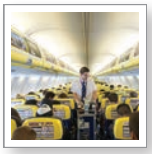
16 Developing Pricing Strategies and Programs

Price is the one element of the marketing mix that produces revenue; the other elements produce costs. Price also communicates the company's intended value positioning of its product or brand. A well-designed and marketed product can still command a price premium and reap big profits. But new economic realities have caused many consumers to reevaluate what they are willing to pay for products and services, and companies have had to carefully review their pricing strategies as a result. One that has caught the attention of consumers and businesses is Ryanair, with an unusual pricing strategy.[1]



Profits for discount European air carrier Ryanair have been sky-high thanks to its revolutionary business model. The secret? Founder Michael O'Leary thinks like a retailer, charging passengers for almost everything—except their seat. A quarter of Ryanair's seats are free, and O'Leary wants to double that within five years, with the ultimate goal of making all seats free. Passengers currently pay only taxes and fees of about $10 to $24, with an average one-way fare of roughly $52. Everything else is extra: checked luggage ($9.50 per bag), snacks ($5.50 for a hot dog, $4.50 for chicken soup, $3.50 for water), and bus or train transportation into town from the far-flung airports Ryanair uses ($24). Flight attendants sell a variety of merchandise, including digital cameras ($137.50) and iPocket MP3 players ($165). Onboard gambling and cell phone service are projected new revenue sources. Other strategies cut costs or generate outside revenue. Seats don't recline, window shades and seat-back pockets have been removed, and there is no entertainment. Seat-back trays carry ads, and the exteriors of the planes are giant revenue-producing billboards for Vodafone Group, Jaguar, Hertz, and others. More than 99 percent of tickets are sold online. The Web site also offers travel insurance, hotels, ski packages, and car rentals. Only Boeing 737-800 jets are flown to reduce maintenance costs, and flight crews buy their own uniforms. O'Leary has even discussed the possibility of pay toilets and 10 rows of standing room with handrails like a New York City subway car (to squeeze 30 more passengers aboard), though both suggestions drew much public concern and skepticism. Although his ideas may seem unconventional, the formula works for Ryanair's customers; the airline flies 58 million people to more than 150 airports each year. All the extras add up to 20 percent of revenue. Ryanair enjoys net margins of 25 percent, more than three times Southwest's 7 percent. Some industry pundits even refer to Ryanair as "Walmart with wings"!

Pricing decisions are complex and must take into account many factors—the company, the customers, the competition, and the marketing environment. Holistic marketers know their pricing decisions must also be consistent with the firm's marketing strategy and its target markets and brand positions. In this chapter, we provide concepts and tools to facilitate the setting of initial prices and adjusting prices over time and markets.

Understanding Pricing

Price is not just a number on a tag. It comes in many forms and performs many functions. Rent, tuition, fares, fees, rates, tolls, retainers, wages, and commissions are all the price you pay for some good or service. Price also has many components. If you buy a new car, the sticker price may be adjusted by rebates and dealer incentives. Some firms allow customers to pay through multiple forms, such as $150 plus 25,000 frequent flier miles for a flight.[2]

Throughout most of history, prices were set by negotiation between buyers and sellers. Bargaining is still a sport in some areas. Setting one price for all buyers is a relatively modern idea that arose with the development of large-scale retailing at the end of the nineteenth century. F. W. Woolworth, Tiffany & Co., John Wanamaker, and others advertised a "strictly one-price policy," efficient because they carried so many items and supervised so many employees.

PRICING IN A DIGITAL WORLD

Traditionally, price has operated as a major determinant of buyer choice. Consumers and purchasing agents who have access to price information and price discounters put pressure on retailers to lower their prices. Retailers in turn put pressure on manufacturers to lower their prices. The result can be a marketplace characterized by heavy discounting and sales promotion.

Downward price pressure from a changing economic environment coincided with some longer-term trends in the technological environment. For some years now, the Internet has been changing the way buyers and sellers interact. Here is a short list of how the Internet allows sellers to discriminate between buyers and buyers to discriminate between sellers.

Buyers can:

- ***Get instant price comparisons from thousands of vendors.*** Customers can compare the prices offered by multiple retailers by clicking mySimon.com. Intelligent shopping agents ("bots") take price comparison a step further and seek out products, prices, and reviews from hundreds if not thousands of merchants.
- ***Check prices at the point of purchase.*** Customers can use smart phones to make price comparisons in stores before deciding whether to purchase, pressure the retailer to match or better the price, or buy elsewhere.
- ***Name their price and have it met.*** On Priceline.com, customers state the price they want to pay for an airline ticket, hotel, or rental car, and the site looks for any seller willing to meet that price.[3] Volume-aggregating sites combine the orders of many customers and press the supplier for a deeper discount.
- ***Get products free.*** Open source, the free software movement that started with Linux, will erode margins for just about any company creating software. The biggest challenge confronting Microsoft, Oracle, IBM, and virtually every other major software producer is: How do you compete with programs that can be had for free? "Marketing Insight: Giving It All Away" describes how firms have been successful with essentially free offerings.

Sellers can:

- ***Monitor customer behavior and tailor offers to individuals.*** GE Lighting, which gets 55,000 pricing requests a year from its B-to-B customers, has Web programs that evaluate 300 factors going into a pricing quote, such as past sales data and discounts, so it can reduce processing time from up to 30 days to six hours.
- ***Give certain customers access to special prices.*** Ruelala is a members-only Web site that sells upscale women's fashion, accessories, and footwear through limited-time sales, usually two-day events. Other business marketers are already using extranets to get a precise handle on inventory, costs, and demand at any given moment in order to adjust prices instantly.

Both buyers and sellers can:

- ***Negotiate prices in online auctions and exchanges or even in person.*** Want to sell hundreds of excess and slightly worn widgets? Post a sale on eBay. Want to purchase vintage baseball cards at a bargain price? Go to www.baseball-cards.com. According to *Consumer Reports*, more than half of U.S. adults reported bargaining for a better deal on everyday goods and services in the past three years; almost 90 percent were successful at least once. Some successful tactics included: told salesperson I'd check competitor's prices (57 percent of respondents); looked for lower prices at a walk-in store (57 percent); chatted with salesperson to make a personal connection (46 percent); used other store circulars or coupons as leverage (44 percent); and checked user reviews to see what others paid (39 percent).[4]

A CHANGING PRICING ENVIRONMENT

Pricing practices have changed significantly, thanks in part to a severe recession in 2008–2009, a slow recovery, and rapid technological advances. But the new millennial generation also brings new attitudes and values to consumption. Often burdened by student loans and other financial demands, members of this group (born between about 1977 and 1994) are reconsidering just what they really need to own. Renting, borrowing, and sharing are valid options to many.

marketing
insight

Giving It All Away

Giving away products for free via sampling has been a successful marketing tactic for years. Estée Lauder gave free samples of cosmetics to celebrities, and organizers at awards shows lavish winners with plentiful free items or gifts known as "swag." Other manufacturers, such as Gillette and HP, built their business model around selling the host product essentially at cost and making money on the sale of necessary supplies, such as razor blades and printer ink.

Software companies adopted similar practices. Adobe gave away its Adobe Reader for free in 1994, as did Macromedia with its Shockwave player in 1995. Their software became the industry standard, but the firms really made their money selling their authoring software. More recently, start-ups such as Blogger Weblog and Skype have succeeded with a "freemium" strategy—free online services with a premium component.

Chris Anderson, former editor-in-chief of *Wired*, believes that in a digital marketplace companies can make money with free products. As evidence, he offers revenue models relying on cross-subsidies (giving away a DVR to sell cable service) and freemiums (offering the Flickr online photo management and sharing application for free to everyone while selling the superior Flickr Pro to more committed users).

Some online firms have successfully moved "from free to fee" and begun charging for services. Under a new participative-pricing mechanism that lets consumers decide on the price they feel is warranted, buyers often choose to pay more than zero, and even enough for sellers' revenues to increase over what a fixed price would have yielded.

Red Hat successfully applied a "freemium" model. A pioneer with open source Linux software, the company offers its business customers stability and dependability. Every few years it freezes a version of the constantly evolving software and sells a long-term support edition with customized applications, backdated updates from later versions of Linux, and customer support, all for a subscription fee. Red Hat also works with developers and programmers for its free version of Linux via its Fedora program. Thanks to these moves, Red Hat is now a billion-dollar company serving 80 percent of the *Fortune* 500 companies.

Sources: Ashlee Vance, "Red Hat Sees Lots of Green," *Bloomberg Businessweek*, March 29, 2012; Jon Brodkin, "How Red Hat Killed Its Core Product—and Became a Billion-Dollar Business," www.arstechnica.com, February 28, 2012; Chris Anderson, *Free: The Future of a Radical Price* (New York: Hyperion, 2009); Ju-Young Kim, Martin Natter, and Martin Spann, "Pay What You Want: A New Participative Pricing Mechanism," *Journal of Marketing* 73 (January 2009), pp. 44–58; Koen Pauwels and Allen Weiss, "Moving from Free to Fee: How Online Firms Market to Change Their Business Model Successfully," *Journal of Marketing* 72 (May 2008), pp. 14–31.

Source: ASSOCIATED PRESS

Champion of open source Linux software, Red Hat complements its free offerings with valuable fee-based services.

Some say these new behaviors are creating a **sharing economy** in which consumers share bikes, cars, clothes, couches, apartments, tools, and skills and extracting more value from what they already own. As one sharing-related entrepreneur noted, "We're moving from a world where we're organized around ownership to one organized around access to assets." In a sharing economy, someone can be both a consumer and a producer, reaping the benefits of both roles.[5]

Trust and a good reputation are crucial in any exchange, but imperative in a sharing economy. Most platforms that are part of a sharing-related business have some form of self-policing mechanism such as public profiles and community rating systems, sometimes linked with Facebook. Let's look at bartering and renting, two pillars of a sharing economy.

BARTERING Bartering, one of the oldest ways of acquiring goods, is making a comeback through transactions estimated to total $12 billion annually in the United States. Trade exchange companies like Florida Barter and Web sites like www.swap.com connect people and businesses seeking win-win solutions. One financial analyst has traded financial plans to clients in return for a tutorial in butter churning and trapeze and fire-breathing lessons. ThredUP allows parents to swap kids' outgrown and unused clothing and toys with other parents in similar situations all over the United States. Zimride is a ride-sharing social network for college campuses.[6]

Experts advise using barter only for goods and services that someone would be willing to pay for anyway. The founders of a Web site for swapping sporting goods and outdoor gear drew up these criteria for sharable objects: cost more than $100 but less than $500, easily transportable, and infrequently used.[7]

RENTING The sector of the new sharing economy that is really exploding is rentals. RentTheRunway offers affordable rentals of designer dresses. Customers are sent two different sizes of the dress they choose—to ensure better fit—at a cost of $50 to $300, or about 10 percent of retail value. The site is adding 100,000 customers a month, typically 15 to 35 years old.[8] One of the pioneers in the rental economy is Airbnb.[9]

AIRBNB Rhode Island School of Design graduates Brian Chesky and Joe Gebbia came upon the idea of making a little extra money by launching www.airbedandbreakfast.com and renting out air mattresses to attendees at an industrial design conference in San Francisco. Emboldened by their success at attracting three very different guests for a week, the two shortened the name of their venture to Airbnb, hired a tech expert, and set out to extend their "couch-surfing" business by adding features such as escrow payments and professional photography so the potential rental properties looked their best. Around-the-clock customer service for guests and a $1 million insurance policy for hosts provided each party with valuable peace of mind. All kinds of spaces were included—not just rooms, apartments, and houses but also driveways, treehouses, igloos, and even castles. Airbnb applied a broker's model to generate revenues: 3 percent from the host and 6 percent to 12 percent from the guest, depending on the property price. Although it now operates in 190 countries and 28,000 cities, books millions of spaces annually, and has seen its valuation approach $10 billion, it faces several significant challenges, including government intervention in the form of taxes, disputes over illegal subletting, and the imposition of safety and other hospitality-related regulation.

