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Pricing and Discounting



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INTRODUCTION CASE

Iliad undercuts its rivals

BY DAG BENNETT

In France, the mobile-phone service market in 2011 was dominated by three main suppliers: Orange, part of France Telecom; SFR, owned by Vivendi; and Bouygues. These companies competed with each other through advertising and slightly differentiated product offerings. What they rarely did was challenge each other on pricing. All three were comfortably profitable in the early twenty-first century.

In 2012 that all changed with the entrance of Free Mobile, a new mobile telephone services brand from Iliad, headed by Xavier Niel. In January 2012, Free introduced a new mobile service plan that offered unlimited domestic and international calls, SMS and mobile data for €19.99 per month (about AU\$25). While it was difficult to compare this price directly with the plans of other suppliers—as deliberate obfuscation about pricing makes shopping more difficult—it appeared that the plan was about half the price of similar offerings at the time.

Free Mobile directly challenged the market leaders, who had built up one of the most expensive mobile markets in Europe. In 2011, mobile users in France spent an average of €392 (about AU\$570) per year compared with €181 in Germany and €167 in Portugal, according to the research firm Gartner. Free Mobile was able to offer a low price by building on its existing broadband and television service network. In order to obtain the licence to become the fourth big operator in France, Free Mobile had to overcome fierce lobbying from France Telecom and the other operators, who were worried about Iliad's reputation for cutting prices. It seemed Xavier Niel had a habit of upsetting his complacent rivals by undercutting them whenever he could.



At the press conference that launched the service, Niel said, 'You now have the chance to teach your operator a lesson. You have two choices: you can sign up with Free, or you can call your operator and ask them to match our rates' (Pfanner, 2012).

In response to this assault, Orange began sending text messages to its subscribers, reassuring them that it was checking to make sure they had the appropriate calling plan for their usage. Meanwhile, the existing suppliers enjoyed some protection from price-based competition because many customers were locked into long-term contracts. Free Mobile, on the other hand, did not require a minimum subscription period.

By the fourth quarter of 2013, the Iliad strategy was paying off with a steady increase in subscribers. Free was the second largest ISP in France, with 23 per cent of the market, second only to France Telecom with 41 per cent. Since then Free has continued to add subscribers for both fixed and mobile subscriptions faster than its rivals—it added 5.5 million mobile users between 2011 and 2014, while SFR added only about 1 million. During this time, the overall cost of subscriptions fell to €310, bringing French costs more closely into alignment with other European countries.

Another dimension of the strategy is that Iliad is using revenues generated in France for expansion abroad: it considered acquiring the US operations of T-Mobile in August 2014 (Iliad withdrew this bid in October 2014) and in December 2014 bought Orange's network in Switzerland. This may herald an internationalisation of the low-cost market disrupting strategy across Europe.

'Keeping its competitors off balance while appealing to customer desires for lower prices seems to be working for the enfant terrible of French telecoms, which in 2016 claimed to be France's leading recruiter of mobile subscribers. By early 2017, Iliad claimed over 12 million subscribers, and while many bought a rock-bottom €2 plan, Iliad's income has continued to rise, largely due to increases in mobile services revenue. Free Mobile has grown steadily since it first launched in 2012, while the price war it started has had big repercussions for its competitors—including a failed attempt to reduce the number of major players from four to three when talks between Orange and Bouygues Telecom collapsed in April 2017. Clearly Iliad has been playing a long game, and playing to win.'





Introduction

Price is one of the elements that consumers consider when making a choice. It is part of a brand's position, signalling quality or functionality as well as the cost of producing a product or service.

Price can also be varied independently of the rest of the brand's attributes; for example, offering a special reduced price, where it can be assumed that the rest of the brand's attributes are unchanged. Price is not often the all-important factor for consumers. The cheapest brand is very rarely the biggest in any market. Most consumers spend little time considering price and have poor recall of the price they have paid for an item. Nevertheless, when price is varied, volume tends to change in line with basic economic theory—price up means volume down—but by different amounts in different circumstances.

This chapter considers what marketers need to know about pricing to make better price-related decisions: how to set a price, and what will happen when price changes relative to the competitive environment.

Learning objectives

After reading this chapter you should:

- + understand the role of price in the marketing mix
- + be able to differentiate between cost-based and demand-based methods of pricing
- + understand the processes and pitfalls of new product pricing
- + be able to calculate price elasticity and use it to evaluate pricing decisions
- + know circumstances where elasticity is consistently larger or smaller
- + understand why temporary price cuts (price promotions) are potentially damaging.

CHAPTER OUTLINE

| | | |
|--------------------------------------|----------------------|-------------------------------|
| Introduction | Cost-based pricing | Pricing for new products |
| Setting prices in an imperfect world | Revenue and profit | The reality of setting prices |
| Starting at the floor: The cost base | Market-based pricing | Conclusion |
| | Value-based pricing | |

KEY TERMS

| | | |
|---|---|------------------------|
| direct cost pricing | functional (or realistic) range of prices | market-based pricing |
| fixed costs (or overheads) | gross profit margin pricing | optimisation |
| full (total or absorption) cost pricing | marginal cost pricing | price-benefit position |
| | | price elasticity |



| | | |
|--------------------|-----------|----------------|
| price penetration | temporary | value-based |
| price segmentation | price | pricing |
| price skimming | promotion | variable costs |

Setting prices in an imperfect world

The price placed on a good or service has a direct effect on sales revenue (revenue = volume × price), and therefore on the profit or loss of a firm (profit = revenue – costs). Price is the only element of the marketing mix that has such immediate effect on the bottom line. There are many pressures and temptations to change price, which seems easy to do—after all, it is only a number on a price tag. Usually the pressure is to reduce prices in order to help raise sales volumes. In line with standard economic theory, lowering prices generally does increase sales, but it is also likely to reduce profits, as we demonstrate later in the section ‘Marketing knowledge of price elasticity’. Let’s start by looking at how we arrive at prices.

In a modern, competitive market economy where people have discretionary spending power and can choose between an ever-widening range of goods from competing producers, variables such as price are of great importance. These days, sophisticated markets and imperfect competition are the norm. Most categories have large numbers of both buyers and sellers of various sorts, and consumers have incomplete knowledge of the alternatives. Some of these sellers are very large and have diverse product lines, high market share, numerous brands and a great deal of market power, especially over price, which means they are able to withstand pressure to reduce prices.

With all products and services there is an upper and a lower price level, bounded by what customers are willing to pay at the upper end, and by the costs of supplying the product at the lower end. Outside this range, the company would simply not be viable, and so the goal is to determine the **functional (or realistic) range of prices**. Highly competitive firms tend to offer products and brands that are very much like each other and also competitively priced.

