant-breakfast-drink category. The company will aim initially to sell 500,000 cases or 10 percent of the market, with a loss in the first year not exceeding \$1.3 million. The second year it will aim for 700,000 cases or 14 percent of the market, with a planned profit of \$2.2 million.

The second part outlines the planned price, distribution strategy, and marketing budget for the first year:

The product will be offered in chocolate, vanilla, and strawberry, in individual packets of six to a box, at a retail price of \$2.49 a box. There will be 48 boxes per case, and the case price to distributors will be \$24. For the first two months, dealers will be offered one case free for every four cases bought, plus cooperative-advertising allowances. Free samples will be distributed in stores. Coupons for 50 cents off will appear in newspapers and online. The total sales promotional budget will be \$2.9 million. An advertising budget of \$6 million will be split 50:50 between national and local. Two-thirds will go into television and one-third into online. Advertising copy will emphasize the benefit concepts of nutrition and convenience. The advertising-execution concept will revolve around a small boy who drinks instant breakfast and grows strong. During the first year, \$100,000 will be spent on marketing research to buy store audits and consumer-panel information to monitor market reaction and buying rates.

The third part of the marketing strategy plan describes the long-run sales and profit goals and marketing-mix strategy over time:

The company intends to win a 25 percent market share and realize an after-tax return on investment of 12 percent. To achieve this return, product quality will start high and be improved over time through technical research. Price will initially be set at a high level and gradually drop to expand the market and meet competition. The total promotion budget will be boosted about 20 percent each year, with the initial advertising-sales promotion split of 65:35 eventually evolving to 50:50. Marketing research will be reduced to \$60,000 per year after the first year.

BUSINESS ANALYSIS

After management develops the product concept and marketing strategy, it can evaluate the proposal's business attractiveness. Management needs to prepare sales, cost, and profit projections to determine whether they satisfy company objectives. If they do, the concept can move to the development stage. As new information comes in, the business analysis will undergo revision and expansion.

ESTIMATING TOTAL SALES Total estimated sales are the sum of estimated first-time sales, replacement sales, and repeat sales. Sales-estimation methods depend on whether the product is purchased once (such

as an engagement ring or retirement home), infrequently, or often. For one-time products, sales rise at the beginning, peak, and approach zero as the number of potential buyers becomes exhausted [see Figure 15.6(a)]. If new buyers keep entering the market, the curve will not go to zero.

Infrequently purchased products—such as automobiles, microwaves, and industrial equipment—exhibit replacement cycles dictated by physical wear or obsolescence associated with changing styles, features, and performance. Sales forecasting for this product category calls for estimating first-time sales and replacement sales separately [see Figure 15.6(b)].

Frequently purchased products, such as consumer and industrial nondurables, have product life-cycle sales resembling Figure 15.6(c). The number of first-time buyers initially increases and then decreases as fewer buyers are left (assuming a fixed population). Repeat purchases occur soon, providing the product satisfies some buyers. The sales curve eventually falls to a plateau representing a level of steady repeat-purchase volume; by this time, the product is no longer a new product.

In estimating sales, the manager's first task is to estimate first-time purchases of the new product in each period. To estimate replacement sales, management researches the product's *survival-age distribution*—that is, the number of units that fail in year one, two, three, and so on. The low end of the distribution indicates when the first replacement sales will take place. Because replacement sales are difficult to estimate before the product is in use, some manufacturers base the decision to launch a new product on their estimate of first-time sales alone.

For a frequently purchased new product, the seller estimates repeat sales as well as first-time sales. A high rate of repeat purchasing means customers are satisfied; sales are likely to stay high even after all first-time purchases take place. Some products and brands are bought a few times and dropped. Colgate's Wisp disposable toothbrush received much trial, but repeat sales slowed considerably after that.⁸⁹

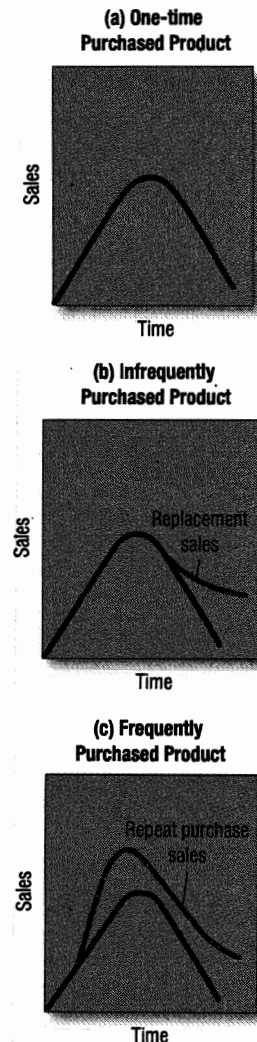
ESTIMATING COSTS AND PROFITS Costs are estimated by the R&D, manufacturing, marketing, and finance departments. Table 15.3 illustrates a five-year projection of sales, costs, and profits for the instant breakfast drink.