Even big companies are getting in on the act. German car maker Daimler introduced its Car2Go service for customers who want to rent a car for a short period of time—even at the spur of the moment. In about half its stores, Home Depot has a unit that rents out all kinds of products such as drills and saws that it also sells.[10]

HOW COMPANIES PRICE

In small companies, the boss often sets prices. In large companies, division and product line managers do. Even here, top management sets general pricing objectives and policies and often approves lower management's proposals.

Where pricing is a key competitive factor (aerospace, railroads, oil companies), companies often establish a pricing department to set or assist others in setting appropriate prices. This department reports to the marketing department, finance department, or top management. Others who influence pricing include sales managers, production managers, finance managers, and accountants. In B-to-B settings, research suggests that pricing performance improves when pricing authority is spread horizontally across the sales, marketing, and finance units and when there is a balance in centralizing and delegating that authority between individual salespeople and teams and central management.[11]

Many companies do not handle pricing well and fall back on "strategies" such as: "We calculate our costs and add our industry's traditional margins." Other common mistakes are not revising price often enough to capitalize on market changes; setting price independently of the rest of the marketing program rather than as an intrinsic element of market-positioning strategy; and not varying price enough for different product items, market segments, distribution channels, and purchase occasions.

For any organization, effectively designing and implementing pricing strategies requires a thorough understanding of consumer pricing psychology and a systematic approach to setting, adapting, and changing prices.

CONSUMER PSYCHOLOGY AND PRICING

Many economists traditionally assumed that consumers were "price takers" who accepted prices at face value or as a given. Marketers, however, recognize that consumers often actively process price information, interpreting it from the context of prior purchasing experience, formal communications (advertising, sales calls, and brochures), informal communications (friends, colleagues, or family members), point-of-purchase or online resources, and other factors.[12]

Purchase decisions are based on how consumers perceive prices and what they consider the current actual price to be—*not* on the marketer's stated price. Customers may have a lower price threshold, below which prices signal inferior or unacceptable quality, and an upper price threshold, above which prices are prohibitive and the product appears not worth the money. Different people interpret prices in different ways. Consider the consumer psychology involved in buying a simple pair of jeans and a T-shirt.[13]

JEANS AND A T-SHIRT Why does a black T-shirt for women that looks pretty ordinary cost $275 from Armani but only $14.90 from the Gap and $7.90 from Swedish discount clothing chain H&M? Customers who purchase the Armani T-shirt are paying for a more stylishly cut T-shirt made of 70 percent nylon, 25 percent polyester, and 5 percent elastane with a "Made in Italy" label from a luxury brand known for suits, handbags, and evening gowns that sell for thousands of dollars. The Gap and H&M shirts are made mainly of cotton. For pants to go with that T-shirt, choices abound. Gap sells its "Original Khakis" for $44.50, though Abercrombie & Fitch's classic button-fly chinos cost $70. But that's a comparative bargain compared to Michael Bastian's plain khakis for $480 or Giorgio Armani's for $595. High-priced designer jeans may use expensive fabrics such as cotton gabardine and require hours of meticulous hand-stitching to create a distinctive design, but equally important are an image and a sense of exclusivity.

Understanding how consumers arrive at their perceptions of prices is an important marketing priority. Here we consider three key topics—reference prices, price–quality inferences, and price endings.

REFERENCE PRICES Although consumers may have fairly good knowledge of price ranges, surprisingly few can accurately recall specific prices.[14] When examining products, however, they often employ **reference prices,** comparing an observed price to an internal reference price they remember or an external frame of reference such as a posted "regular retail price."[15]

All types of reference prices are possible (see Table 16.1), and sellers often attempt to manipulate them. For example, a seller can situate its product among expensive competitors to imply that it belongs in the same class. Department stores will display women's apparel in separate departments differentiated by price; dresses in the more expensive department are assumed to be of better quality.[16] Marketers also encourage reference-price thinking by stating a high manufacturer's suggested price, indicating that the price was much higher originally, or by pointing to a competitor's high price.[17]

When consumers evoke one or more of these frames of reference, their perceived price can vary from the stated price.[18] Research has found that unpleasant surprises—when perceived price is lower than the stated price—can have a greater impact on purchase likelihood than pleasant surprises.[19] Consumer expectations can also play a

Source: ©Peshkov Daniil/Shutterstock

For even something as simple as a black t-shirt and a pair of jeans or pants, consumers may choose to pay as little as $50 or hundreds of dollars instead.

TABLE 16.1 Possible Consumer Reference Prices

- "Fair Price" (what consumers feel the product should cost)
- Typical Price
- Last Price Paid
- Upper-Bound Price (reservation price or the maximum most consumers would pay)
- Lower-Bound Price (lower threshold price or the minimum most consumers would pay)
- Historical Competitor Prices
- Expected Future Price
- Usual Discounted Price

Source: Adapted from Russell S. Winer, *Pricing*, MSI Relevant Knowledge Series (Cambridge, MA: Marketing Science Institute, 2006).

key role in price response. On Internet auction sites such as eBay, when consumers know similar goods will be available in future auctions, they will bid less in the current auction.[20]

Clever marketers try to frame the price to signal the best value possible. For example, a relatively expensive item can look less expensive if the price is broken into smaller units, such as a $500 annual membership for "under $50 a month," even if the totals are the same.[21]

PRICE-QUALITY INFERENCES Many consumers use price as an indicator of quality. Image pricing is especially effective with ego-sensitive products such as perfumes, expensive cars, and designer clothing. A $100 bottle of perfume might contain $10 worth of scent, but gift givers pay $100 to communicate their high regard for the receiver.

Price and quality perceptions of cars interact. Higher-priced cars are perceived to possess high quality. Higher-quality cars are likewise perceived to be higher priced than they actually are. When information about true quality is available, price becomes a less significant indicator of quality. When this information is not available, price acts as a signal of quality.

Some brands adopt exclusivity and scarcity to signify uniqueness and justify premium pricing. Luxury-goods makers of watches, jewelry, perfume, and other products often emphasize exclusivity in their communication messages and channel strategies. For luxury-goods customers who desire uniqueness, demand may actually increase price because they then believe fewer other customers can afford the product.[22]

To maintain its air of exclusivity, Ferrari deliberately curtailed sales of its iconic, $200,000-or-more Italian sports car to below 7,000 despite growing demand in China, the Middle East, and the United States. But even exclusivity and status can vary by customer. Brahma beer is a no-frills light brew in its home market of Brazil but has thrived in Europe, where it is seen as "Brazil in a bottle." Pabst Blue Ribbon is a retro favorite among U.S. college students, but its sales have exploded in China where an upgraded bottle and claims of being "matured in a precious wooden cask like a Scotch whiskey" allow it to command a $44 price tag.[23]

PRICE ENDINGS Many sellers believe prices should end in an odd number. Customers perceive an item priced at $299 to be in the $200 rather than the $300 range; they tend to process prices "left to right" rather than by rounding.[24] Price encoding in this fashion is important if there is a mental price break at the higher, rounded price.

Another explanation for the popularity of "9" endings is that they suggest a discount or bargain, so if a company wants a high-price image, it should probably avoid the odd-ending tactic.[25] One study showed that demand actually increased one-third when the price of a dress *rose* from $34 to $39 but was unchanged when it rose from $34 to $44.[26]

Prices that end with 0 and 5 are also popular and are thought to be easier for consumers to process and retrieve from memory. "Sale" signs next to prices spur demand, but only if not overused: Total category sales are highest when some, but not all, items in a category have sale signs; past a certain point, sale signs may cause total category sales to fall.[27]

Pricing cues such as sale signs and prices that end in 9 are more influential when consumers' price knowledge is poor, when they purchase the item infrequently or are new to the category, and when product designs vary over time, prices vary seasonally, or quality or sizes vary across stores.[28] They are less effective the more they are used. Limited availability (for example, "three days only") also can spur sales among consumers actively shopping for a product.[29]

Source: © Ian Shaw/Alamy

Despite booming demand, Ferrari limits production and the number of sports cars that it sells to maintain the brand's exclusivity.

Setting the Price

A firm must set a price for the first time when it develops a new product, when it introduces its regular product into a new distribution channel or geographical area, and when it enters bids on new contract work. The firm must decide where to position its product on quality and price.

Most markets have three to five price points or tiers. Marriott Hotels is good at developing different brands or variations of brands for different price points: Marriott Vacation Club—Vacation Villas (highest price), Marriott Marquis (high price), Marriott (high-medium price), Renaissance (medium-high price), Courtyard (medium price), TownePlace Suites (medium-low price), and Fairfield Inn (low price). Firms devise their branding strategies to help convey the price-quality tiers of their products or services to consumers.[30]

Having a range of price points allows a firm to cover more of the market and to give any one consumer more choices. "Marketing Insight: Trading Up, Down, and Over" describes how consumers have been shifting their spending in recent years.

The firm must consider many factors in setting its pricing policy.[31] Table 16.2 summarizes the six steps in the process.

STEP 1: SELECTING THE PRICING OBJECTIVE

The company first decides where it wants to position its market offering. The clearer a firm's objectives, the easier it is to set price. Five major objectives are: survival, maximum current profit, maximum market share, maximum market skimming, and product-quality leadership.

TABLE 16.2 Steps in Setting a Pricing Policy

1. Selecting the Pricing Objective
2. Determining Demand
3. Estimating Costs
4. Analyzing Competitors' Costs, Prices, and Offers
5. Selecting a Pricing Method
6. Selecting the Final Price

marketing insight

Trading Up, Down, And Over

Michael Silverstein and Neil Fiske, the authors of *Trading Up*, have observed a number of middle-market consumers periodically "trading up" to what they call "New Luxury" products and services "that possess higher levels of quality, taste, and aspiration than other goods in the category but are not so expensive as to be out of reach." The authors identify three main types of New Luxury products:

- *Accessible super-premium products*, such as Victoria's Secret underwear and Kettle gourmet potato chips, carry a significant premium over middle-market brands, yet consumers can readily trade up to them because they are relatively low-ticket items in affordable categories.
- *Old Luxury brand extensions* extend historically high-priced brands down-market while retaining their cachet, such as the Mercedes-Benz C-class and the American Express Blue card.
- *Masstige goods*, such as Kiehl's skin care and Kendall-Jackson wines, are priced between average middle-market brands and super-premium Old Luxury brands. They are "always based on emotions, and consumers have a much stronger emotional engagement with them than with other goods."