This is because for any company it is generally less risky to offer what the market can be seen to be buying—in the form of competitors’ offerings—than it is to offer something very different, or even innovative. So, to be competitive, firms tend to copy each other. This concept of ‘copying’ applies to pricing as well.

This is why in many categories there are not just similar products on offer, but those products have similar prices. For instance, a visit to an electronics shop reveals dozens of very similar televisions at a price of \$499, and other clusters of sets at \$999 or \$1999. This is because manufacturers seek to be competitive with each other at as many product or price levels as possible; many markets have price bands or price tiers.

As a result, price setting for many organisations, especially smaller ones, is relatively straightforward. They map out the range of prices in a particular category, and then

*** functional (or realistic) range of prices:** The highest and the lowest prices for a category of closely substitutable goods found in the normal course of trade.



see if they can produce products profitably within that range. Leading firms—or those that intend to offer new products—face a more complex task in that they must:

- 1 set an initial price structure for new products
- 2 consider how to react to competitive prices
- 3 consider distribution channel margins, stock turnover and inter-channel competition
- 4 forecast the sensitivity of resellers and retailers to prices and margins
- 5 estimate the relative sensitivity to price of similar offerings in different segments or related categories
- 6 organise prices for products with interrelated production costs
- 7 arrange prices for products differing in cost and profitability
- 8 determine the appropriate timing, frequency and amount of price changes, including promotion, using temporary price-related changes (i.e. cutting the price, 'buy one get one free' offers, and so on).

In practice, pricing for large organisations tends not to be handled by upper management but by lower-level and middle managers. This is because they have a more intimate knowledge of market conditions. However, price-setting must also consider priorities laid out by top management, including the following:

- 1 Profit targets.
- 2 Whether the company intends to communicate a corporate image that is closely identified with price levels, such as a reputation for high quality.
- 3 The company's short-term and long-term objectives for profitability and how these are to be applied to products or product groups, and whether the same policies are to be applied to domestic and overseas markets.
- 4 The strategic vision for different products—is the aim for market penetration, market share maintenance or cash generation? And to what extent can short-term profit be traded off against strategic or long-term goals?
- 5 The company's views on responding to competitive price pressures such as discounters or price-related promotions.
- 6 The positioning of a product or brand, especially with regard to pricing across international markets that are increasingly connected, e.g. across the Euro-zone, or ASEAN.
- 7 The management of prices within ranges that reflect changes in foreign exchange rates between countries.

CRITICAL REFLECTION

- 1 Why do you think there are upper and lower limits to what a consumer is willing to pay for a product?
 - 2 What do you think determines the levels at which price tiers emerge? Why might a firm offer a very highly priced product variant even though it will sell few of them?
 - 3 With which aspects of price management are middle managers more concerned compared to senior managers? Why is that?
-



Starting at the floor: The cost base

All companies have to produce revenue that recovers their costs, otherwise they are trading illegally and risk going bankrupt. Hence, a common way of working out a price consists of estimating the cost of producing a product and adding a mark-up on that cost to cover other costs that have not been included (e.g. costs that are difficult to allocate directly to production, such as the managing director’s salary), plus a profit. In practice, this method can be complex.

Costs can be classified as fixed or variable.

*** fixed costs (or overheads):** Costs that are not dependent on the level of goods and services produced by the business. These costs are generally tied to time periods, e.g. salaries paid per month, or rents paid quarterly or yearly.

*** variable costs:** Costs that change in proportion to the activity level of the business.

Fixed costs (or overheads) are fees and expenses that a company incurs to be in business. They do not vary with the level of sales. These costs include the cost for the business to house itself (such as rent), wages for staff, factory or ‘plant’ and facility maintenance. Fixed costs can be regarded as fixed in the short term (a year, perhaps), but over longer periods an organisation can change accommodation and hire or fire people, and therefore change its underlying cost structure.

Variable costs are entirely incurred in the product or service being provided. For example, a company making mobile phone handsets will have costs of making or acquiring the components that go into a phone, and the direct labour cost of assembling the bits (see Table 9.1). Variable costs are also known as ‘direct costs’. For profit and loss calculations, they are usually given as a cost per unit. The same is true of services, where the costs directly attributable to providing each unit of service will be mostly made up of the labour required to provide the service.

TABLE 9.1 Example variable costs for a mobile phone

| Item | \$ |
|-----------------------|--------------|
| Direct labour cost | 1.00 |
| Plastic casing | 2.00 |
| LED screen | 1.50 |
| Handset buttons | 0.50 |
| Electronic components | 3.50 |
| SIM card | 1.50 |
| Total | 10.00 |

In theory, the variable costs per phone will be the same whether 10 are produced or 100. Of course, in real situations this may not be true if a company produces much larger numbers of items so that it acquires enough bargaining power with suppliers to drive down component costs.

Information about fixed and variable costs should be known inside the company. The accounting department will track fixed costs, and gather information from the production or service department on variable costs. This is one reason that many organisations practise cost-based pricing—all the information is on hand and accessible.



While both fixed and variable costs are simple in concept, they still involve managerial decisions. For example, suppose the mobile phone manufacturer has fixed costs of \$500. If it then produces 100 phones, it would allocate $\frac{1}{100\text{th}}$ of the total overhead costs to each phone:

$$\frac{\$500}{100} = \$5.00 \text{ per phone}$$

As a result, the cost of production for each phone for this company will be the variable cost of \$10 (from Table 9.1) plus \$5 of fixed costs = \$15 per unit.

Suppose the company decides to produce 200 phones instead. In this case, the variable costs per phone do not change, but the fixed costs are now spread across twice as many units, so each unit now receives only $\frac{1}{200\text{th}}$ of the fixed costs:

$$\frac{\$500}{200} = \$2.50 \text{ per phone}$$

Therefore the total cost for each phone is now \$10 plus \$2.50 = \$12.50.

Two things should be clear from this example. Firstly, when fixed costs are allocated over a larger number of units, the cost per unit is driven down. This is core to achieving economies of scale and explains why companies pursue increases in volume. It also provides an explanation for the relentless pursuit of cost reductions.

Secondly, it should also be obvious that one of the main problems with cost-based pricing is that the end price per unit varies with the number of units produced. In practice, this may not matter very much for very high volumes of production in which fixed costs are a very small portion of total costs, but the total number of units produced will be critical to cost calculations for organisations with a high proportion of fixed costs.