Row 1 shows projected sales revenue over the five-year period. The company expects to sell \$11,889,000 (approximately 500,000 cases at \$24 per case) in the first year. Behind this projection is a set of assumptions about the rate of market growth, the company's market share, and the factory-realized price. Row 2 shows the cost of goods sold, which hovers around 33 percent of sales revenue. We find this cost by estimating the average cost of labor, ingredients, and packaging per case. Row 3 shows the expected gross margin, the difference between sales revenue and cost of goods sold.

Row 4 shows anticipated development costs of \$3.5 million, including product-development cost, marketing research costs, and manufacturing development costs. Row 5 shows the estimated marketing costs over the five-year period to cover advertising, sales promotion, and marketing research and an amount allocated for sales force coverage and marketing administration. Row 6 shows the allocated overhead to this new product to cover its share of the cost of executive salaries, heat, light, and so on.

Row 7, the gross contribution, is gross margin minus the preceding three costs. Row 8, supplementary contribution, lists any change in income to other company products caused by the new-product introduction. *Dragalong income* is additional income to them, and *cannibalized income* is reduced income.⁹⁰ Table 15.3 assumes no supplementary contributions. Row 9 shows net contribution, which in this case is the same as gross contribution. Row 10 shows discounted contribution—that is, the present value of each future contribution discounted at 15 percent per annum. For example, the company will not receive \$4,716,000 until the fifth year. This amount is worth only \$2,346,000 today if the company can earn 15 percent on its money through other investments.⁹¹

Finally, row 11 shows the cumulative discounted cash flow, the accumulation of the annual contributions in row 10. Two points are of central interest. First is the maximum investment exposure, the highest loss the project can create. The company will be in a maximum loss position of \$4,613,000 in year 1. The second is the payback period, the time when the company recovers all its investment, including the built-in return of 15 percent. The payback period here is about three and a half years. Management must decide whether to risk a maximum investment loss of \$4.6 million and a possible payback period of three and a half years. As part of their financial analysis, firms may conduct a breakeven or risk analysis.



| Fig. 15.6 |
Product Life-Cycle Sales for Three Types of Products

TABLE 15.3 Projected Five-Year Cash Flow Statement (in thousands of dollars)

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
1. Sales revenue	\$0	\$11,889	\$15,381	\$19,654	\$28,253	\$32,491
2. Cost of goods sold	0	3,981	5,150	6,581	9,461	10,880
3. Gross margin	0	7,908	10,231	13,073	18,792	21,611
4. Development costs	-3,500	0	0	0	0	0
5. Marketing costs	0	8,000	6,460	8,255	11,866	13,646
6. Allocated overhead	0	1,189	1,538	1,965	2,825	3,249
7. Gross contribution	-3,500	-1,281	2,233	2,853	4,101	4,716
8. Supplementary contribution	0	0	0	0	0	0
9. Net contribution	-3,500	-1,281	2,233	2,853	4,101	4,716
10. Discounted contribution (15%)	-3,500	-1,113	1,691	1,877	2,343	2,346
11. Cumulative discounted cash flow	-3,500	-4,613	-2,922	-1,045	1,298	3,644

Managing the Development Process: Development to Commercialization

Up to now, the product has existed only as a word description, a drawing, or a prototype. The next step represents a jump in investment that dwarfs the costs incurred so far. The company will determine whether the product idea can translate into a technically and commercially feasible product. If not, the accumulated project cost will be lost, except for any useful information gained in the process.

