

# Pricing

## new products

Michael V. Marn, Eric V. Roegner, and Craig C. Zawada

Companies habitually charge less than they could for new offerings. It's a terrible habit.

---

**H**ow much should you charge for a new product? Charge too much and it won't sell—a problem that can be fixed relatively easily by reducing the price. Charging too little is far more dangerous: a company not only forgoes significant revenues and profits but also fixes the product's market value position at a low level. And as companies have found time and again, once prices hit the market it is difficult, even impossible, to raise them. In our experience, 80 to 90 percent of all poorly chosen prices are too low.

Companies consistently undercharge for products despite spending millions or even billions of dollars to develop or acquire them. It is true that businesses and private consumers alike are demanding more for less; the prices of personal computers, for example, have been pushed downward despite their higher processor speeds and additional memory. Global competition, increased pricing transparency, and lower barriers to entry in many of the most attractive industries have contributed to the trend. But these are not the only problems. Many companies want to make a quick grab for market share or return on investment, and with high prices both objectives can be harder to achieve.

These concerns encourage companies to take an incremental approach to pricing: they use existing products as their reference point. If a new offering



11 1/4 X

1 1/2 X  
1 1/2 X  
1 1/2 X

\$12345

1234567890

€45678

1524135  
1184 99

SPECIAL  
¥ 795

costs 15 percent more to build than the older version does, for instance, they charge about 15 percent more for it. Particularly in consumer markets, they might set the price slightly higher or lower than that of their main competitor.

The incremental approach often underestimates the value of new products for customers. One of the first makers of portable bar code readers, for example, calculated how much more quickly its customers would be able to assemble their own products if they used portable readers. The company then took the price of the older, stationary readers and raised it proportionally, solely to account for the time savings. This strategy also fit in with the company's desire to penetrate the market quickly.

But by using an existing product as the reference point, the company undervalued a revolutionary product. The portable reader not only improved existing processes but also enabled companies to redesign their supply chains. Portability and instant access to information prepared the way for real-time inventory control, vastly improved logistics planning, and just-in-time deliveries, thus eliminating the need for large inventories. Buyers quickly recognized a bargain and flocked to the low-priced product. The company, which couldn't keep up with demand, not only failed to capture the full value of its reader but also set the market's price expectations at a very low level. A single bad decision easily erased \$1 billion or more in potential profits for the industry.

Analyses based on cost differences and process improvements are parts of the puzzle, and so is an understanding of the competitive landscape. But good pricing decisions are based on an expansive rather than an incremental approach. Before zeroing in on a price that promises the greatest long-term profitability, companies must know both the highest and the lowest prices they could charge. Price-benefit analysis should begin early in the development cycle, when the market is first being probed, for it not only shows companies whether price barriers might make products unfeasible but can also guide their development by indicating which attributes customers are most willing to pay for.

### **Exploring the full range of pricing options**

For products that replicate others on the market ("me-too" products) or that offer small improvements (evolutionary products), the room to maneuver is relatively narrow, and incremental approaches may come close to the optimal price (*see* sidebar "Launch position"). Even then, however, a lot of money can be left on the table. Charging just 1 percent less than the optimal price for a product can mean forfeiting about 8 percent of its potential oper-

ating profit.<sup>1</sup> And the more novel a product may be, the more important it is for companies to take a broader view of the pricing possibilities.

### The highest price

Since incremental approaches tend to focus on the lower end of the price range, companies should start by defining the opposite end of the spectrum. Such a price ceiling, based on a product's benefits, may ultimately prove to be unrealistic: there may not be a sufficient market at that level, it may leave too much room for competitors, or customers may be strong enough to demand a greater share of the value the product creates.<sup>2</sup> But establishing this ceiling will ensure that each and every potential price point is brought up for discussion.

To establish a price ceiling, a clear understanding of a product's benefits for its customers is essential. The value of some benefits, such as savings on raw materials, can be measured easily. But others, particularly process and relationship benefits such as on-line purchasing options or brand reputation, must be evaluated through market research.