Another problem arises when a company has to decide how to allocate fixed costs across quite different products. For example, suppose the phone manufacturer makes 100 mid-level phones with a variable cost of \$10, and 100 more basic models with a variable cost of \$6 per unit. If the firm has fixed costs of \$500, then it may decide to allocate costs evenly per unit:

$$\frac{\$500}{200} = \$2.50 \text{ per unit}$$

The effect on total costs is shown in Table 9.2.

TABLE 9.2 Costs for mid-level versus basic mobile phones

| | Mid-level phone (\$) | Basic phone (\$) |
|-----------------------|----------------------|------------------|
| Variable cost | 10.00 | 6.00 |
| Fixed cost allocation | 2.50 | 2.50 |
| Total cost | 12.50 | 8.50 |



Alternatively, the company might decide to allocate fixed costs in proportion to the variable costs, so the more expensive model carries about 65 per cent or $\$325/100 = \3.25 per phone, and the less expensive model takes 35 per cent or $\$175/100 = \1.75 per phone. In this case, the final total cost for the mid-range phone would be $\$10$ plus $\$3.25 = \13.25 , while the basic model would be $\$6$ plus $\$1.75 = \7.75 . The phone maker might decide on proportional allocation because it allows it to put a slightly lower price on the basic model. In any case, the decision results in quite different costs per phone. If the company uses a standard mark-up, this will have a big effect on the end price.

Cost-based pricing

If a company only produces one product, then all costs—both fixed and variable—have to be covered by the revenue from that product. But the more usual case is that a company produces more than one product or variant of a product, so costs have to be allocated to individual products to produce a cost base. Three main techniques are used:

- 1 Full (total or absorption) cost pricing
- 2 Direct cost pricing
- 3 Marginal cost pricing.

Full cost pricing

*** full (total or absorption) cost pricing:** A method of accounting for costs that includes the full or total cost of manufacturing a product or providing a service, including materials, labour and all manufacturing overheads (fixed and variable).

Full (total or absorption) cost pricing attempts to apportion all company expenses, whether they can be traced directly to a product or not. Apportionment of fixed costs generally follows some ‘reasonable’ method, but is in essence arbitrary—a managerial decision. If all the overheads are not allocated to a product, there is a danger that revenue will fall short of costs in total, which would be unacceptable. While this approach appears to avoid the danger of incomplete recovery of overheads, it does not take market conditions into account, nor the fact that some products will be more price sensitive than others. As a result, use of full cost pricing tends to overprice some products and underprice others. For example, in the oil industry the production of one good is inextricably linked with others—petrol, kerosene, propane gas and heavy fuel oil are all distilled from crude oil, and oil distillates and by-products go into ink, crayons, bubble gum, dishwashing liquid, plastics, DVDs and many other goods. So there are major difficulties in allocating joint costs to particular products—and this also goes some way towards explaining why changes in the price of oil affect all manner of goods.

That said, full cost pricing, or something quite close to it, is very widely used—especially by smaller organisations that do not have the time and resources to devote to more complicated pricing approaches. Instead, every product or every quote for service is priced according to the same equation. The equation is essentially direct costs (of the product or project) plus a proportion of fixed costs (an additional



percentage mark-up for profit might also be added at this point). For example, a market research company might calculate a price for carrying out a survey by costing the hours worked on the project by staff designing the questionnaire, contacting the respondents, collecting the information and processing it, then adding a proportion of the cost of running the office, developing new business, advertising and so on—which are costs that are necessary for the business, but not directly related to the project. Companies offering professional services (e.g. law firms, architects, advertising or research agencies) typically use this approach, and rarely offer discounts or other sorts of pricing flexibility. The result is that they have very similar prices when they offer to provide similar services.

This is worth remembering when as a marketer you are buying a marketing service. If an advertising agency or market research agency quotes a very different price from others, it is almost invariably because they are going to provide a different service, so a cheap price means they are missing out on something—perhaps by accident or perhaps the firm interpreted your brief differently. So check before you grab that bargain!

Direct cost pricing

The **direct cost pricing** approach attempts to include only those costs that are directly incurred and that could be avoided in the medium or long term if the particular product was discontinued. Such costs may include factory costs, selling or marketing costs and expenses such as research and development (R&D), or distribution costs that are specific to a product or product range. Both fixed and variable costs are included. This method seems similar to full cost pricing, but the difference is that no allocation of fixed costs shared with other products is made. For example, if a product has a dedicated production line, those costs will be included in the direct costing, but the costs of warehousing that are shared across products will not be allocated.

One of the disadvantages of this method is that it ignores the distinction between fixed and variable costs. This makes it much harder to know how changes in volume will affect costs and therefore profit.

Marginal cost pricing

Marginal cost pricing is sometimes known as ‘variable cost pricing’. With marginal cost pricing, emphasis is placed on separating costs into two main classes: fixed and variable. The marginal cost is then the cost of producing one extra unit of the product—the variable cost at that level of production. If a price higher than this marginal cost is achieved, the revenue from the volume becomes a ‘contribution’ towards recovery of fixed costs, overheads and profit.

This method has advantages in its ability to allow different prices to be set for different slices of business. Rather than attempt to recover fixed and variable

* direct cost pricing:

A method of accounting for costs that identifies all costs that can be associated with a product or service.

* marginal cost pricing:

A method of accounting that focuses on determining the change in cost (marginal cost) of producing one extra unit; it is useful in arriving at a cost for a tiny change in quantity at a given level of production, i.e. the cost per unit.



costs in proportion with every unit sold, marginal cost pricing enables fixed costs to be recovered over a portion of the volume. Additional volumes can be given lower prices, with any revenue above the variable costs going towards profit without needing to contribute to fixed costs. Profit/volume sensitivity is particularly important where the level of fixed costs is high. For example, airlines generally face high fixed costs, but the variable cost for each additional passenger is quite low. This is why they have an incentive to fill every seat on a flight, even if some of those seats are sold at a low price—anything over variable cost will make a positive contribution to covering fixed costs. High fixed costs indicate a marginal level of price above which a sales order is preferable to leaving plant idle. But selling a bit less will quickly lead to overall losses, because revenue will soon fail to cover the fixed costs.

The two main drawbacks of marginal costing are that there are often practical difficulties in segregating fixed and variable expenses, and that such segregation is only valid for specified levels of output and time. There is also a danger that if every price decision is taken on the basis of marginal cost, fixed expenses and profit will not be adequately recovered. This means that once fixed costs are covered, any revenue above marginal costs is profitable, but the danger is that volume achieved at a price based on marginal costs may be at the expense of volume at full cost, and then total costs will not be covered.

CRITICAL REFLECTION

- 1 What is the difference between fixed and variable costs, and why is it useful to distinguish between them when making pricing decisions?
- 2 What are the advantages and disadvantages of the different kinds of cost pricing?