PRODUCT DEVELOPMENT

The job of translating target customer requirements into a working prototype is helped by a set of methods known as *quality function deployment* (QFD). The methodology takes the list of desired *customer attributes* (CAs) generated by market research and turns them into a list of *engineering attributes* (EAs) that engineers can use. For example, customers of a proposed truck may want a certain acceleration rate (CA). Engineers can turn this into the required horsepower and other engineering equivalents (EAs). A major contribution of QFD is improved communication between marketers, engineers, and manufacturing people.⁹²

PHYSICAL PROTOTYPES The goal of the R&D department is to find a prototype that embodies the key attributes in the product-concept statement, performs safely under normal use and conditions, and can be produced within budgeted manufacturing costs. Sophisticated virtual reality technology and the Internet now permit rapid prototyping and flexible development processes.

R&D must also decide how consumers will react to different colors, sizes, and weights. Historically, a yellow mouthwash supported an "antiseptic" claim (Listerine), red a "refreshing" claim (Lavoris), and green or blue a "cool" claim (Scope). Marketers need to supply R&D with information about what attributes consumers seek and how they judge whether these are present.

Firms rigorously test product prototypes internally. Vibram, which makes its own FiveFingers line as well as soles for all types of shoes—such as for skateboarding, cycling, rock climbing, and fly fishing—employs a team of product testers. The company puts its products into the most extreme conditions by executing tests directly in the field and employing a series of procedures:⁹³

If our chemist creates a new compound targeted towards road running applications, first we perform a battery of lab tests to understand the compound's physical properties. Next, we bring natural environments and surfaces into the laboratory and calculate information. Then lastly shoes are distributed to our tester team who will document things like weather/temp, distance, location, and running surfaces, etc. They'll comment on the differences in the grip of the soles. We then compile the results and make a decision on validation.

CUSTOMER TESTS When the prototypes are ready, they must be put through rigorous functional and customer tests before they enter the marketplace. *Alpha testing* tests the product within the firm to see how it performs in different applications. After refining the prototype further, the company moves to *beta testing* with customers.

Consumer testing can bring consumers into a laboratory or give them samples to use at home. Procter & Gamble has on-site labs such as a diaper-testing center where dozens of mothers bring their babies to be studied. To develop its Cover Girl Outlast all-day lip color, P&G invited 500 women to come to its labs each morning to apply the lipstick, record their activities, and return eight hours later so it could measure remaining lip color, resulting in a product that came with a tube of glossy moisturizer that women could apply on top of their color without looking at a mirror. In-home placement tests are common for products from ice cream flavors to new appliances.

MARKET TESTING

After management is satisfied with functional and psychological performance, the product is ready to be branded with a name, logo, and packaging and go into a market test, if desired.

Not all companies undertake market testing. A company officer at Revlon stated: "In our field—primarily higher-priced cosmetics not geared for mass distribution—it would be unnecessary for us to market test. When we develop a new product, say an improved liquid makeup, we know it's going to sell because we're familiar with the field. And we've got 1,500 demonstrators in department stores to promote it."

One problem is that many managers find it difficult to kill a project that attracted much effort and attention, even if they *should* do so based on market testing. The result is an unfortunate (and typically unsuccessful) escalation of commitment.⁹⁴

Many companies, however, believe market testing, if done correctly, can yield valuable information about buyers, dealers, marketing program effectiveness, and market potential. The main issues are: How much market testing should be done, and what kind(s)?

The amount of testing is influenced by the investment cost and risk on the one hand and time pressure and research cost on the other. High-investment-high-risk products, whose chance of failure is high, must be market tested; the cost will be an insignificant percentage of total project cost. High-risk products that create new-product categories (the first instant-breakfast drink) or have novel features (the first gum-strengthening toothpaste) warrant more market testing than modified products (another toothpaste brand).