To trade up to brands that offer these emotional benefits, consumers often "trade down" by shopping at discounters such as Walmart and Costco for staple items or goods that confer no emotional benefit but still deliver quality and functionality. As one consumer explained in rationalizing why her kitchen boasted a Sub-Zero refrigerator, a state-of-the-art Fisher & Paykel dishwasher, and a $900 warming drawer but a giant 12-pack of Bounty paper towels from a warehouse discounter: "When it comes to this house, I didn't give in on anything. But when it comes to food shopping or cleaning products, if it's not on sale, I won't buy it."

The recent economic downturn increased the prevalence of trading down, as many found themselves unable to sustain their lifestyles. Consumers began to buy more from need than desire and to trade down more frequently in price. They shunned conspicuous consumption, and sales of some luxury goods suffered. Even purchases that had never been challenged before were scrutinized. Almost 1 million U.S. patients became "medical tourists" in 2010 and traveled overseas for medical procedures at lower costs, sometimes at the urging of U.S. health insurance companies.

As the economy improved and consumers tired of putting off discretionary purchases, retail sales picked up, benefiting luxury products in the process. Trading up and down has persisted, however, along with "trading over" or switching spending from one category to another, buying a new home theater system, say, instead of a new car. Often this meant setting priorities and making a decision not to buy in some categories in order to buy in others.

Sources: Cotten Timberlake, "U.S. 2 Percenters Trade Down with Post-Recession Angst," www.bloomberg.com, May 15, 2013; Anna-Louise Jackson and Anthony Feld, "Frugality Fatigue Spurs Americans to Trade Up," www.bloomberg.com, April 13, 2012; Walker Smith, "Consumer Behavior: From Trading Up to Trading Off," *Branding Strategy Insider,* January 26, 2012; Sbriya Rice, "'I Can't Afford Surgery in the U.S.,' Says Bargain Shopper," www.cnn.com, April 26, 2010; Bruce Horovitz, "Sale, Sale, Sale: Today Everyone Wants a Deal," *USA Today*, April 21, 2010, pp. 1A–2A; Michael J. Silverstein, *Treasure Hunt: Inside the Mind of the New Consumer* (New York: Portfolio, 2006); Michael J. Silverstein and Neil Fiske, *Trading Up: The New American Luxury* (New York: Portfolio, 2003).

Source: Digital Vision/Getty Images

Some consumers are trading up to buy expensive luxury products like Sub-Zero refrigerators, but also trading down to buy basic staples and more functional products.

SURVIVAL Companies pursue *survival* as their major objective if they are plagued with overcapacity, intense competition, or changing consumer wants. As long as prices cover variable costs and some fixed costs, the company stays in business. Survival is a short-run objective; in the long run, the firm must learn how to add value or face extinction.

MAXIMUM CURRENT PROFIT Many companies try to set a price that will *maximize current profits.* They estimate the demand and costs associated with alternative prices and choose the price that produces maximum current profit, cash flow, or rate of return on investment. This strategy assumes the firm knows its demand and cost functions; in reality, these are difficult to estimate. In emphasizing current performance, the company may sacrifice long-run performance by ignoring the effects of other marketing variables, competitors' reactions, and legal restraints on price.

MAXIMUM MARKET SHARE Some companies want to *maximize their market share.* They believe a higher sales volume will lead to lower unit costs and higher long-run profit, so they set the lowest price, assuming the market is price sensitive. Texas Instruments famously practiced this **market-penetration pricing** for years. The company would build a large plant, set its price as low as possible, win a large market share, experience falling costs, and cut its price further as costs fell.

The following conditions favor adopting a market-penetration pricing strategy: (1) The market is highly price sensitive and a low price stimulates market growth; (2) production and distribution costs fall with accumulated production experience; and (3) a low price discourages actual and potential competition.

MAXIMUM MARKET SKIMMING Companies unveiling a new technology favor setting high prices to *maximize market skimming.* Sony has been a frequent practitioner of **market-skimming pricing,** in which prices start high and slowly drop over time. When Sony introduced the world's first high-definition television (HDTV) to the Japanese market in 1990, it was priced at $43,000. So that Sony could "skim" the maximum amount of revenue from the various segments of the market, the price dropped steadily through the years—a 28-inch Sony HDTV cost just over $6,000 in 1993, but a 42-inch Sony LED HDTV cost only $579 20 years later in 2013.

This strategy can be fatal, however, if a worthy competitor decides to price low. When Philips, the Dutch electronics manufacturer, priced its videodisc players to make a profit on each, Japanese competitors priced low and rapidly built their market share, which in turn pushed down their costs substantially.

Moreover, consumers who buy early at the highest prices may be dissatisfied if they compare themselves with those who buy later at a lower price. When Apple dropped the early iPhone's price from $600 to $400 only two months after its introduction, public outcry caused the firm to give initial buyers a $100 credit toward future Apple purchases.[32]

Market skimming makes sense under the following conditions: (1) A sufficient number of buyers have a high current demand; (2) the unit costs of producing a small volume are high enough to cancel the advantage of charging what the traffic will bear; (3) the high initial price does not attract more competitors to the market; and (4) the high price communicates the image of a superior product.

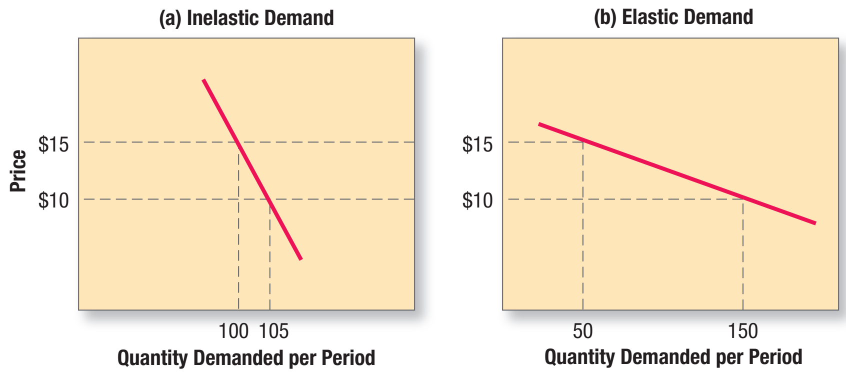
PRODUCT-QUALITY LEADERSHIP A company might aim to be the *product-quality leader* in the market.[33] Many brands strive to be "affordable luxuries"—products or services characterized by high levels of perceived quality, taste, and status with a price just high enough not to be out of consumers' reach. Brands such as Starbucks, Aveda, Victoria's Secret, BMW, and Viking have positioned themselves as quality leaders in their categories, combining quality, luxury, and premium prices with an intensely loyal customer base. Grey Goose and Absolut carved out a superpremium niche in the essentially odorless, colorless, and tasteless vodka category through clever on-premise and off-premise marketing that made the brands seem hip and exclusive.

OTHER OBJECTIVES Nonprofit and public organizations may have other pricing objectives. A university aims for *partial cost recovery,* knowing that it must rely on private gifts and public grants to cover its remaining costs. A nonprofit hospital may aim for full cost recovery in its pricing. A nonprofit theater company may price its productions to fill the maximum number of seats. A social service agency may set a service price geared to client income.

Whatever the specific objective, businesses that use price as a strategic tool will profit more than those that simply let costs or the market determine their pricing. For art museums, which earn an average of only 5 percent of their revenues from admission charges, pricing can send a message that affects their public image and the amount of donations and sponsorships they receive.

| Fig. 16.1 |

Inelastic and Elastic Demand



STEP 2: DETERMINING DEMAND

Each price will lead to a different level of demand and have a different impact on a company's marketing objectives. The normally inverse relationship between price and demand is captured in a demand curve (see Figure 16.1): The higher the price, the lower the demand. For prestige goods, the demand curve sometimes slopes upward. Some consumers take the higher price to signify a better product. However, if the price is too high, demand may fall.

PRICE SENSITIVITY The demand curve shows the market's probable purchase quantity at alternative prices, summing the reactions of many individuals with different price sensitivities. The first step in estimating demand is to understand what affects price sensitivity. Generally speaking, customers are less price sensitive to low-cost items or items they buy infrequently. They are also less price sensitive when (1) there are few or no substitutes or competitors; (2) they do not readily notice the higher price; (3) they are slow to change their buying habits; (4) they think the higher prices are justified; and (5) price is only a small part of the total cost of obtaining, operating, and servicing the product over its lifetime.

A seller can successfully charge a higher price than competitors if it can convince customers that it offers the lowest *total cost of ownership* (TCO). Marketers often treat the service elements in a product offering as sales incentives rather than as value-enhancing augmentations for which they can charge. In fact, pricing expert Tom Nagle believes the most common mistake manufacturers have made in recent years is to offer all sorts of services to differentiate their products without charging for them.[34]

Of course, companies prefer customers who are less price-sensitive. Table 16.3 lists some characteristics associated with decreased price sensitivity. On the other hand, the Internet has the potential to *increase* price sensitivity. In some established, fairly big-ticket categories, such as auto retailing and term insurance, consumers pay lower prices as a result of the Internet. Car buyers use the Internet to gather information and borrow the negotiating

TABLE 16.3 Factors That Reduce Price Sensitivity

- The product is more distinctive.
- Buyers are less aware of substitutes.
- Buyers cannot easily compare the quality of substitutes.
- The expenditure is a smaller part of the buyer's total income.
- The expenditure is small compared to the total cost of the end product.
- Part of the cost is borne by another party.
- The product is used in conjunction with assets previously bought.
- The product is assumed to have more quality, prestige, or exclusiveness.
- Buyers cannot store the product.

Source: Based on information from Thomas T. Nagle, John E. Hogan, and Joseph Zale, *The Strategy and Tactics of Pricing,* 5th ed. (Upper Saddle River, NJ: Pearson, 2011). Printed and electronically reproduced by permission of Pearson Education, Inc., Upper Saddle River, New Jersey.

clout of an online buying service.[35] But customers may have to visit multiple sites to realize possible savings, and they don't always do so. Targeting only price-sensitive consumers may in fact be "leaving money on the table."

ESTIMATING DEMAND CURVES Most companies attempt to measure their demand curves using several different methods.

- ***Surveys*** can explore how many units consumers would buy at different proposed prices. Although consumers might understate their purchase intentions at higher prices to discourage the company from pricing high, they also tend to actually exaggerate their willingness to pay for new products or services.[36]
- ***Price experiments*** can vary the prices of different products in a store or of the same product in similar territories to see how the change affects sales. Online, an e-commerce site could test the impact of a 5 percent price increase by quoting a higher price to every 40th visitor to compare the purchase response. However, it must do this carefully and not alienate customers or be seen as reducing competition in any way (thus violating the Sherman Antitrust Act).[37]
- ***Statistical analysis*** of past prices, quantities sold, and other factors can reveal their relationships. The data can be longitudinal (over time) or cross-sectional (from different locations at the same time). Building the appropriate model and fitting the data with the proper statistical techniques call for considerable skill, but sophisticated price optimization software and advances in database management have improved marketers' abilities to optimize pricing.