---

## Launch position

A critical step—and often the first stumbling block—in releasing a new product is to understand its true nature. Whatever its price category, it hits the market in one of three positions.

- **Revolutionary:** A product is so new that it creates its own market. Quantifying and explaining such a product's benefits to an untested market takes skill.
- **Evolutionary:** Upgrades and enhancements to existing products are evolutionary in nature. If the new product provides too many new benefits at too low a price, a price war can ensue.

- **Me-too:** Painstaking cost analysis and a clear set of target customers are needed to avoid catastrophe with me-too products, which bring a company into line with the rest of the market without adding new benefits.

Too often, companies overplay the benefits of their new products, touting as revolutionary what is at best evolutionary and rarely acknowledging that they are really playing catch-up. But it is important to make an honest internal assessment of a product's position, since different pricing strategies are appropriate for each of the three possibilities.

---

<sup>1</sup>This analysis is based on average economics for S&P 1500 companies. See Michael V. Marn, Eric V. Roegner, and Craig C. Zawada, "The power of pricing," *The McKinsey Quarterly*, 2003 Number 1, pp. 26–39 ([www.mckinseyquarterly.com/links/6189](http://www.mckinseyquarterly.com/links/6189)).

<sup>2</sup>See Ralf Leszinski and Michael V. Marn, "Setting value, not price," *The McKinsey Quarterly*, 1997 Number 1, pp. 98–115 ([www.mckinseyquarterly.com/links/6306](http://www.mckinseyquarterly.com/links/6306)).

Advanced marketing tools—for instance, conjoint analysis and perceptual mapping<sup>3</sup>—can assess how much value each benefit offers to customers. But companies must see to it that their research does more than make comparisons with known reference points. Many suppliers rely too heavily on their internal perceptions, which sometimes unintentionally skew their efforts to probe the market. While formulating the research and writing the questions for a market test, a company should therefore ensure that they cover a broad range of possibilities; otherwise the work may serve merely to confirm the benefits claimed by the product’s developers or anecdotal information brought back by the sales force.

To take an accurate measure of the benefits a product offers—and thereby find its true price ceiling—market research must be designed to elicit more open-ended feedback than can usually be acquired through multiple-choice questionnaires or trade-off techniques, both of which can limit responses. For example, a controls maker’s revolutionary high-pressure steam valve for nuclear power plants significantly increased the reliability and reduced the complexity of their water-management systems. At first, trade-off techniques were used to research the market: the company described the technical benefits of the new valve and tried to find out how much customers would pay by comparing it with a valve for another application. Most of them felt that a 20 to 25 percent premium was justified.



The company later redid its research to broaden the outlook, this time asking more open-ended questions to establish how much value the valve would deliver to the business systems of its customers. Instead of first asking them to compare the new valve with an existing one, the company now sought to evaluate the cost of planned maintenance shutdowns and the role the new valve could play in reducing their number. Now that the company had a fuller picture of the new benefits—a picture based on its customers’ economics—it asked how much customers would be willing to pay for them. This time, the customers gave a figure that was several times the price of the existing valve. The supplier had a more accurate picture of its pricing options.

### The floor

Cost-plus pricing is often derided as weak, but it plays an essential role in setting the floor for a company’s pricing options. An accurate analysis of

<sup>3</sup>Conjoint analysis examines the direct trade-offs among competing products. Perceptual mapping, which assesses the benefits of different products that may not be direct substitutes for one another, seeks to identify the benefits that no other product offers.

costs per unit, plus a margin representing a minimally acceptable return on investment, reveals a new product's lowest reasonable price level. If the market can't bear it, the company must rethink the product's viability.