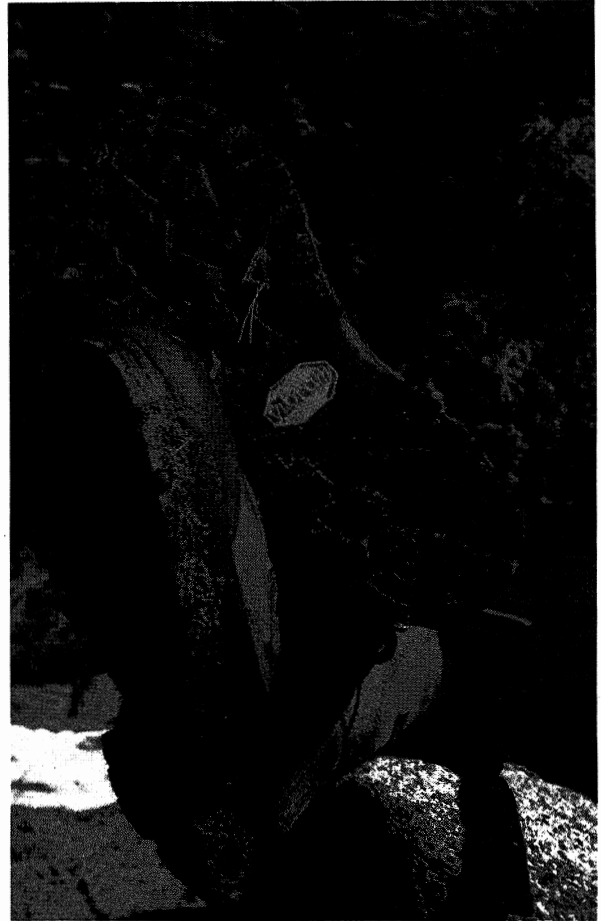
CONSUMER-GOODS MARKET TESTING Consumer-products tests seek to estimate four variables: *trial*, *first repeat*, *adoption*, and *purchase frequency*. Many consumers may try the product but not rebuy it, or it might achieve high permanent adoption but low purchase frequency (like gourmet frozen foods).

Here are four major methods of consumer-goods market testing, from least to most costly.

Sales-Wave Research Consumers who initially try the product at no cost are reoffered it, or a competitor's product, at slightly reduced prices. The offer may be made as many as five times (sales waves), while the company notes how many customers select it again and their reported level of satisfaction.

Sales-wave research can be implemented quickly, conducted with a fair amount of security, and carried out without final packaging and advertising. However, because customers are preselected, it does not indicate trial rates the product would achieve with different sales incentives, nor does it indicate the brand's power to gain distribution and favorable shelf position.

Simulated Test Marketing Thirty to 40 qualified shoppers are asked about brand familiarity and preferences in a specific product category and attend a brief screening of both well-known and new TV or print ads. One ad advertises the new product but is not singled out for attention. Consumers receive a small amount of money and are invited into a store where they may buy any items. The company notes how many consumers buy the new brand and competing brands. This provides a measure of the ad's relative effectiveness against competing ads in stimulating trial. Consumers are asked the reasons for their purchases or nonpurchases. Those who did not buy



Vibram has professional product testers who put the soles it makes for shoes through extreme conditions to see how they hold up.

Source: © ZUMA Press, Inc./Alamy

the new brand are given a free sample. Some weeks later, they are contacted to ascertain product attitudes, usage, satisfaction, and repurchase intention and are offered an opportunity to repurchase any products.

This method can give some surprisingly accurate results about advertising effectiveness and trial rates (and repeat rates if extended) in a much shorter time and at a fraction of the cost of using real test markets, making it especially appealing to marketers of fast-moving consumer goods.⁹⁵ As media and channels have grown more fragmented, however, it has become harder to truly simulate market conditions with only traditional approaches.

Controlled Test Marketing The company with the new product specifies the number of stores and geographic locations it wants to test. A research firm delivers the product to a panel of participating stores and controls shelf position, pricing, and number of facings, displays, and point-of-purchase promotions. Electronic scanners measure sales at checkout. The company can also evaluate the impact of local advertising and promotions and interview a sample of customers later to get their impressions of the product. It does not have to use its own sales force, give trade allowances, or "buy" distribution. However, controlled test marketing provides no information about how to sell the trade on carrying the new product. It also exposes the product and its features to competitors' scrutiny.

Test Markets The ultimate way to test a new consumer product is to put it into full-blown test markets. The company chooses a few representative cities and puts on a full marketing communications campaign, and the sales force tries to sell the trade on carrying the product and giving it good shelf exposure. Test marketing also measures the impact of alternative marketing plans by implementing them in different cities. A full-scale test can cost more than \$1 million, depending on the number of test cities, the test duration, and the amount of data the company wants to collect.