One large retail chain was selling a line of "good-better-best" power drills at $90, $120, and $130, respectively. Sales of the least and most expensive drills were fine, but sales of the midpriced drill lagged. Based on a price optimization analysis, the retailer dropped the price of the midpriced drill to $110. Sales of the low-priced drill dropped 4 percent because it seemed less of a bargain, but sales of the midpriced drill increased 11 percent. Profits rose as a result.[38]

In measuring the price-demand relationship, the market researcher must control for various factors that will influence demand.[39] The competitor's response will make a difference. Also, if the company changes other aspects of the marketing program besides price, the effect of the price change itself will be hard to isolate.

PRICE ELASTICITY OF DEMAND Marketers need to know how responsive, or elastic, demand is to a change in price. Consider the two demand curves in Figure 16.1. In demand curve (a), a price increase from $10 to $15 leads to a relatively small decline in demand from 105 to 100. In demand curve (b), the same price increase leads to a substantial drop in demand from 150 to 50. If demand hardly changes with a small change in price, we say it is *inelastic*. If demand changes considerably, it is *elastic*.

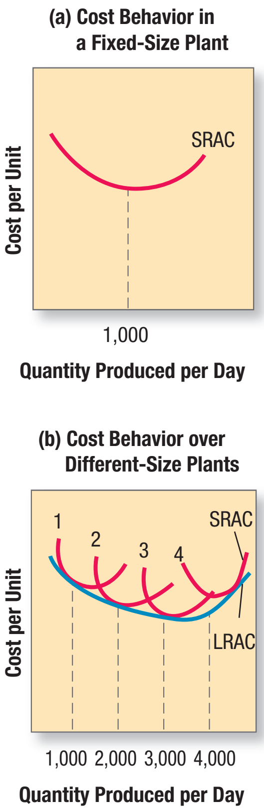
The higher the elasticity, the greater the volume growth resulting from a 1 percent price reduction. If demand is elastic, sellers will consider lowering the price to produce more total revenue. This makes sense as long as the costs of producing and selling more units do not increase disproportionately.

Price elasticity depends on the magnitude and direction of the contemplated price change. It may be negligible with a small price change and substantial with a large price change. It may differ for a price cut than for a price increase, and there may be a *price indifference band* within which price changes have little or no effect.

Finally, long-run price elasticity may differ from short-run elasticity. Buyers may continue to buy from a current supplier after a price increase but eventually switch suppliers. Here demand is more elastic in the long run than in the short run, or the reverse may happen: Buyers may drop a supplier after a price increase but return later. The distinction between short-run and long-run elasticity means that sellers will not know the total effect of a price change until time passes.

Research has shown that consumers tend to be more sensitive to prices during tough economic times, but that is not true across all categories.[40] One comprehensive review of a 40-year period of academic research on price elasticity yielded interesting findings:[41]

- The average price elasticity across all products, markets, and time periods studied was –2.62. In other words, a 1 percent decrease in prices led to a 2.62 percent increase in sales.
- Price elasticity magnitudes were higher for durable goods than for other goods and higher for products in the introduction/growth stages of the product life cycle than in the mature/decline stages.
- Inflation led to substantially higher price elasticities, especially in the short run.
- Promotional price elasticities were higher than actual price elasticities in the short run (though the reverse was true in the long run).
- Price elasticities were higher at the individual item or SKU level than at the overall brand level.



| Fig. 16.2 |

Cost per Unit at Different Levels of Production per Period

STEP 3: ESTIMATING COSTS

Demand sets a ceiling on the price the company can charge for its product. Costs set the floor. The company wants to charge a price that covers its cost of producing, distributing, and selling the product, including a fair return for its effort and risk. Yet when companies price products to cover their full costs, profitability isn't always the net result.

TYPES OF COSTS AND LEVELS OF PRODUCTION A company's costs take two forms, fixed and variable. **Fixed costs,** also known as **overhead,** are costs that do not vary with production level or sales revenue. A company must pay bills each month for rent, heat, interest, salaries, and so on, regardless of output.

Variable costs vary directly with the level of production. For example, each tablet computer produced by Samsung incurs the cost of plastic and glass, microprocessor chips and other electronics, and packaging. These costs tend to be constant per unit produced, but they're called *variable* because their total varies with the number of units produced.

Total costs consist of the sum of the fixed and variable costs for any given level of production. **Average cost** is the cost per unit at that level of production; it equals total costs divided by production. Management wants to charge a price that will at least cover the total production costs at a given level of production.

To price intelligently, management needs to know how its costs vary with different levels of production. Take the case in which a company such as Samsung has built a fixed-size plant to produce 1,000 tablet computers a day. The cost per unit is high if few units are produced per day. As production approaches 1,000 units per day, the average cost falls because the fixed costs are spread over more units. Short-run average cost *increases* after 1,000 units, however, because the plant becomes inefficient: Workers must line up for machines, getting in each other's way, and machines break down more often [see Figure 16.2(a)].

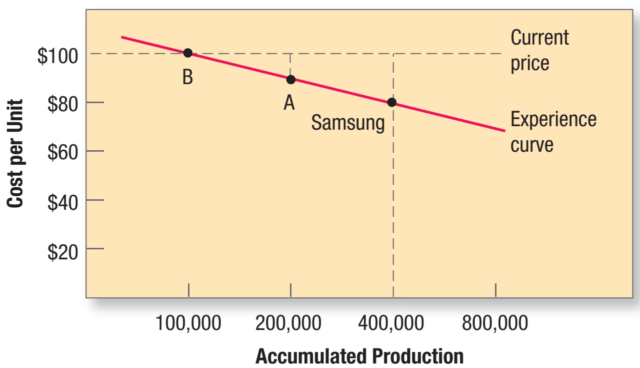
If Samsung believes it can sell 2,000 units per day, it should consider building a larger plant. The plant will use more efficient machinery and work arrangements, and the unit cost of producing 2,000 tablets per day will be lower than the unit cost of producing 1,000 per day. This is shown in the long-run average cost curve (LRAC) in Figure 16.2(b). In fact, a 3,000-capacity plant would be even more efficient according to Figure 16.2(b), but a 4,000-daily production plant would be less so because of increasing diseconomies of scale: There are too many workers to manage, and paperwork slows things down. Figure 16.2(b) indicates that a 3,000-daily production plant is the optimal size if demand is strong enough to support this level of production.

There are more costs than those associated with manufacturing. To estimate the real profitability of selling to different types of retailers or customers, the manufacturer needs to use activity-based cost (ABC) accounting instead of standard cost accounting, as described in Chapter 5.

ACCUMULATED PRODUCTION Suppose Samsung runs a plant that produces 3,000 tablet computers per day. As the company gains experience producing tablets, its methods improve. Workers learn shortcuts, materials flow more smoothly, and procurement costs fall. The result, as Figure 16.3 shows, is that average cost

| Fig. 16.3 |

Cost per Unit as a Function of Accumulated Production: The Experience Curve



falls with accumulated production experience. Thus the average cost of producing the first 100,000 tablets is $100 per tablet. When the company has produced the first 200,000 tablets, the average cost has fallen to $90. After its accumulated production experience doubles again to 400,000, the average cost is $80. This decline in the average cost with accumulated production experience is called the **experience curve** or **learning curve.**

Now suppose three firms compete in this particular tablet market, Samsung, A, and B. Samsung is the lowest-cost producer at $80, having produced 400,000 units in the past. If all three firms sell the tablet for $100, Samsung makes $20 profit per unit, A makes $10 per unit, and B breaks even. The smart move for Samsung would be to lower its price to $90. This will drive B out of the market, and even A may consider leaving. Samsung will pick up the business that would have gone to B (and possibly A). Furthermore, price-sensitive customers will enter the market at the lower price. As production increases beyond 400,000 units, Samsung's costs will drop still further and faster, more than restoring its profits, even at a price of $90.

Experience-curve pricing nevertheless carries major risks. Aggressive pricing might give the product a cheap image. It also assumes competitors are weak followers. The strategy leads the company to build more plants to meet demand, but a competitor may choose to innovate with a lower-cost technology. The market leader is now stuck with the old technology.

Most experience-curve pricing has focused on manufacturing costs, but all costs can be improved on, including marketing costs. If three firms are each investing a large sum of money in marketing, the firm that has used it longest might achieve the lowest costs. This firm can charge a little less for its product and still earn the same return, all other costs being equal.[42]

TARGET COSTING Costs change with production scale and experience. They can also change as a result of a concentrated effort by designers, engineers, and purchasing agents to reduce them through **target costing.** Market research establishes a new product's desired functions and the price at which it will sell, given its appeal and competitors' prices. This price less desired profit margin leaves the target cost the marketer must achieve.

The firm must examine each cost element—design, engineering, manufacturing, sales—and bring down costs so the final cost projections are in the target range. When ConAgra Foods decided to increase the list prices of its Banquet frozen dinners to cover higher commodity costs, the average retail price of the meals increased from $1 to $1.25. When sales dropped significantly, management vowed to return to a $1 price, which necessitated cutting $250 million in other costs through a variety of methods, such as centralizing purchasing and shipping, using less expensive ingredients, and designing smaller portions.[43]

Cost cutting cannot go so deep as to compromise the brand promise and value delivered. Despite the early success of the PT Cruiser, Chrysler chose to squeeze out more profit by avoiding certain redesigns and cutting costs with cheaper radios and inferior materials. Once a best-selling car, the PT Cruiser was eventually discontinued.[44] Apparel makers tweak clothing designs to cut costs but are careful to avoid overly shallow pants pockets, waistbands that can roll over, and buttons that crack.[45] "Marketing Memo: How to Cut Costs" describes how firms are successfully cutting costs to improve profitability.

Source: © Tom Hanslien Photography/Alamy

Overly aggressive cost-cutting actions resulted in declines in perceived quality for the PT Cruiser, helping to contribute to the brand's demise.

marketing memo How to Cut Costs

Prices inevitably have to reflect the cost structure of the products and services. Rising commodity costs and a highly competitive post-recession environment have put pressure on many firms to manage their costs carefully and decide what cost increases, if any, to pass along to consumers in the form of higher prices. When calf-skin prices surged due to a shortage, pressure was placed on those luxury goods makers that need fine leather. Similarly, when steel and other input prices soared by as much as 20 percent, Whirlpool and Electrolux raised their own prices 8 percent to 10 percent.

Companies can cut costs in many ways. For General Mills, it was as simple as reducing the number of varieties of Hamburger Helper from 75 to 45 and the number of pasta shapes from 30 to 10. Dropping multicolored Yoplait lids saved $2 million a year. Other firms are attempting to shrink their products and packages while holding price and hoping consumers don't notice or care. Canned vegetables dropped to 13 or 14 ounces from 16, boxes of baby wipes hold 72 instead of 80, and sugar is sold in 4-pound instead of 5-pound bags.

The cost savings from minor shrinkage can be significant. When the size of a Scott 1000 toilet paper sheet dropped from 4.5 by 3.7 inches to 4.1 by 3.7 inches, the height of a four-pack package decreased from 9.2 to 8 inches, resulting in a 12 percent to 17 percent increase in the amount of product Scott can fit in a truck and a drop of 345,000 gallons in the gasoline needed for shipping because of the resulting fewer trucks on the road.