Although the cost-plus model is well-known, companies often trip up in two areas when they use it to analyze their costs. First, surprisingly, they don't account for all costs that should be allocated to products; there is a tendency, for example, to overlook R&D expenses associated with a product category (including expenses for incomplete projects) and goodwill linked to acquisitions that lead directly to new products. As a necessary part of any development program, these are legitimate items to bring into the cost calculation. Second, overly optimistic market projections can create false estimates of costs, particularly fixed ones.<sup>4</sup>

---

Companies often do not account for **all of the costs** that ought to be allocated to their products

---

The range of pricing options is usually smallest for me-too products. Companies using them to play catch-up must therefore be particularly careful to assess their costs correctly and to understand the assumptions underlying these calculations; a small error can permanently prevent products from becoming profitable. If a product's viability relies on cost savings generated by economies of scale, for instance, a false estimate of the size of the market or of a customer segment would be disastrous.

### The size of the market

Similar research is needed to gauge the size of the market or market segments for various prices at and below the ceiling. Instinct might suggest that the lower the price, the higher the demand, but that isn't always true. Midrange prices, for instance, might put a product in the dead zone—too cheap for quality-conscious customers and too expensive for bargain hunters.

One company, for example, offered a new data-management system that it claimed could save large companies hundreds of millions of dollars a year. But to penetrate the market quickly, it released the core software with an enterprise license fee of less than \$100,000.<sup>5</sup> Potential customers wouldn't take the company's claims seriously; if the claims were true, the software

<sup>4</sup>See Charles Roxburgh, "Hidden flaws in strategy," *The McKinsey Quarterly*, 2003 Number 2, pp. 26–39 ([www.mckinseyquarterly.com/links/6307](http://www.mckinseyquarterly.com/links/6307)).

<sup>5</sup>The company considered this an at-cost price, but it actually underestimated its true expenses.

should have been priced in the same range as other enterprise-resource-planning (ERP) packages, which cost \$1 million or more.

Estimating the size of a market at various price points clarifies the range of pricing options, suggests which price models to use at any price and volume point, and increases the accuracy of estimates of profitability along the spectrum and of the unit-cost calculations needed to define the price floor.

## Setting the release price

After a company has determined the full range of its pricing options and the market's size at various points within that range, it is ready to formulate the release price. Targeting the largest market segment within the range might be tempting, but maximizing volume doesn't necessarily maximize profits

---

## Penetration pricing

With every new product, companies feel tempted to build market share quickly through aggressively low prices—a tactic known as penetration pricing. But a fixation on volume usually sacrifices profitability and may ignite a price war. As a result, it is generally better to keep upward pressure on prices and to promote good industry pricing behavior. On rare occasions, however, the price lever may be the right tool to undercut competition.

### High customer value, elasticity

The first kind of legitimate occasion for penetration pricing involves new or underdeveloped markets in which the benefits offered by a new product are high and customers are particularly price sensitive. If a supplier can build a presence in such markets quickly, ahead of the competition, it can disproportionately tap into latent demand, expand its share, and establish itself as the market leader. Price can be the best mechanism for implementing this strategy, especially in

a market with high switching costs and no established product standards; AOL, for example, started out with very low prices and raised them over time.

This strategy can be risky, however. If consumer choice is influenced primarily by benefits rather than price, penetration pricing can only be destructive. The media, high-tech, and pharmaceutical industries provide many examples of new offerings and technologies priced aggressively to build share, which was then lost when competitors released newer and slightly better products. In markets focused on technical efficacy, these suppliers needlessly pushed price expectations lower and thus forfeited profits.

### Cost-to-serve advances

Another possible occasion for penetration pricing comes when a supplier's cost to serve will decline sharply and rapidly—often because of economies of scale or a learning-curve effect—

(see sidebar “Penetration pricing”). In particular, four aspects of new-product pricing may counsel against targeting the largest market, especially if doing so means setting the price low.

### Reference price

The release price minus any discounts or other incentives establishes the market’s first reference point for the product’s true value as judged by its maker. More than any press release, sales pitch, or catalog description, the reference price tells the market what a company really thinks a new product is worth. An excessively low reference price can handicap its long-term profitability—the low price might hasten its penetration of the market, but the resulting lower margins forgo the future profits a higher price would have captured once a customer base had been established. A low reference price is

---

as volume expands and fixed and variable costs per unit drop. If costs fall faster than prices, margins should rise over time.