Revenue and profit

At its simplest, revenue can be calculated as price per unit × the number of units sold. Suppose the phone manufacturer we’ve been discussing sells its mid-range model for \$18 (using a standard mark-up of 30 per cent, with rounding) and the basic model for \$12. If the company sells all that it produces (100 of each), then revenue will be \$3000, as shown in Table 9.3.

TABLE 9.3 Revenue if all mobile phones are sold

| | |
|----------------------------|----------------------------|
| Mid-range model | $100 \times \$18 = \1800 |
| Basic model | $100 \times \$12 = \1200 |
| Total sales revenue | \$3000 |

We can work out the profit figure for the company by subtracting costs from the total revenue figure of \$3000. The costs are shown in Table 9.4.

TABLE 9.4 Cost of producing 100 mid-range phones and 100 basic phones

| Costs | \$ |
|---------------------------------|---------------------|
| Mid-range model | 100 × \$10 = \$1000 |
| Basic model | 100 × \$6 = \$600 |
| <i>Subtotal: variable costs</i> | <i>\$1600</i> |
| <i>Fixed costs</i> | <i>\$500</i> |
| Total costs | \$2100 |

Thus the profit can be worked out as:

Total sales revenue – Total costs = Profit

\$3000 – \$2100 = \$900

Companies can evaluate profit in terms of ‘net profit’ and ‘gross profit’. Net profit is the difference between total revenue and total costs (as in the example shown in Table 9.4). However, gross profit is the difference between total revenue and costs of goods sold (COGS). COGS are the costs that can be directly attributed to the product. For a manufacturer, COGS will be the cost of production. For wholesalers and resellers, COGS will be the costs of purchase and inventory. COGS do not include operating expenses, such as marketing, rent and salaries.

One of the ways companies evaluate their performance is by looking at the amount of profit, which in this case is a net profit of \$900 for the year. This figure might be compared to previous years to give an indication of whether the firm is improving its results.

Profit margin

Another way of comparing the performance of the business is to look at profit margins, or the percentage of revenue made up of profits. Margins can be calculated using net profit or gross profit. For the mobile phone company, we would calculate the profit margin as follows:

$$\left(\frac{\text{Profit}}{\text{Revenue}} \right) \times 100 = \text{profit margin}$$

$$\left(\frac{\$900}{\$3000} \right) \times 100 = 30 \text{ per cent}$$

By itself, we can't tell whether this 30 per cent figure is good or bad. But we can compare this to the previous year's performance to gauge whether the company is improving not just in terms of total profits but also in profitability—in other words, the level of profit produced relative to the level of sales. This can be useful to monitor because it is possible for sales and total profits to increase but at the same time for the profit margin to decrease. In such a case, it might be that costs have grown too quickly, or that there are market pressures on prices, or that the company is simply



not pricing its products appropriately. Margins may also be compared to those of other products and, if the information is available, to those of other companies as well.

The analysis of profit can be taken further and broken down by products. For example, the mid-range phone generated revenue of \$1800, had direct costs of \$1000, fixed costs of \$325 and therefore generated profits of $\$1800 - (\$1000 + \$325) = \475 . The same type of calculation for the basic model is: $\$1200 - (\$600 + \$175) = \425 .

When we look at profit margin, the calculation separates out the profit and revenue for each model, and for the mid-range model, $\$475$ profit divided by $\$1800$ revenue = 26 per cent, while for the basic model it is $\$425/\$1200 = 35$ per cent. On this basis, the cheaper model seems to be more productive of profits and the company might decide to concentrate on its production rather than on the mid-level phone.

Remember, however, that the allocation of fixed costs was made in proportion to the variable costs. If, on the other hand, the fixed cost allocation was simply based on the numbers produced (so, \$2.50 per phone), the calculation for profit margin would be $\$550/1800 \times 100 = 31$ per cent for the mid-range phone and $\$350/1200 \times 100 = 29$ per cent for the basic phone. In which case, the company might decide to concentrate on the mid-level model. This illustrates the real dilemmas that arise with cost allocation.

Despite the often arbitrary nature of cost allocations, cost pricing is popular with many organisations, across many industries. This is partly because it relies on easily gathered and accessed internal information, as opposed to fuzzy external information, and partly because it gives an air of financial probity. In other words, it is a technique that looks to cover all the bases, and therefore financial managers like it. Marketers and salespeople, on the other hand, often feel that it inhibits their ability to either set competitive prices in the first place, or to negotiate later.

Mark-up pricing

Many companies employ a mark-up pricing strategy, using gross profit margin targets (known as **gross profit margin pricing**). The process is quite straightforward for firms that have a good understanding of the profit margin they require to pay back their operating expenses and to generate income and cashflow. Once the cost of sales (i.e. the cost of the goods and services sold) is established for a product, a price is then generated that will achieve the target gross profit margin.

The price, or marked-up cost to achieve these target margins is straightforward. For a manufacturer with COGS of \$5 and a target gross profit of 50 per cent, price is calculated as follows:

$$\text{Price} = \frac{\text{Cost of Goods Sold}}{(1 - \text{gross profit margin})}$$

$$\text{Price} = \frac{\$5}{(1 - .50)}$$

$$\text{Price} = \frac{\$5}{0.5}$$

$$\text{Price} = \$10.00$$

*** Gross profit margin pricing:** A pricing method in which an organisation generates a price based upon achieving a gross profit margin target.



To check this, simply reverse the calculation and divide the gross profit (Price – Costs = \$10 – \$5 = \$5) by the price, so $\$5 / \$10 = 0.5$ or 50 per cent, which was the target gross profit margin. It is also easy to see that this works out to be $\text{Price} = 2 \times \text{Costs}$, which is a useful shorthand for working out the price.

The components are simple, and can easily be worked out on a spreadsheet. As costs change, this enables the price to be easily recalculated to produce the targeted gross profit. In practice, the gross profit margin tends to vary from company to company, but some ballpark figures, worked out by Ira Kalb (2015), are outlined below (GPM = gross profit margin):

- manufacturers GPM = 50 per cent
- distributors (wholesalers) GPM = 10–15 per cent
- retailers or dealers GPM = 30–50 per cent.

For retailers or dealers, the lower figure is for selling a product that does not need after-sales support, while the higher figure is for retailers that need to show people how to use the product or that need to continue to support the product after the sale.

The guidelines laid out by gross profit margin pricing are of practical use to wholesalers and retailers who may deal with hundreds or even thousands of suppliers and products. At the executional level, the guidelines simplify the process for employees of working out prices as products come in from suppliers and then move on in the distribution system. However, a key limitation of this strategy is that it does not take into account the price consumers are willing to pay, or the prices being offered by competitor organisations.