Some marketers attempt to justify packaging changes on environmental grounds (smaller packages are "greener") or to address health concerns (smaller packages have "fewer calories"), though consumers may not be duped. Others add other benefits in the process ("even stronger" or "new look"). Some companies are applying what they learned from making affordable products with scarce resources in developing countries such as India to the task of cutting costs in developed markets. Cisco blends teams of U.S. software engineers with Indian supervisors.

Supermarket giant Aldi takes advantage of its global scope. It stocks only about 1,000 of the most popular everyday grocery and household items, compared with more than 20,000 at a traditional grocer such as Royal Ahold's Albert Heijn. Almost all the products carry Aldi's own exclusive label. Because it sells so few items, Aldi can exert strong control over quality and price and simplify shipping and handling, leading to high margins. With more than 8,200 stores worldwide currently, Aldi brings in almost $60 billion in annual sales.

Sources: Richard Alleyne, "Household Brands Slash Size of Goods in 'Hidden Price Hikes,'" *The Telegraph,* March 21, 2013; Andrew Roberts, "Getting a Handle on the Steep Price of Leather," *Bloomberg Businessweek*, September 19, 2011; Stephanie Clifford and Catherine Rampell, "Inflation Looms, but Is Stealthily Disguised in Packaging," *New York Times*, March 28, 2011; "Everyday Higher Prices," *The Economist*, February 26, 2011; Beth Kowitt, "When Less Is . . . Less," *Fortune*, November 15, 2010, p. 21; Reena Jane, "From India, the Latest Management Fad," *Bloomberg BusinessWeek*, December 14, 2009, p. 57; "German Discounter Aldi Aims to Profit from Belt-Tightening in US," www.dw-world.de, January 15, 2009; Mina Kimes, "Cereal Cost Cutters," *Fortune*, November 10, 2008, p. 24.

STEP 4: ANALYZING COMPETITORS' COSTS, PRICES, AND OFFERS

Within the range of possible prices identified by market demand and company costs, the firm must take competitors' costs, prices, and possible reactions into account. If the firm's offer contains features not offered by the nearest competitor, it should evaluate their worth to the customer and add that value to the competitor's price. If the competitor's offer contains some features not offered by the firm, the firm should subtract their value from its own price. Now the firm can decide whether it can charge more, the same, or less than the competitor.[46]

VALUE-PRICED COMPETITORS Companies offering the powerful combination of low price and high quality are capturing the hearts and wallets of consumers all over the world.[47] Value players, such as Aldi, E*TRADE Financial, JetBlue Airways, Southwest Airlines, Target, and Walmart, are transforming the way consumers of nearly every age and income level purchase groceries, apparel, airline tickets, financial services, and other goods and services.

Traditional players are right to feel threatened. Upstart firms often rely on serving one or a few consumer segments, providing better delivery or just one additional benefit, and matching low prices with highly efficient operations to keep costs down. They have changed consumer expectations about the trade-off between quality and price.

One school of thought is that companies should set up their own low-cost operations to compete with value-priced competitors only if: (1) their existing businesses will become more competitive as a result and (2) the new business will derive some advantages it would not have gained if independent.[48]

Source: Konstantin von Wedelstaedt

Creating a successful low cost marketing entry is not easy—United is one of many airlines who failed to do so.

Low-cost operations set up by HSBC, ING, Merrill Lynch, and Royal Bank of Scotland—First Direct, ING Direct, ML Direct, and Direct Line Insurance, respectively—succeed in part thanks to synergies between the old and new lines of business. Major airlines have also introduced their own low-cost carriers. But Continental's Lite, KLM's Buzz, SAS's Snowflake, and United's Shuttle have all been unsuccessful, due in part to a lack of synergies. The low-cost operation must be designed and launched as a moneymaker in its own right, not just as a defensive play.

STEP 5: SELECTING A PRICING METHOD

Given the customers' demand schedule, the cost function, and competitors' prices, the company is now ready to select a price. Figure 16.4 summarizes the three major considerations in price setting: Costs set a floor to the price. Competitors' prices and the price of substitutes provide an orienting point. Customers' assessment of unique features establishes the price ceiling.

Companies select a pricing method that includes one or more of these three considerations. We will examine seven price-setting methods: markup pricing, target-return pricing, perceived-value pricing, value pricing, EDLP, going-rate pricing, and auction-type pricing.

MARKUP PRICING The most elementary pricing method is to add a standard **markup** to the product's cost. Construction companies submit job bids by estimating the total project cost and adding a standard markup for profit. Lawyers and accountants typically price by adding a standard markup on their time and costs.

Variable cost per unit	\$10
Fixed costs	\$300,000
Expected unit sales	50,000

Suppose a toaster manufacturer has the following costs and sales expectations:
The manufacturer's unit cost is given by:

$$\text{Unit cost} = \text{variable cost} + \frac{\text{fixed cost}}{\text{unit sales}} = \$10 + \frac{\$300{,}00}{50{,}000} = \$16$$

Now assume the manufacturer wants to earn a 20 percent markup on sales. The manufacturer's markup price is given by:

$$\text{Markup price} = \frac{\text{unit cost}}{(1 - \text{desired return on sales})} = \frac{\$16}{1 - 0.2} = \$20$$

The manufacturer will charge dealers \$20 per toaster and make a profit of \$4 per unit. If dealers want to earn 50 percent on their selling price, they will mark up the toaster 100 percent to \$40. Markups are generally higher on seasonal items (to cover the risk of not selling), specialty items, slower-moving items, items with high storage and handling costs, and demand-inelastic items, such as prescription drugs.

| Fig. 16.4 |

The Three Cs Model for Price Setting

Does the use of standard markups make logical sense? Generally, no. Any pricing method that ignores current demand, perceived value, and competition is not likely to lead to the optimal price. Markup pricing works only if the marked-up price actually brings in the expected level of sales. Consider what happened at Parker Hannifin.[49]

PARKER HANNIFIN When Don Washkewicz took over as CEO of Parker Hannifin, maker of 800,000 industrial parts for the aerospace, transportation, and manufacturing industries, pricing was done one way: Calculate how much it costs to make and deliver a product and then add a flat percentage (usually 35 percent). Even though this method was historically well received, Washkewicz set out to get the company to think more like a retailer and charge what customers were willing to pay. Encountering initial resistance from some of the company's 115 different divisions, Washkewicz assembled a list of the 50 most commonly given reasons why the new pricing scheme would fail and announced he would listen only to arguments that were not on the list. The new pricing scheme put Parker Hannifin's products into one of four categories depending on how much competition existed. About one-third fell into niches where Parker offered unique value, there was little competition, and higher prices were appropriate. Each division now has a pricing guru or specialist who assists in strategic pricing. The division making industrial fittings reviewed 2,000 different items and concluded that 28 percent were priced too low, raising prices anywhere from 3 percent to 60 percent. As a result of the higher margins from this new strategic pricing approach, Parker estimates it has added $1 billion in profit during the fiscal years 2005–2011.

Still, markup pricing remains popular. First, sellers can determine costs much more easily than they can estimate demand. By tying the price to cost, sellers simplify the pricing task. Second, when all firms in the industry use this pricing method, prices tend to be similar and price competition is minimized. Third, many people feel cost-plus pricing is fairer to both buyers and sellers. Sellers do not take advantage of buyers when the latter's demand becomes acute, and sellers earn a fair return on investment.

TARGET-RETURN PRICING In **target-return pricing,** the firm determines the price that yields its target rate of return on investment. Public utilities, which need to make a fair return on investment, often use this method.

Suppose the toaster manufacturer has invested $1 million in the business and wants to set a price to earn a 20 percent ROI, specifically $200,000. The target-return price is given by the following formula:

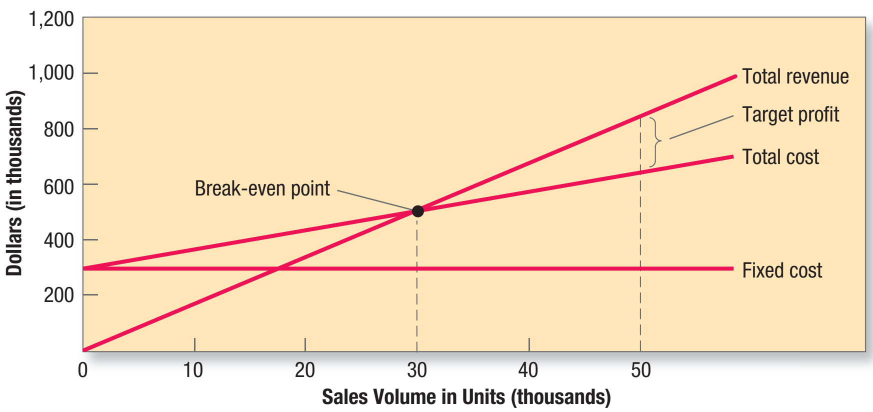
$$\text{Target-return price} = \text{unit cost} + \frac{\text{desired return} \times \text{invested capital}}{\text{unit sales}}$$

$$= \$16 + \frac{.20 \times \$1{,}000{,}000}{50{,}000} = \$20$$

The manufacturer will realize this 20 percent ROI provided its costs and estimated sales turn out to be accurate. But what if sales don't reach 50,000 units? The manufacturer can prepare a break-even chart to learn what would happen at other sales levels (see Figure 16.5). Fixed costs are $300,000 regardless of sales volume. Variable costs, not shown in the figure, rise with volume. Total costs equal the sum of fixed and variable costs. The total revenue curve starts at zero and rises with each unit sold.

| Fig. 16.5 |

Break-Even Chart for Determining Target-Return Price and Break-Even Volume



The total revenue and total cost curves cross at 30,000 units. This is the break-even volume. We can verify it by the following formula:

$$\text{Break-even volume} = \frac{\text{fixed cost}}{(\text{price} - \text{variable cost})} = \frac{\$300{,}000}{\$20 - \$10} = 30{,}000$$

The manufacturer, of course, is hoping the market will buy 50,000 units at $20, in which case it earns $200,000 on its $1 million investment, but much depends on price elasticity and competitors' prices. Unfortunately, target-return pricing tends to ignore these considerations. The manufacturer needs to consider different prices and estimate their probable impacts on sales volume and profits.

The manufacturer should also search for ways to lower its fixed or variable costs because lower costs will decrease its required break-even volume. Taiwan's Acer gained share in the tablet market through rock-bottom prices made possible by its bare-bones cost strategy. Acer sells only via retailers and other outlets and outsources all manufacturing and assembly, reducing its overhead to 8 percent of sales versus 14 percent at Dell and 15 percent at HP.[50]

PERCEIVED-VALUE PRICING An increasing number of companies now base their price on the customer's **perceived value.** Perceived value is made up of a host of inputs, such as the buyer's image of the product performance, the channel deliverables, the warranty quality, customer support, and softer attributes such as the supplier's reputation, trustworthiness, and esteem. Companies must deliver the value promised by their value proposition, and the customer must perceive this value. Firms use the other marketing program elements, such as advertising, sales force, and the Internet, to communicate and enhance perceived value in buyers' minds.