But as the market share of a company grows, its competitors often react quickly, using low prices to minimize their market loss or to enter the market. The result can be constant downward pressure on pricing that puts target margins out of reach. Remember too that extreme care must be taken if the core driver of a product’s acceptance is benefits rather than price.

Limited capacity is another pitfall that can trap a company that is chasing low costs to serve. If penetration pricing ignites demand that can’t be met, the supplier is injured twice: margins are lost needlessly because available supplies could have been sold at higher prices, and delivery delays or failures—a factor in the overall perception of a product’s benefits—could undermine customer satisfaction.

### Weak competition

Penetration pricing could also be appropriate if a company’s competitors have higher cost structures or are locked into channel agreements that limit their pricing freedom. In the basic-materials industry, for instance, Asian and Eastern European suppliers have frequently captured market share through penetration pricing once their purity and logistics standards reached minimally acceptable levels, because producers in developed countries could not match their low labor costs.

A well-known example comes from the US consumer PC market, in which Dell Computer created a lower cost structure (and eliminated costs associated with intermediaries) by selling built-to-order PCs direct to customers over the phone and the Internet. Since rivals couldn’t match Dell’s low costs, the company expanded its market share rapidly even as it secured higher margins than its rivals did.

particularly damaging if it conflicts with the value position the company is trying to establish or if market demand has been underestimated.

### Competitors' reactions

Especially for evolutionary products, a low price that noticeably shifts market share will probably trigger a destructive price war: competitors usually can't react immediately by improving the benefits of their own products, so they often cut prices instead.<sup>6</sup> A higher reference price, by contrast, suggests that a company is targeting profits rather than market share and might therefore generate few if any immediate reactions from competitors.

### Life cycle strategy

If an early-adopter segment is willing to pay a premium for a product, the company that makes it may wish to consider a high release price to capture the extra value, with planned reductions down the road to attract latecomers. Along with capturing more revenue over the life of a product, this strategy can also help companies match demand to production capacity for a new product.

### Cannibalization

Companies must also carefully consider how new wares will affect their current ones. If an older product remains viable, a company might try to manage the cannibalization problem by giving its new product a higher release price targeting a smaller segment of customers. By contrast, if a product line is being retired, a lower release price for a new offering may be appropriate to shift customers to it as quickly as possible.

### Going to market

Presenting a price to the market requires both astute communication with it and patience. It can be especially hard to explain the value and benefits of revolutionary products to often-skeptical buyers, but whatever conditions a new product may face, a faulty pricing strategy shouldn't be allowed to undermine its value message.



A product's fortunes during the first six months to a year after it hits the market have a critical influence on its value position. Especially during this period, companies must keep firm con-

<sup>6</sup>See Robert A. Garda and Michael V. Marn, "Price wars," *The McKinsey Quarterly*, 1993 Number 3, pp. 87–100 ([www.mckinseyquarterly.com/links/6309](http://www.mckinseyquarterly.com/links/6309)).

trol of their pricing operations, all the way down to individual transactions. For instance, discounting, which could be routine for continuing product lines, might sabotage a new product's reference price.

If managers must push a product quickly, however, they can do so without sacrificing its reference price or the market's perception of its value. One common technique is to offer consumers free samples or to give the product to small groups of customers with a high profile or significant market influence. Another is to offer it to customers for a free-trial period. Both approaches speed up the market penetration of the product without cutting the reference price. Standard discounts or rebates are usually a mistake, however, since they do cut it and also provoke doubts about the product's benefits.

---

The answers to questions about the price of new products can't wait for the end of the development cycle; the questions are an intricate part of the process of developing them, and the answers are needed to assess their ultimate profitability. At present, companies routinely overlook the higher reaches of their pricing potential. Basing release prices on credible market research and cost analysis can give managers the confidence to ride out the initial turbulence that usually surrounds new products and to claim their true value. **Q**

---

**Mike Marn** and **Eric Roegner** are principals in McKinsey's Cleveland office; **Craig Zawada** is a principal in the Pittsburgh office. Copyright © 2003 McKinsey & Company. All rights reserved.