CASE STUDY

Santa Lucia Wholefoods: Product development decisions

BY ELIZABETH GUNNER

Santa Lucia Wholefoods has been making dried pasta for over 15 years. They have always produced and sold just one product line: a standard dried pasta distributed at supermarkets in a range of shapes. Now, the company directors have decided to invest in producing a second product line so that they can increase company profits. The product development team are considering two options for the new line: luxury pastas or gluten-free pastas.

Currently, Santa Lucia Wholefoods sells 900,000 units of standard pasta annually at \$2.10 per pack. It is predicted that if they produced a luxury brand they would sell 500,000 units of it each year (at \$4.60 per pack); if they produced a gluten-free brand they would sell 750,000 units (at \$3.75 per pack). The variable costs per unit are \$0.70 for standard pasta, \$1.70 for luxury pasta and \$1.50 for gluten-free pasta. The annual fixed costs for the company are \$1,500,000.

| | Scenario A | | Scenario B | |
|-------------------------|------------|---------|------------|-------------|
| | Standard | Luxury | Standard | Gluten-Free |
| Estimated sales (units) | 900,000 | 500,000 | 900,000 | 750,000 |
| Price per 500 g pack | \$2.10 | \$4.60 | \$2.10 | \$3.75 |
| Variable cost per pack | \$0.70 | \$1.70 | \$0.70 | \$1.50 |

Questions

- 1 Divide the list below into fixed and variable costs:
 - a flour for making the pasta
 - b rental of the factory
 - c wages for employees
 - d eggs for making the pasta
 - e machinery within the factory
 - f packaging for the products
 - g maintenance on machinery
 - h advertising expenses.
- 2 Assuming that Santa Lucia Wholefoods achieves the predicted sales targets, what would the fixed cost allocation per unit be if they produced standard pasta and luxury pasta (scenario A)? What would the fixed cost allocation per unit be if they chose the gluten-free pasta instead of the luxury pasta (scenario B)? (Note: Fixed costs should be allocated evenly for all pasta units sold.)
- 3 Calculate the sales revenue for both products in both scenarios.
- 4 Which scenario would give a greater total profit for the firm?
- 5 For both scenarios, calculate the profit margin for each product.





Market-based pricing

Up until this point, the phone company we have been discussing has been inwardly focused on the information it has on hand. It produces phones and assumes that it can sell the phones it produces. It can also work out how well it is performing in terms of profits and margins.

However, if this company is to live in the real world, it must also pay attention to the competitive offers available on the market and the customers who buy them. The ability to sell a phone for \$18 or \$12 is not a given, but reflects the interaction of suppliers and customers in the marketplace. The prices the company is able to charge successfully reflect all the other products on offer.

Market-based pricing means different things in different contexts. Here it means pricing based on the prices of the competition. For the phone company, which is a small player in relation to Nokia or Samsung (which are clear market leaders), pricing might simply be a process of following what the leaders do—pricing similar products at the same or slightly lower prices to their competitors.

In many commodity markets, such as crude oil, bulk chemicals, basic foodstuffs and so on, market-based pricing is the norm. This is because the products these firms sell are often identical and there is rapid and complete communication of transaction prices. Firms in these categories don't make pricing decisions as such; rather, they take the price as given and adjust their outputs accordingly. For commodities, there is no alternative to market-based pricing.

Smaller companies, new entrants and low-cost competitors might also adopt market-based pricing. In essence, they set their prices with reference to the market leaders, generally at just under the leader's price. The pricing policy for this type of strategy is simply to price at a particular differential to the leader's price; for example, a new budget airline might always have a price of \$10 less than the market leader, or the daily rate for a rental car company might always be set at \$1 less than the bigger firms.

In practice, many companies use some form of market-based pricing. This is especially the case for smaller companies and those in categories dominated by large competitors; it can be a good way to grow and drive market share. However, following the leader too slavishly means letting competitors set the company's price, and does not allow a company to capitalise on changes in value perceptions, nor to build on any differences that customers may perceive between one company and its competitors. If a company wants to maximise profits, it needs to pay attention to what its competitors are doing, maintaining a realistic differential, and adjusting its own relative position to reflect current market conditions and customer perceptions of its offering—not forgetting to take account of how its own costs are changing.

* market-based pricing:

A pricing method in which an organisation evaluates the prices of similar products on the market and sets its own price so that it is competitive; also called competition-based pricing.



CASE STUDY**Give it away—and increase profits?**

BY DAG BENNETT

It used to be that downloading games onto a laptop or smartphone generally cost 99c or \$1. At that price, thousands of people bought games, generating a modest revenue stream for the game designers. But these days, there are many free games and millions of people who download them.

You might think that giving something away is a silly or risky strategy. However, many game and application designers have found that when they charge up-front for a product, sales stay small, but if they give the game away as a free download, millions of people will download it without thinking twice about it. Once they start playing, the games get 'sticky', or even addictive, and people will then become willing to pay for extra features to 'up' their game (e.g. new characters, extra lives, power-ups or special boosters). Even if only a small percentage of the millions of players buy extra features, the games makers still find they can increase their revenues.



One company that appeared particularly successful at this pricing strategy is Zynga, which capitalised on FarmVille and its other Facebook games with an initial public offering that raised US\$1 billion. FarmVille is free to play, but players can purchase 'farm cash' that can be used to make crops immediately ready for market. However, by 2015 Zynga was still losing money.

This strategy of giving something away, sometimes called 'freemium' pricing, presents customers with what they see as a great deal by allowing them to use a product as much as they like, and then decide to give a couple of dollars to the game developer. Once they pay, they also tend to play more. In addition, customers can then be exposed to new game features and other, again initially free, games.

The buying process can be made simple by including a virtual store inside a game. Flurry, a mobile software analytics firm, estimates that about 65 per cent of all revenue generated in the iPhone app store comes from free games that charge for extra goods or features. Apple makes it very easy for people to make purchases within apps by keeping credit cards on file. Google's app store, Google Play, on the other hand, initially struggled to generate revenue despite around 50 billion app downloads by 2015 because making payments was more difficult. The bottom line seems to be that free games can hook buyers, but purchasing has to be easy in order to deliver revenues.



The applications of freemium pricing are not confined to games—other companies that use it are LinkedIn for networking, Dropbox for file-sharing, Hulu for TV shows, and the B2B companies Box and Yammer. And yet, freemium pricing is not a guarantee of success in the marketplace. To be successful, a company has to offer something that the market wants in the first place. Then it must figure out the features that customers are willing to pay for, and at what price levels.