Caterpillar uses perceived value to set prices on its construction equipment. It might price its tractor at $100,000, though a similar competitor's tractor might be priced at $90,000. When a prospective customer asks a Caterpillar dealer why he should pay $10,000 more for the Caterpillar tractor, the dealer answers:

$90,000	is the tractor's price if it is only equivalent to the competitor's tractor
$7,000	is the price premium for Caterpillar's superior durability
$6,000	is the price premium for Caterpillar's superior reliability
$5,000	is the price premium for Caterpillar's superior service
$2,000	is the price premium for Caterpillar's longer warranty on parts
$110,000	is the normal price to cover Caterpillar's superior value
– $10,000	discount
$100,000	final price

The Caterpillar dealer is able to show that although the customer is asked to pay a $10,000 premium, he is actually getting $20,000 extra value! The customer chooses the Caterpillar tractor because he is convinced its lifetime operating costs will be lower.

Ensuring that customers appreciate the total value of a product or service offering is crucial. Consider the experience of PACCAR.[51]

PACCAR PACCAR Inc., maker of Kenworth and Peterbilt trucks, is able to command a 10 percent premium through its relentless focus on all aspects of the customer experience to maximize total value. Contract Freighters trucking company, a loyal PACCAR customer for 20 years, justified ordering another 700 new trucks, despite their higher price, because of their higher perceived quality—greater reliability, higher trade-in value, even the superior plush interiors that might attract better drivers. PACCAR bucks the commoditization trend by custom-building its trucks to individual specifications. The company invests heavily in technology and can prototype new parts in hours rather than days and weeks, allowing more frequent upgrades. It was the first to roll out hybrid vehicles in the fuel-intensive commercial trucking industry (and sell at a premium). A $1 billion, multiyear program to design and develop the highest-quality, most efficient trucks in the industry resulted in successful launches of the Kenworth T680, the Peterbilt Model 579, and the DAF XF Euro 6 lines of trucks. The company generated $1.17 billion of net income on $17.21 billion of revenue in 2013—its 74th consecutive year of profitability—bolstered by an expanded geographic footprint and a thriving business in aftermarket parts.

By maximizing total value and all aspects of the customer experience, PACCAR is able to command a significant price premium for its trucks.

Even when a company claims its offering delivers more total value, not all customers will respond positively. Some care only about price. But there is also typically a segment that cares about quality. Umbrellas are essential during the three months of near-nonstop monsoon rain in Indian cities such as Mumbai, and the makers of Stag umbrellas there found themselves in a bitter price war with cheaper Chinese competitors. After realizing they were sacrificing quality too much, Stag's managers decided to increase quality with new colors, designs, and features such as built-in high-power flashlights and prerecorded music. Despite higher prices, sales of the improved Stag umbrellas actually increased.[52]

The key to perceived-value pricing is to deliver more unique value than competitors and to demonstrate this to prospective buyers. Thus, a company needs to fully understand the customer's decision-making process. For example, Goodyear found it hard to command a price premium for its more expensive new tires despite innovative new features to extend tread life. Because consumers had no reference price to compare tires, they tended to gravitate toward the lowest-priced offerings. Goodyear's solution was to price its models on expected miles of wear rather than their technical product features, making product comparisons easier.[53]

The company can try to determine the value of its offering in several ways: managerial judgments within the company, value of similar products, focus groups, surveys, experimentation, analysis of historical data, and conjoint analysis.

VALUE PRICING Companies that adopt value pricing win loyal customers by charging a fairly low price for a high-quality offering. **Value pricing** is thus not a matter of simply setting lower prices; it is a matter of reengineering the company's operations to become a low-cost producer without sacrificing quality to attract a large number of value-conscious customers.

Among the best practitioners of value pricing are IKEA, Target, and Southwest Airlines. In the early 1990s, Procter & Gamble created quite a stir when it reduced prices on supermarket staples such as Pampers and Luvs diapers, liquid Tide detergent, and Folgers coffee. To value-price these products, P&G redesigned the way it developed, manufactured, distributed, priced, marketed, and sold them to deliver better value at every point in the supply chain.[54] Its acquisition of Gillette in 2005 for $57 billion (a record five times its sales) brought another brand into its fold that has also traditionally adopted a value pricing strategy.

Value pricing can change the way a company sets prices too. One company that sold and maintained switch boxes in a variety of sizes for telephone lines found that the probability of failure—and thus the level of maintenance costs—was proportional to the number of switches customers had in their boxes rather than to the dollar value of the installed boxes. The number of switches per box could vary, though. Therefore, rather than charging customers based on the total spent on installation, the company began charging based on the total number of switches that needed servicing.[55]

EDLP A retailer using **everyday low pricing (EDLP)** charges a constant low price with little or no price promotion or special sales. Constant prices eliminate week-to-week price uncertainty and the high-low pricing of promotion-oriented competitors. In **high-low pricing,** the retailer charges higher prices on an everyday basis but runs frequent promotions with prices temporarily lower than the EDLP level.[56]

These two strategies have been shown to affect consumer price judgments—deep discounts (EDLP) can lead customers to perceive lower prices over time than frequent, shallow discounts (high-low), even if the price actually averages to the same level.[57] In recent years, high-low pricing has given way to EDLP at such widely different venues as Toyota Scion car dealers and upscale department stores such as Nordstrom, but the king of EDLP is surely Walmart, which practically defined the term. Except for a few sale items every month, Walmart promises everyday low prices on major brands.

The most important reason retailers adopt EDLP is that constant sales and promotions are costly and have eroded consumer confidence in everyday shelf prices. Some consumers also have less time and patience for past traditions like watching for supermarket specials and clipping coupons.

Yet promotions and sales do create excitement and draw shoppers, so EDLP does not guarantee success and is not for everyone.[58] However, given Daiso's success, everyday low prices do work when done right.[59]

DAISO Daiso is the famous one-price Japanese livingware store that recently opened in Kuala Lumpur, Malaysia. Primarily based on the extreme EDLP strategy and modeled after Japanese 100 Yen shops, the chain has 2,500 stores in Japan, 975 in South Korea, and 522 stores overseas, including the United States, Singapore, and Australia. Daiso is the ideal place for an enjoyable, fast, cheap, and easy shopping experience where everything sells at the same low fixed price; for example, in the Kuala Lumpur store, each item is 5 Malaysian ringgits, or approximately $1.49. Each store stocks a range of kitchenware, tableware, bathroom accessories, house ware, storage units, and skin care products from Japan. Daiso stores in Kuala Lumpur also introduced imported Japanese products that were not available there before, such as sweet and savory Japanese crackers, confectioneries, and *furikake* or Japanese savory rice-sprinkles. In fact, Daiso stores sell more than 90,000 products and introduce 1,000 new ones every month.

GOING-RATE PRICING In **going-rate pricing,** the firm bases its price largely on competitors' prices. In oligopolistic industries that sell a commodity such as steel, paper, or fertilizer, all firms normally charge the same price. Smaller firms "follow the leader," changing their prices when the market leader's prices change rather than when their own demand or costs change. Some may charge a small premium or discount, but they preserve the difference. Thus, minor gasoline retailers usually charge a few cents less per gallon than the major oil companies, without letting the difference increase or decrease.

Going-rate pricing is quite popular. Where costs are difficult to measure or competitive response is uncertain, firms feel it is a good solution because they believe it reflects the industry's collective wisdom.

Source: hxdyl/Shutterstock

Daiso is the perfect example of everyday low pricing done right.

AUCTION-TYPE PRICING Auction-type pricing is growing more popular, especially with scores of electronic marketplaces selling everything from pigs to used cars as firms dispose of excess inventories or used goods. These are the three major types of auctions and their separate pricing procedures:[60]

- ***English auctions (ascending bids)*** have one seller and many buyers. On sites such as eBay and Amazon.com, the seller puts up an item and bidders raise their offer prices until the top price is reached. The highest bidder gets the item. English auctions are used today for selling antiques, cattle, real estate, and used equipment and vehicles. Kodak and Nortel sold hundreds of patents for wireless and digital imaging via auctions, raising hundreds of millions of dollars.[61]
- ***Dutch auctions (descending bids)*** feature one seller and many buyers or one buyer and many sellers. In the first kind, an auctioneer announces a high price for a product and then slowly decreases the price until a bidder accepts. In the other, the buyer announces something he or she wants to buy, and potential sellers compete to offer the lowest price. Ariba—acquired by SAP in 2012—runs business-to-business auctions to help companies acquire low-priced items as varied as steel, fats, oils, name badges, pickles, plastic bottles, solvents, cardboard, and even legal and janitorial work.[62]
- ***Sealed-bid auctions*** let would-be suppliers submit only one bid; they cannot know the other bids. The U.S. and other governments often use this method to procure supplies or to grant licenses. A supplier will not bid below its cost but cannot bid too high for fear of losing the job. The net effect of these two pulls is the bid's *expected profit*.[63]

To buy equipment for its drug researchers, Pfizer uses reverse auctions online in which suppliers submit the lowest price they are willing to be paid. If the increased savings a buying firm obtains in an online auction translate into decreased margins for an incumbent supplier, however, the supplier may feel the firm is opportunistically squeezing out price concessions. Online auctions with a large number of bidders, higher economic stakes, and less visibility in the specific prices involved result in greater overall satisfaction for both parties, more positive future expectations, and fewer perceptions of opportunism.[64]

STEP 6: SELECTING THE FINAL PRICE

Pricing methods narrow the range from which the company must select its final price. In selecting that price, the company must consider additional factors, including the impact of other marketing activities, company pricing policies, gain-and-risk-sharing pricing, and the impact of price on other parties.

IMPACT OF OTHER MARKETING ACTIVITIES The final price must take into account the brand's quality and advertising relative to the competition. In a classic study, Paul Farris and David Reibstein examined the relationships among relative price, relative quality, and relative advertising for 227 consumer businesses and found the following:[65]

- Brands with average relative quality but high relative advertising budgets could charge premium prices. Consumers were willing to pay higher prices for known rather than for unknown products.
- Brands with high relative quality and high relative advertising obtained the highest prices. Conversely, brands with low quality and low advertising charged the lowest prices.
- For market leaders, the positive relationship between high prices and high advertising held most strongly in the later stages of the product life cycle.

These findings suggest that in many cases price may not be necessarily as important as quality and other benefits.

COMPANY PRICING POLICIES The price must be consistent with company pricing policies. Yet companies are not averse to establishing pricing penalties under certain circumstances.

Airlines charge $200 to buyers of discount tickets who change their reservations. Banks charge fees for too many withdrawals in a month or early withdrawal of a certificate of deposit. Dentists, hotels, car rental companies, and other service providers charge penalties for no-shows. Although these policies are often justifiable, marketers must use them judiciously and not unnecessarily alienate customers. (See "Marketing Insight: Stealth Price Increases.")

Many companies set up a pricing department to develop policies and establish or approve decisions. The aim is to ensure salespeople quote prices that are reasonable to customers and profitable to the company.