In designing a test market, management faces several decisions: (1) How many test cities? (2) Which test cities? (3) Length of the test? (4) Which information to collect? and (5) What action to take? A number of considerations come into play for each decision. Columbus, Ohio, is a popular location for testing new fast-food products: The city is reasonably representative demographically of the rest of the nation, with a healthy dose of college-aged students, and is a contained media market with reasonable ad rates.⁹⁶

Many major global consumer goods makers such as L'Oréal, Philips, and Nikon like to test in South Korea because its demanding but fair consumers and well-developed marketing infrastructure help ensure that products are in good enough shape to enter other global markets.⁹⁷ Gucci likes to test its luxury products in China because it feels consumers there indicate where the luxury market is heading.⁹⁸

Many companies today skip test marketing despite its benefits and rely on faster and more economical testing methods. Starbucks regularly launches products before they have been deemed "perfect," based on this philosophy espoused by chief digital officer, Adam Brotman: "We don't think it is okay if things aren't perfect, but we're willing to innovate and have speed to market trump a 100% guarantee that it's be perfect." The company's mobile payments app had a number of flaws and corrections in its first six months after launch, but it now generates 3 million mobile transactions a week.⁹⁹ General Mills prefers to launch new products in 25 percent of the country, an area too large for rivals to disrupt. Managers review retail scanner data, which tells them within days how the product is doing and what corrective fine-tuning to do.

Some companies like to test their new products in South Korea because of the open-minded attitude of consumers who live there and the marketing infrastructure that exists.



BUSINESS-GOODS MARKET TESTING Business goods can also benefit from market testing. Expensive industrial goods and new technologies will normally undergo alpha and beta testing.¹⁰⁰ During beta testing, the company's technical people observe how customers use the product, a practice that often exposes unanticipated problems of safety and servicing and alerts the company to customer training and servicing requirements. The company can also observe how much value the equipment adds to the customer's operation, as a clue to subsequent pricing.

Companies must interpret beta test results carefully because only a small number of test customers are used, they are not randomly drawn, and tests are somewhat customized to each site. Another risk is that testers unimpressed with the product may leak unfavorable reports about it. Square doesn't employ beta testing—preferring to test at its own internally controlled locations—because it feels it should never put out an unfinished product.¹⁰¹

At trade shows the company can observe how much interest buyers show in the new product, how they react to various features and terms, and how many express purchase intentions or place orders. In distributor and dealer display rooms, products may stand next to the manufacturer's other products and possibly competitors' products, yielding preference and pricing information in the product's normal selling atmosphere. However, customers who come in might not represent the target market, or they might want to place early orders that cannot be filled.

Industrial manufacturers come close to using full test marketing when they give a limited supply of the product to the sales force to sell in a limited number of areas that receive promotion support and printed catalog sheets.

COMMERCIALIZATION

Commercialization incurs the company's highest costs to date.¹⁰² Too often companies are so focused on developing a new product that they neglect to spend adequate time developing a winning marketing launch program.¹⁰³ The firm will need to contract for manufacture, or it may build or rent a full-scale manufacturing facility. Most new-product campaigns also require a sequenced mix of market communication tools to build awareness and ultimately preference, choice, and loyalty.¹⁰⁴

To introduce a major new consumer packaged good into the national market can cost \$25 million to \$100 million in advertising, promotion, and other communications in the first year. For new food products, marketing expenditures typically represent 57 percent of first-year sales.

To raise funds, some inventors who don't have the backing of a major corporation are relying on crowdfunding and companies like Kickstarter.¹⁰⁵ With **crowdfunding**, individuals or start-ups fund their projects by using social media and other means to generate interest and contributions from the general public.

WHEN (TIMING) Suppose a company has almost completed the development work on its new product and learns a competitor is nearing the end of its development work. The company faces three choices:

1. **First entry**—The first firm entering a market usually enjoys the “first mover advantages” of locking up key distributors and customers and gaining leadership. But if rushed to market before it has been thoroughly debugged, the first entry can backfire.
2. **Parallel entry**—The firm might time its entry to coincide with the competitor's entry. The market may pay more attention when two companies are advertising the new product.¹⁰⁶
3. **Late entry**—The firm might delay its launch until after the competitor has borne the cost of educating the market, and its product may reveal flaws the late entrant can avoid. The late entrant can also learn the size of the market.