QUESTIONS

- 1 If a company has a freemium strategy, but is attracting few new customers, what might this indicate?
- 2 If a company's premium strategy attracts a lot of customers, but doesn't generate much revenue from them, what do you think they might be doing wrong?

Value-based pricing

In its broadest sense, **value-based pricing** means that pricing ought to relate to customer perceptions of value. In other words, customer perceptions ought to be the key driver of price. The question, of course, is how to arrive at a realistic view of those customer perceptions; historically, the answer has been 'market research'. Customer surveys, focus groups and elaborate choice models (e.g. conjoint analysis to estimate how customers value a product relative to its alternatives) have long been used to set prices, especially in consumer goods markets, and when new products are being introduced.

In practice, however, there are difficulties with this method. For example, it is very difficult to discern individual customer perceptions at the point of sale—unless there is an extremely astute salesperson on hand—so models rarely include the important influence of the sales environment. There is generally a difference between the 'value' that a potential buyer might place on a product and what they would actually pay in the marketplace. As always, what customers say and what they do are different things. Also, the inability to control the competitive environment means that a product never really faces the same set of competitors in the marketplace as it does in a research study. This apparent inconsistency is easy to understand because the real-world marketplace is flexible, with the number and type of offerings in constant flux, and therefore the situation that confronts the buyer at any given purchase occasion is likely to be unique. These methods ask people to think about product features and benefits much more than they normally would. Therefore, in research survey settings, people will place higher value on product features than they do in real life. In short, this means that companies almost always have to price lower than they would like.

* value-based pricing:

A method of pricing in which an organisation estimates the value of its product or service to the customer and uses that as its basis for setting price.

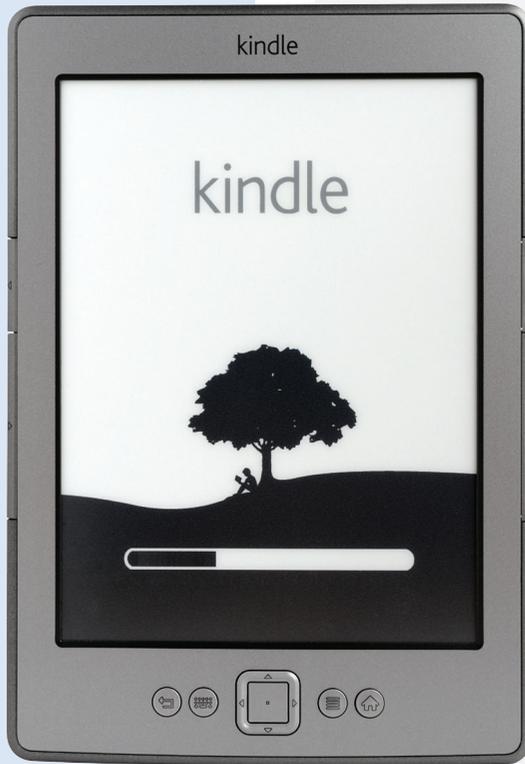
CASE STUDY

Kindle Fire: \$199 looks like a bargain

BY DAG BENNETT

In December 2011, Amazon introduced the Kindle Fire at a price of US\$199. The Fire had a seven-inch full colour touch screen, WiFi and a cloud-accelerated web browser with access to movies, games, apps, music and books. The Fire looked to be competitive with Apple's iPad2, although the iPad2 had more functions, and sold at the time for US\$499. How was it that Amazon could set a price that seemed so low?

According to CNN Money (2011), the answer lay in what was included in the machine and what was left out. Comparing the Fire with the iPad2, you can see that the cost (based on industry-standard parts) of the core components for the Fire was substantially lower:



| | Cost for Kindle Fire (\$) | Cost for Apple iPad2 (\$) |
|----------------------|---------------------------|---------------------------|
| TI processor | 18 | 25 |
| Hard drive | 8 | 20 |
| Battery | 12 | 20 |
| Glass touchscreen | 60 | 80 |
| Shell, components | 45 | 80 |
| Cameras, microphones | - | 45 |
| Total | 143 | 270 |

Across the board, lower componentry costs were achieved by installing a smaller hard drive, shifting memory functions to the cloud, and leaving out certain accessories altogether, such as cameras (the iPad2 had two of them). Even so, it is clear that the US\$56 difference between cost and list price did not leave much to cover costs of assembly or other expenses, or for profits, compared to the iPad's US\$229.

Apple routinely reports its sales figures, and claimed sales of around 11 million iPads in the last quarter of 2011. Amazon, on the other hand, was reticent about releasing its sales figures, but industry analysts estimated that 2 to 3 million Kindle Fires were bought in the holiday quarter, making it the bestselling competitor to the iPad.

Over the past three years, the competitive positions of the iPad and Kindle have remained much the same. The two brands are direct competitors, albeit



with different operating systems, and they have much the same capabilities, yet the iPad continues to sell at a price 50 per cent or more higher than Kindle Fire.

In the final quarter of 2014, Apple sold 21.4 million iPads, or about 28 per cent market share, more than the next four tablet manufacturers combined. Only about 1.7 million Kindle Fires were sold by Amazon, putting it in fifth place with about 2.3 per cent market share.

One key difference between the Amazon and Apple strategies is that Amazon uses its e-book reader as a platform to sell other Amazon products, such as Amazon Prime and Kindle Books. In other words, the Kindle Fire can be sold at a lower price than its functionality might indicate because it gives Amazon a built-in means of capturing additional revenue from customers.

Questions

- 1 When a person buys a Kindle Fire, what are they really buying?
- 2 Can you think of other examples of 'captive pricing', where the ownership of a product leads to sales of supporting products or services?
- 3 How low do you think the price of the Kindle Fire can go?
- 4 Can you think of any competitive strategies that Apple might adopt in response to the Kindle Fire?
- 5 Do you feel the Amazon strategy has been effective?

CRITICAL REFLECTION

- 1 What are the main differences between cost-based, market-based and value-based pricing?
 - 2 What are some of the pitfalls you might encounter in establishing what customers are willing to pay for something? What steps can you take to overcome these difficulties?
-

Pricing for new products

Many firms introduce new products on a regular basis. This is especially common in categories where technology is constantly evolving, making older products obsolete. New product launches are also prevalent in competitive situations where there is a great deal of pressure to respond to evolving consumer tastes, or to meet competitors' offerings. Of course, there is a great deal of difference in the level of newness between products. A new product might launch into an entirely new product category, or an improvement on existing product offering—which is sometimes captured in



technological fields with terms such as ‘next generation’ or ‘4G’. Smaller scale new products can be observed in the launch of new product variants, such as a cereal with reduced sugar or more raisins.