GAIN-AND-RISK-SHARING PRICING Buyers may resist accepting a seller's proposal because they perceive a high level of risk, such as in a big computer hardware purchase or a company health plan. The seller then has the option of offering to absorb part or all the risk if it does not deliver the full promised value.

marketing insight

Stealth Price Increases

With consumers resisting higher prices, companies trying to increase revenue in other ways often resort to adding fees for once-free features. Although some consumers abhor "nickel-and-dime" pricing strategies, small additional charges can add up to a substantial source of revenue.

The numbers can be staggering. U.S. airlines collected a massive $3.35 billion in baggage fees and $2.81 billion in reservation change/cancellation fees in 2013. The telecommunications industry has been aggressive in adding fees for setup, change-of-service, service termination, directory assistance, regulatory assessment, number portability, and cable hookup and equipment, costing consumers billions of dollars. Fees for consumers who pay bills online, bounce checks, or use automated teller machines bring banks billions of dollars annually. Credit card companies responded to restrictions on certain of their pricing practices by adopting rate floors for variable rate cards, higher penalties for overdue payments at lower balance thresholds, and inactivity fees for unused cards.

This explosion of fees has a number of implications. Given that list prices stay fixed, they may understate the degree of price inflation. They also make it harder for consumers to compare competitive offerings. Although various citizens' groups have tried to pressure companies to roll back some fees, they don't always get a sympathetic ear from state and local governments, which use their own array of fees, fines, and penalties to raise necessary revenue.

Companies justify the extra fees as the only fair and viable way to cover expenses without losing customers. Many argue that it makes sense to charge a premium for added services that cost more to provide and that only some customers use. Thus, basic costs can stay low. Companies also use fees to weed out unprofitable customers or get them to change their behavior.

Ultimately, the viability of extra fees will be decided in the marketplace and by the willingness of consumers to vote with their wallets and pay the fees or vote with their feet and move on.

Sources: Katia Hetter, "Airlines Collect $6 Billion in Fees," www.cnn.com, May 15, 2013; Alexis Leondis and Jeff Plungis, "The Latest Credit Card Tricks," *Bloomberg Businessweek*, December 28, 2009, and January 4, 2010, p. 95; Brian Burnsed, "A New Front in the Credit Card Wars," *BusinessWeek*, November 9, 2009, p. 60.

Source: ©Brian A Jackson /Shutterstock

Airlines generate billions of dollars in baggage fees as a source of extra income.

Baxter Healthcare, a leading medical products firm, was able to secure a contract for an information management system from Columbia/HCA, a leading health care provider, by guaranteeing the firm several million dollars in savings over an eight-year period. An increasing number of companies, especially B-to-B marketers, may have to stand ready to guarantee any promised savings but also participate in the upside if the gains are much greater than expected.

IMPACT OF PRICE ON OTHER PARTIES How will distributors and dealers feel about the contemplated price?[66] If they don't make enough profit, they may choose not to bring the product to market. Will the sales force be willing to sell at that price? How will competitors react? Will suppliers raise their prices when they see the company's price? Will the government intervene and prevent this price from being charged?

U.S. legislation states that sellers must set prices without talking to competitors: Price-fixing is illegal. Twenty-one airlines, including British Airways, Korean Air and Air France-KLM, were fined a total of $1.7 billion for artificially inflating passenger prices and cargo fuel surcharges between 2000 and 2006.[67] Many federal and state statutes protect consumers against deceptive pricing practices. For example, it is illegal for a company to set artificially high "regular" prices, then announce a "sale" at prices close to previous everyday prices.

Adapting the Price

Companies usually do not set a single price but rather develop a pricing structure that reflects variations in geographical demand and costs, market-segment requirements, purchase timing, order levels, delivery frequency, guarantees, service contracts, and other factors. As a result of discounts, allowances, and promotional support, a company rarely realizes the same profit from each unit of a product that it sells. Here we will examine several price-adaptation strategies: geographical pricing, price discounts and allowances, promotional pricing, and differentiated pricing.

GEOGRAPHICAL PRICING (CASH, COUNTERTRADE, BARTER)

In geographical pricing, the company decides how to price its products to different customers in different locations and countries. Should the company charge higher prices to distant customers to cover higher shipping costs or a lower price to win additional business? How should it account for exchange rates and the strength of different currencies?

Another question is how to get paid. This issue is critical when buyers lack sufficient hard currency to pay for their purchases. Many want to offer other items in payment, a practice known as **countertrade,** and U.S. companies are often forced to accept if they want the business. Countertrade may account for 15 percent to 20 percent of world trade and takes several forms:[68]

- ***Barter.*** The buyer and seller directly exchange goods, with no money and no third party involved.
- ***Compensation deal.*** The seller receives some percentage of the payment in cash and the rest in products. A British aircraft manufacturer sold planes to Brazil for 70 percent cash and the rest in coffee.
- ***Buyback arrangement.*** The seller sells a plant, equipment, or technology to a company in another country and agrees to accept as partial payment products manufactured with the supplied equipment. A U.S. chemical company built a plant for an Indian company and accepted partial payment in cash and the remainder in chemicals manufactured at the plant.
- ***Offset.*** The seller receives full payment in cash for a sale overseas but agrees to spend a substantial amount of the money in that country within a stated time period. In the Gorbachev era, PepsiCo sold its cola syrup to the government of the Soviet Union for rubles and agreed to buy Russian vodka at a certain rate for sale in the United States.[69]

PRICE DISCOUNTS AND ALLOWANCES

Most companies will adjust their list price and give discounts and allowances for early payment, volume purchases, and off-season buying (see Table 16.4).[70] Companies must do this carefully or find their profits much lower than planned.[71]

In the early days of its entry into the Russian market, PepsiCo used an offset agreement with the Russian government involving a swap of cola syrup for vodka.

Source: AFP/Getty Images

TABLE 16.4	Price Discounts and Allowances
Discount:	A price reduction to buyers who pay bills promptly. A typical example is "2/10, net 30," which means payment is due within 30 days and the buyer can deduct 2 percent by paying within 10 days.
Quantity Discount:	A price reduction to those who buy large volumes. A typical example is "$10 per unit for fewer than 100 units; $9 per unit for 100 or more units." Quantity discounts must be offered equally to all customers and must not exceed the cost savings to the seller. They can be offered on each order placed or on the number of units ordered over a given period.
Functional Discount:	Discount (also called *trade discount*) offered by a manufacturer to trade-channel members if they perform certain functions, such as selling, storing, and record keeping. Manufacturers must offer the same functional discounts within each channel.
Seasonal Discount:	A price reduction to those who buy merchandise or services out of season. Hotels, motels, and airlines offer seasonal discounts in slow selling periods.
Allowance:	An extra payment designed to gain reseller participation in special programs. *Trade-in allowances* are granted for turning in an old item when buying a new one. *Promotional allowances* reward dealers for participating in advertising and sales support programs.

Discount pricing has become the modus operandi of a surprising number of companies offering both products and services. Salespeople in particular are quick to give discounts to close a sale. But word can get around fast that the company's list price is "soft," and discounting becomes the norm, undermining the perceived value of the offerings. Some product categories self-destruct by always being on sale.

Some companies with overcapacity are tempted to give discounts or even begin to supply a retailer with a store-brand version of their product at a deep discount. Because the store brand is priced lower, however, it may start making inroads on the manufacturer's brand. Manufacturers should consider the implications of supplying retailers at a discount because they may end up losing long-run profits in an effort to meet short-run volume goals.

Only people with higher incomes and higher product involvement willingly pay more for features, customer service, quality, added convenience, and the brand name. So it can be a mistake for a strong, distinctive brand to plunge into price discounting as a response to low-price attacks. At the same time, discounting can be a useful tool if the customer will give concessions in return, such as signing a longer contract, ordering electronically, or buying larger quantities.

Sales management needs to monitor the proportion of customers receiving discounts, the average discount, and any tendency for salespeople to over-rely on discounting. Upper management should conduct a **net price analysis** to arrive at the "real price" of the offering. The real price is affected not only by discounts but by other expenses that reduce the realized price (see "Promotional Pricing" below). Suppose the company's list price is $3,000. The average discount is $300. The company's promotional spending averages $450 (15 percent of the list price). Retailers are given co-op advertising money of $150 to back the product. The company's net price is $2,100, not $3,000.

PROMOTIONAL PRICING

Companies can use several pricing techniques to stimulate early purchase:

- ***Loss-leader pricing.*** Supermarkets and department stores often drop the price on well-known brands to stimulate additional store traffic. This pays if the revenue on the additional sales compensates for the lower margins on the loss-leader items. Manufacturers of loss-leader brands typically object because this practice can dilute the brand image and bring complaints from retailers who charge the list price. Manufacturers have tried to keep intermediaries from using loss-leader pricing by lobbying for retail-price-maintenance laws, but these laws have been revoked.
- ***Special event pricing.*** Sellers will establish special prices in certain seasons to draw in more customers. Every August, there are back-to-school sales.

- ***Special customer pricing.*** Sellers will offer special prices exclusively to certain customers. Members of Road Runner Sports' Run America Club get "exclusive" online offers with price discounts twice those given to regular customers.[72]
- ***Cash rebates.*** Auto companies and other consumer-goods companies offer cash rebates to encourage purchase of the manufacturers' products within a specified time period. Rebates can help clear inventories without cutting the stated list price.
- ***Low-interest financing.*** Instead of cutting its price, the company can offer low-interest financing. Automakers have used no-interest financing to try to attract more customers.
- ***Longer payment terms.*** Sellers, especially mortgage banks and auto companies, stretch loans over longer periods and thus lower the monthly payments. Consumers often worry less about the cost (the interest rate) of a loan and more about whether they can afford the monthly payment.
- ***Warranties and service contracts.*** Companies can promote sales by adding a free or low-cost warranty or service contract.
- ***Psychological discounting.*** This strategy sets an artificially high price and then offers the product at substantial savings; for example, "Was $359, now $299." Discounts from normal prices are a legitimate form of promotional pricing; the Federal Trade Commission and Better Business Bureau fight illegal discount tactics.

Promotional-pricing strategies are often a zero-sum game. If they work, competitors copy them and they lose their effectiveness. If they don't work, they waste money that could have been put into other marketing tools, such as building up product quality and service or strengthening product image through advertising.

DIFFERENTIATED PRICING

Companies often adjust their basic price to accommodate differences among customers, products, locations, and so on. Lands' End creates men's shirts in many different styles, weights, and levels of quality. In March 2014, a men's white button-down shirt could cost as little as $19.99 or as much as $70.00.[73]

Price discrimination occurs when a company sells a product or service at two or more prices that do not reflect a proportional difference in costs. In first-degree price discrimination, the seller charges a separate price to each customer depending on the intensity of his or her demand.