If a new product replaces an older product, the company might delay until the old product's stock has been drawn down. If the product is seasonal, it might wait until the season arrives; often a product waits for a “killer application” to occur. Many companies are now encountering competitive “design-arounds”—rivals are making their own versions just different enough to avoid patent infringement and royalties.¹⁰⁷

WHERE (GEOGRAPHIC STRATEGY) Most companies will develop a planned market rollout over time. In choosing rollout markets, the major criteria are market potential, the company's local reputation, the cost of filling the pipeline, the cost of communication media, the influence of the area on other areas, and competitive penetration. Small companies select an attractive city and put on a blitz campaign, entering other cities one at a time. Large companies introduce their product into a whole region and then move to the next. Companies with national distribution networks, such as auto companies, launch new models nationally.

With the Internet connecting far-flung parts of the globe, competition is more likely to cross national borders. Companies are increasingly rolling out new products simultaneously across the globe. However, masterminding a global launch poses challenges, as Chapter 8 described, and a sequential rollout across countries may still be the best option.¹⁰⁸

TO WHOM (TARGET-MARKET PROSPECTS) Within the rollout markets, the company must target initial distribution and promotion to the best prospect groups. Ideally these should be early adopters, heavy users, and opinion leaders it can reach at low cost. Few groups include all these, so the company should rate prospects and target the best group. The aim is to generate strong sales as soon as possible to attract further prospects.

HOW (INTRODUCTORY MARKET STRATEGY) Because new-product launches often take longer and cost more than expected, many potentially successful offerings suffer from underfunding. It's important to allocate sufficient time and resources—yet not overspend—as the new product gains traction in the marketplace.¹⁰⁹

To coordinate the many tasks in launching a new product, management can use network-planning techniques such as **critical path scheduling (CPS)**, which develops a master chart showing the simultaneous and sequential activities that must take place. By estimating how much time each activity takes, planners estimate completion time for the entire project. Any delay in any activity on the critical path—the shortest route to completion—will delay the project. If the launch must be completed sooner, the planner searches for ways to reduce time along the critical path.¹¹⁰

The Consumer-Adoption Process

Adoption is an individual's decision to become a regular user of a product and is followed by the *consumer-loyalty process*. New-product marketers typically aim at early adopters and use the theory of innovation diffusion and consumer adoption to identify them.

STAGES IN THE ADOPTION PROCESS

An **innovation** is any good, service, or idea that someone *perceives* as new, no matter how long its history. Everett Rogers defines the **innovation diffusion process** as “the spread of a new idea from its source of invention or creation to its ultimate users or adopters.”¹¹¹ The **consumer-adoption process** is the mental steps through which an individual passes from first hearing about an innovation to final adoption.¹¹² They are:

1. **Awareness**—The consumer becomes aware of the innovation but lacks information about it.
2. **Interest**—The consumer is stimulated to seek information about the innovation.
3. **Evaluation**—The consumer considers whether to try the innovation.
4. **Trial**—The consumer tries the innovation to improve his or her estimate of its value.
5. **Adoption**—The consumer decides to make full and regular use of the innovation.

The new-product marketer should facilitate movement through these stages. A water filtration system manufacturer might discover that many consumers are stuck in the interest stage; they do not buy because of their uncertainty and the large investment cost.¹¹³ But these same consumers would be willing to use a water filtration system at home on a trial basis for a small monthly fee. The manufacturer should consider offering a trial-use plan with option to buy.

FACTORS INFLUENCING THE ADOPTION PROCESS

Marketers recognize the following characteristics of the adoption process: differences in individual readiness to try new products, the effect of personal influence, differing rates of adoption, and differences in organizations' readiness to try new products. Some researchers are focusing on use-diffusion processes as a complement to adoption process models to see how consumers actually use new products.¹¹⁴

READINESS TO TRY NEW PRODUCTS AND PERSONAL INFLUENCE Everett Rogers defines a person's level of innovativeness as “the degree to which an individual is relatively earlier in adopting new ideas than the other members of his social system.” Some people are the first to adopt new clothing fashions or new appliances; some doctors are the first to prescribe new medicines.¹¹⁵ See the adopter categories in Figure 15.7. After a slow start, an increasing number of people adopt the innovation, the number reaches a peak, and then it diminishes as fewer nonadopters remain.

The five adopter groups differ in their value orientations and their motives for adopting or resisting the new product.¹¹⁶

- **Innovators** are technology enthusiasts; they are venturesome and enjoy tinkering with new products and mastering their intricacies. In return for low prices, they are happy to conduct alpha and beta testing and report on early weaknesses.