The question then is how much to charge for a new product. This can be especially difficult for new products with little historical information from which to make these decisions. The more the product differs from current offerings in the marketplace, the more uncertainty there is around predicting consumer demand and acceptable price levels.

Price too high and it may not sell. Price too low and not only may revenue suffer, but the new product may also fix its value position at the wrong point. The problem of starting too low is often compounded by the fact that it may be difficult to raise the price later. Clearly it is more dangerous to initially price a new product too low. Even so, the management consultants McKinsey estimate that 80 to 90 per cent of poorly chosen prices are too low.

The tendency to underprice can be attributed to many pressures, including customer demands, international competition (especially from low-cost manufacturing countries), and the increasing ease with which consumers can compare competitive offers (e.g. through comparison sites).

In addition, companies may overestimate the demand for their new product, or underestimate competitive reaction. They may also be trying to make a quick grab for market share—which is sometimes necessary to convince a retailer to keep stocking the new product—or aiming at a high return on investment, both of which appear harder to achieve with high prices.

In practice, firms often take an incremental approach to pricing, first studying the market to establish reference prices and competitive positioning. In relatively stable consumer goods markets this is fairly straightforward. Many new products are set at or near (usually a bit lower) that of a main competitor (see the next Industry insight). However, the potential danger of this approach is that it may underestimate the value of new products for customers.

New product pricing requires an in-depth understanding of the competitive landscape. That understanding should be dynamic, paying attention to marketplace evolution—new market entrants, new products from existing competitors and so on. With this in mind, a company can establish both the highest and lowest potential prices for its product and, most importantly, work out a **price-benefit position**.

* **price-benefit position:**

A summary of the benefit of a product to consumers (or potential consumers) and its price, usually in reference to competitors.

Reactionary as opposed to strategic pricing

In practice, decisions about new product pricing often happen later in the development process than they should—many companies start to think about the price just before launch. Given the tendency to underprice and the difficulties in



raising prices discussed earlier, this means that many new products achieve revenues lower than would otherwise be possible.

To be more effective, pricing considerations should be part of the earliest thinking in the innovation process. This thinking should involve evaluations about what customers value—or might value—and what they would be willing to pay for a feature. There is also a need to consider how to charge for a product or feature—will it be a one-off, or a subscription, or might it be bundled with other products?

New product pricing also needs to ensure that the focus on market needs or technological drivers that originally instigated the new product development is not diminished throughout the process. This can occur if the development team starts adding features (perhaps to keep up with competitors) or altering product inputs. These additions can lead to higher costs, in turn affecting price and volume projections.

The reality of setting prices

Cost-based pricing, market-based pricing and value-based pricing are all popular means of arriving at prices. Each method has its advocates and many companies do very well using one or another of these systems.

In practice, however, most companies are not purists when it comes to setting prices. Managers might start by using cost-based pricing, but they will also modify their approach when circumstances demand it. For example, during the 2008–09 recession, many industries faced contractions in demand and pressure to lower prices, and many companies were forced to adopt survival strategies in which they were only able to cover some of their costs. Even in more normal times, companies will react to the actions of their competitors by changing their prices.

Pricing is also subject to the current strategy in use by the company at the time—such as harvesting profits or growing market share—and the occasional trend in management such as ‘focusing on the customer’. In short, most companies are not strictly devoted to any one pricing approach. This is actually a survival instinct—any company that rigidly tried to stick to any of the approaches above would probably very quickly find itself in trouble. What is most often seen is a hybrid approach, using aspects of different methods, complemented by improvisation. In summary, pricing is an area with lots of imprecision, even confusion, and rarely a consistent justification or approach is applied across all pricing decisions.

INDUSTRY INSIGHT

In studies of the Global 1200 companies, the consultancy Mckinsey & Company found that operating profits average about 9 per cent, variable costs average 66 per cent and fixed costs 25 per cent. The actual figures for individual industries vary greatly; declining industries, for example, tend to have lower operating profits (Baker, Marn & Zawada, 2010b).

From a pricing standpoint, we can make some interesting deductions from these numbers. For example, with a 9 per cent profit margin, a 1 per cent increase in price will result in an 11 per cent increase in operating profit: $(1/9\% = 11\%)$. Similarly, a 1 per cent increase in sales will result in a 3.8 per cent profit increase, and a 1 per cent decrease in variable costs will increase profit by 7.2 per cent. Thus, while it is clear that reducing costs can increase profit, it is also apparent that the biggest impact on profit can be had from changes in price.



The obvious question from these numbers is: why don't companies raise their prices? The answer is that it is vital to understand how the marketplace—consumers and competitors—will react to such changes. No company is insulated from the reactions of both customers and competitors. In other words, price can be regarded as a dynamic variable. When price is changed, it has effects on the marketplace, which will affect sales levels and therefore profits. In short, marketers must have a notion of elasticity (which we will discuss in the next section).

Price changes

Perhaps the majority of pricing decisions are not about setting a price, but about changing an existing price. When a company changes the price it charges for a product, it will want to know what is likely to happen as a result. Generally, if the price of something goes up, then demand for it will go down, while if the price is lowered demand will increase. This is the law of supply and demand.

The key question in changing a price is: how much will demand change as a result? If the price goes up by 10 per cent, will demand go down by 10 per cent, or 20 per cent? The answer depends on how consumers respond. Will they cut back



purchases a little or a lot? This question of consumer responsiveness to price changes is measured by **price elasticity** (sometimes called ‘price elasticity of demand’).

Elasticity is a measure of responsiveness to price. Ultimately, we want to know how many fewer units we will sell if we increase the price by a certain amount. By expressing the change in price and volume as percentages, we can compare the measured change in price to the resulting measure of decrease in demand. Suppose the response to a price rise of 10 per cent is a decrease in demand of 20 per cent; the decrease in demand is twice the increase in price, which hints that consumers are sensitive or responsive to changes in price. Knowing how responsive consumers are to changes in price is important for any manager considering price changes. Using elasticity as a metric also allows easy comparison of effects across different price levels and changes, and across brands and categories.

Elasticity can be calculated in several ways. The simplest method is to divide the percentage change in quantity by the percentage change in price.

$$\text{Elasticity} = \frac{\text{Percentage change in quantity}}{\text{Percentage change in price}}$$

If price increases by 10 per cent and consumers respond by decreasing purchases by 20 per cent, the elasticity coefficient is $-20/10 = -2$. Elasticity results are always negative because changes in price lead to changes in the opposite direction in demand. In practice, since elasticity numbers are always negative, the minus sign is often dropped and we refer to an elasticity of 2. Dropping the minus sign is particularly relevant when referring to the magnitude of elasticity as being larger or higher when the coefficient is bigger (strictly, of course, -1 is a higher number than -3 , but we call an elasticity of -3 a larger elasticity).