In second-degree price discrimination, the seller charges less to buyers of larger volumes. With certain services such as cell phone service, however, tiered pricing results in consumers actually paying *more* with higher levels of usage. With the iPhone, 3 percent of users accounted for 40 percent of the traffic on AT&T's network, resulting in costly network upgrades to AT&T and causing the firm to set higher prices for those users.[74]

In third-degree price discrimination, the seller charges different amounts to different classes of buyers, as in the following cases:[75]

- ***Customer-segment pricing.*** Different customer groups pay different prices for the same product or service. For example, museums often charge a lower admission fee to students and senior citizens.
- ***Product-form pricing.*** Different versions of the product are priced differently, but not in proportion to their costs. Evian prices a 2-liter bottle of its mineral water as low as $1 but 5 ounces of the same water in a moisturizer spray for as much as $12.
- ***Image pricing.*** Some companies price the same product at two different levels based on image differences. A perfume manufacturer can put a scent in one bottle, give it a name and image, and price it at $10 an ounce. The same scent in another bottle with a different name and image can sell for $30 an ounce.
- ***Channel pricing.*** Coca-Cola carries a different price depending on whether the consumer purchases it from a fine restaurant, a fast-food restaurant, or a vending machine.
- ***Location pricing.*** The same product is priced differently at different locations even though the cost of offering it at each location is the same. A theater varies its seat prices according to audience preferences for different locations.
- ***Time pricing.*** Prices vary by season, day, or hour. Restaurants charge less to "early bird" customers, and some hotels charge less on weekends. Retail prices for roses increase by as much as 200 percent in the lead-up to Valentine's Day.[76]

The airline and hospitality industries use yield management systems and **yield pricing,** by which they offer discounted but limited early purchases, higher-priced late purchases, and the lowest rates on unsold inventory just before it expires. Airlines charge different fares to passengers on the same flight, depending on the seating class; the time of day (morning or night coach); the day of the week (workday or weekend); the season; the person's employer, past business, or status (youth, military, senior citizen); and so on. That's why on a flight from New York City to Miami you might pay $200 and sit across from someone who paid $1,290.

The phenomenon of offering different pricing schedules to different consumers and dynamically adjusting prices is exploding. Merchants are adjusting process based on inventory levels, item velocity or how fast it sells, competitor's pricing, and advertising. Even sports teams are adjusting ticket prices to reflect the popularity of the competitor and the timing of the game.[77]

Many companies are using software to make real-time controlled tests of actual consumer response to different pricing schedules. Online merchants selling their products on Amazon.com are changing their prices on an hourly or even minute-by-minute basis, in part so they can secure the top spot on search results.[78]

Constant price variation can be tricky, however, where consumer relationships are concerned. Research shows it's most effective when there's no bond between the buyer and the seller. One way to make it work is to offer customers a unique bundle of products and services to meet their needs precisely, making it harder to make price comparisons. The tactic most companies favor is to use variable prices as a reward rather than a penalty. Shipping company APL rewards customers who can better predict how much cargo space they'll need with cheaper rates for booking early.

Customers are getting savvier about how to avoid overpaying, changing their buying behavior to accommodate the new realities of dynamic pricing. But most are probably not even aware of the degree to which they are the targets of discriminatory pricing. Retailers like Staples, Office Depot, and Home Depot vary their online and in-store prices on a host of factors related to costs of doing business and consumer sensitivity to prices. Some firms use computer IP addresses to deduce people's zip codes and use their proximity to a competitor's store to adjust their prices.

When online travel agency Orbitz found that people using Apple Mac computers spent as much as 30 percent more a night on hotels, it began to show them different, and sometimes costlier, travel options than Windows users saw. Orbitz also considers a user's location and history on the site as a well as a hotel's overall popularity and promotions.[79]

Although some forms of price discrimination are illegal (such as offering different prices to different customers within the same trade group), the practice is legal if the seller can prove its costs are different when selling different volumes or different qualities of the same product to different retailers. Predatory pricing—selling below cost with the intention of destroying competition—is unlawful, though.

For price discrimination to work, certain conditions must exist. First, the market must be segmentable and the segments must show different intensities of demand. Second, members in the lower-price segment must not be able to resell the product to the higher-price segment. Third, competitors must not be able to undersell the firm in the higher-price segment. Fourth, the cost of segmenting and policing the market must not exceed the extra revenue derived from price discrimination. Fifth, the practice must not breed customer resentment and ill will. Sixth, of course, the particular form of price discrimination must not be illegal.[80]

Initiating and Responding to Price Changes

Companies often need to cut or raise prices.

INITIATING PRICE CUTS

Several circumstances might lead a firm to cut prices. One is *excess plant capacity*: The firm needs additional business and cannot generate it through increased sales effort, product improvement, or other measures. Companies sometimes initiate price cuts in a *drive to dominate the market through lower costs.* Either the company starts with lower costs than its competitors, or it initiates price cuts in the hope of gaining market share and lower costs.

Cutting prices to keep customers or beat competitors often encourages customers to demand price concessions, however, and trains salespeople to offer them.[81] A price-cutting strategy can lead to other possible traps:

- ***Low-quality trap.*** Consumers assume quality is low.
- ***Fragile-market-share trap.*** A low price buys market share but not market loyalty. The same customers will shift to any lower-priced firm that comes along.
- ***Shallow-pockets trap.*** Higher-priced competitors match the lower prices but have longer staying power because of deeper cash reserves.
- ***Price-war trap.*** Competitors respond by lowering their prices even more, triggering a price war.[82]

Customers often question the motivation behind price changes.[83] They may assume the item is about to be replaced by a new model, the item is faulty and is not selling well, the firm is in financial trouble, the price will come down even further, or the quality has been reduced. The firm must monitor these attributions carefully.

INITIATING PRICE INCREASES

A successful price increase can raise profits considerably. If the company's profit margin is 3 percent of sales, a 1 percent price increase will increase profits by 33 percent if sales volume is unaffected. This situation is illustrated in Table 16.5. The assumption is that a company charged $10 and sold 100 units and had costs of $970, leaving a profit of $30, or 3 percent on sales. By raising its price by 10 cents (a 1 percent price increase), it boosted its profits by 33 percent, assuming the same sales volume.

A major circumstance provoking price increases is *cost inflation.* Rising costs unmatched by productivity gains squeeze profit margins and lead companies to regular rounds of price increases. Companies often raise their prices by more than the cost increase, in anticipation of further inflation or government price controls, in a practice called *anticipatory pricing.*

Another factor leading to price increases is *overdemand.* When a company cannot supply all its customers, it can raise its prices, ration supplies, or both. It can increase price in the following ways, each of which has a different impact on buyers.

- ***Delayed quotation pricing.*** The company does not set a final price until the product is finished or delivered. This pricing is prevalent in industries with long production lead times, such as industrial construction and heavy equipment.
- ***Escalator clauses.*** The company requires the customer to pay today's price plus all or part of any inflation increase that takes place before delivery. Escalator clauses base price increases on some specified price index. They are found in contracts for major industrial projects, such as aircraft construction and bridge building.
- ***Unbundling.*** The company maintains its price but removes or prices separately one or more elements that were formerly part of the offer, such as delivery or installation. Car companies sometimes add higher-end audio entertainment systems or GPS navigation systems to their vehicles as separately priced extras.
- ***Reduction of discounts.*** The company instructs its sales force not to offer its normal cash and quantity discounts.

Although there is always a chance a price increase can carry some positive meanings to customers—for example, that the item is "hot" and represents an unusually good value—consumers generally dislike higher prices. In passing price increases on to them, the company must avoid looking like a price gouger.[84] Coca-Cola's proposed smart vending machines that would raise prices as temperatures rose and Amazon.com's dynamic pricing experiment that varied prices by purchase occasion both became front-page news. The more similar the products or offerings from a company, the more likely consumers are to interpret any pricing differences as unfair. Product customization and differentiation and communications that clarify differences are thus critical.[85]

Several techniques help consumers avoid sticker shock and a hostile reaction when prices rise: One is maintaining their sense of fairness, such as by giving them advance notice so they can do forward buying or shop around. Sharp price increases also need to be explained in understandable terms. Making low-visibility price moves first is also a good technique: Eliminating discounts, increasing minimum order sizes, and curtailing production of low-margin products are examples, and contracts or bids for long-term projects should contain escalator clauses based on such factors as increases in recognized national price indexes.[86]

ANTICIPATING COMPETITIVE RESPONSES

The introduction or change of any price can provoke a response from customers, competitors, distributors, suppliers, and even government. Competitors are most likely to react when the number of firms is few, the product is homogeneous, and buyers are highly informed.

TABLE 16.5 Profits before and after a Price Increase

	Before	After	
Price	$10	$10.10	(a 1% price increase)
Units sold	100	100	
Revenue	$1,000	$1,010	
Costs	–970	–970	
Profit	$30	$40	(a 33 1/3% profit increase)

Source: AFP/Getty Images

Consumers had a hostile reaction when they heard reports that Coca-Cola was considering introducing smart vending machines which would adjust prices according to the temperature outside.

How can a firm anticipate a competitor's reactions? One way is to assume the competitor reacts in the standard way to a price being set or changed. Another is to assume the competitor treats each price difference or change as a fresh challenge and reacts according to self-interest at the time. Now the company will need to research the competitor's current financial situation, recent sales, customer loyalty, and corporate objectives. If the competitor has a market share objective, it is likely to match price differences or changes.[87] If it has a profit-maximization objective, it may react by increasing its advertising budget or improving product quality.

The problem is complicated because the competitor can put different interpretations on lowered prices or a price cut: that the company is trying to steal the market, that it is doing poorly and trying to boost its sales, or that it wants the whole industry to reduce prices to stimulate total demand. When Walmart began to run ads claiming lower prices than Publix, the regional supermarket chain dropped its prices below Walmart's on roughly 500 essential items and began its own advertising campaign in retaliation.[88]

RESPONDING TO COMPETITORS' PRICE CHANGES

How should a firm respond to a competitor's price cut? It depends on the situation. The company must consider the product's stage in the life cycle, its importance in the company's portfolio, the competitor's intentions and resources, the market's price and quality sensitivity, the behavior of costs with volume, and the company's alternative opportunities.

In markets characterized by high product homogeneity, the firm can search for ways to enhance its augmented product. If it cannot find any, it may need to meet the price reduction. If the competitor raises its price in a homogeneous product market, other firms might not match it if the increase will not benefit the industry as a whole. Then the leader will need to roll back the increase.

In nonhomogeneous product markets, a firm has more latitude. It needs to consider the following: (1) Why did the competitor change the price? To steal the market, to utilize excess capacity, to meet changing cost conditions, or to lead an industry-wide price change? (2) Does the competitor plan to make the price change temporary or permanent? (3) What will happen to the company's market share and profits if it does not respond? Are other companies going to respond? (4) What are the competitors' and other firms' likely responses to each possible reaction?

Market leaders often face aggressive price cutting by smaller firms trying to build market share. Using price, Fuji has attacked Kodak, Schick has attacked Gillette, and AMD has attacked Intel. Brand leaders also face lower-priced store brands. Three possible responses to low-cost competitors are: (1) further differentiate the product or service, (2) introduce a low-cost venture, or (3) reinvent as a low-cost player.[89] The right strategy depends on the ability of the firm to generate more demand or cut costs.

An extended analysis of alternatives may not always be feasible when the attack occurs. The company may have to react decisively within hours or days, especially where prices change with some frequency and it is important to react quickly, such as in the meatpacking, lumber, or oil industries. It would make better sense to anticipate possible competitors' price changes and prepare contingent responses.