The higher the elasticity number, the more elastic the demand.

Economists refer to a product as *inelastic* if its price elasticity is less than 1, and *elastic* if its elasticity is greater than 1. An elasticity coefficient of 2 indicates that consumers respond quite a lot to a change in price. If, on the other hand, a 10 per cent change in price causes only a 5 per cent decrease in sales, the elasticity coefficient will be only 0.5, less than 1. When elasticity is 1, revenue remains the same whether price is raised or lowered. If elasticity is greater than 1, a company wishing to increase revenue (i.e. price \times quantity) would be better off lowering its price, whereas if elasticity is less than 1, it could earn more revenue by raising the price. Whether price changes result in more *profit* is another story, which we will touch on later.

Highly addictive products such as cigarettes or cocaine, and products with few substitutes such as petrol (as a category, not brands of petrol), generally have a lower elasticity of demand than products with many substitutes. So these more broadly defined products have a lower elasticity than narrowly defined products that have many substitutes (e.g. fast-moving consumer goods). The price elasticity of demand for pasta will be lower than the price elasticity of vermicelli, and mobile phones will be less price elastic than Apple iPhones. Indeed, the price elasticity of brands

*** price elasticity:**

A measure of responsiveness to price, calculated as the percentage change in quantity divided by the percentage change in price.



in a category is always bigger, often much more so, than the category in total. For example, the Wikipedia entry on ‘price elasticity of demand’ (2017) quotes price elasticity for both Mountain Dew and Coca-Cola as 4, whereas the elasticity for the overall category of soft drinks is less than 1.

Time also plays a role in both consumer and producer responsiveness—the longer the time to adjust, the more adjustments will be made. When the price of petrol rose rapidly in 2007, the only adjustment consumers could initially make was to drive less. With time, they could also find jobs closer to home, or switch to more fuel-efficient cars or hybrids. As petrol prices climb even higher, the fall in demand is accelerating.

Marketing knowledge of price elasticity

This general knowledge about price changes is fairly well understood in business, but it is not particularly helpful because it is not specific enough for the situations under which most marketers operate. Nor does it have any underlying market-based principles to help guide a brand manager confronted with a pricing decision. Are there, for example, consistent factors that marketers should know about that either raise or lower customer responses to changes in price?

It turns out that such consistent factors do exist. Scriven and Ehrenberg (2004) did a series of tests in which consumers were confronted with changes in price. They were able to identify five factors that consistently raised elasticity:

- 1 Passing an explicit reference price—changing a brand’s price so that it becomes either more or less expensive than other brands, especially the brand leader.
- 2 Raising the price, rather than decreasing it—customers are more resistant to upward moves.
- 3 Starting at a price close to the average category price—implying that the middle of the price range is most competitive and brands that are located at extremes (either high or low) are less affected by changes in price.
- 4 Being a small-share brand—customers of small-share brands have many options to choose between and small brands are punished for getting out of line, but also gain relatively more when price is cut.
- 5 Signalling the price change—it helps to be noticed, which is why sales and price-related promotions are heavily publicised, and conversely why legislation is designed to stop manufacturers from trying to disguise price increases or claim cuts that are not genuine.

In practical terms, although larger cuts may produce bigger sales increases, marketers may find that small price cuts, to fractionally below the major competitors’ prices, are likely to be more profitable. Small price rises to just below the major competitors might increase profits even more. On the other hand, big brands and expensive brands seem to generate less response from lowering their prices and therefore would theoretically have little incentive to do so.

One explanation for these findings is that people often do not have an exact knowledge of the price of items they buy, even things they buy regularly and often.



However, they may have a reasonably accurate impression of where the brands they buy are ranked against other brands in the category. It is often the relative price—rather than the imperfectly remembered absolute price—that matters, which is why signalling is important. This is why some companies display price comparisons, or include a recommended retail price (RRP) on their price tags—it provides a basis for comparison or relative price position.

CRITICAL REFLECTION

- 1 Thinking about the five circumstances above that result in higher elasticity of price, are they intuitively what you would expect? Why do you think that?
 - 2 What are some of the strategic implications of the findings on elasticity? Do you think that small companies should adopt different pricing strategies than market leaders?
 - 3 Does market positioning play a role in pricing strategy?
 - 4 The next time you go shopping, look at a category or two of competing goods. What do you notice about the prices of competitive offerings? What is the highest price you see, and what is the lowest price? Do prices cluster around any particular level?
-

Promoting with temporary price cuts

Brands do sometimes change their regular price, usually when underlying costs increase or decrease, or when there is a major shift in competitive prices. But the most common form of price change is a **temporary price promotion**, where the brand reduces its price for a fixed short period. Why do brand managers do this? The obvious answers are to increase volume, increase profit and attract new customers. It turns out that only one of these is generally the outcome.

Temporary price cuts do increase volume, often dramatically, for the duration of the promotion. But as Ehrenberg, Hammond and Goodhardt (1994) found in their analysis of over 100 price promotions in consumer packaged goods categories, volume quickly returns to the ‘normal’ pre-promotion levels after the promotion ends. There is no carry-over from any new customers. Almost everybody who buys in a price promotion has bought the brand previously, so there are virtually no new customers. And buying in a promotion does not alter future propensity to buy (either up or down).

What about increasing profit? Even if the sale price is more than the marginal cost of production, there may not be extra profit, because of the margin given away on sales that would have been at full price if the promotion had not happened. Table 9.5 shows the level of sales uplift that would be required, for a brand with a contribution margin of 50 per cent at normal price, to break even at various combinations of price cut and contribution margin. It is easy to see that big price cuts require a massive increase in volume to avoid losing money.

* temporary price

promotion: Setting a price lower than the usual price or offering a special deal, e.g. two for the price of one—which is effectively a 50 per cent price cut—for a limited time. After the promotion period, the price goes back to the previous level.



TABLE 9.5 Sales uplift required to match contribution when price is reduced

| Price reduction (%) | Increase in sales needed to match current contribution (%) | Price elasticity needed |
|---------------------|--|-------------------------|
| 1 | 2 | 2.0 |
| 5 | 11 | 2.2 |
| 10 | 25 | 2.5 |
| 15 | 44 | 2.9 |
| 20 | 66 | 3.3 |
| 30 | 150 | 5.0 |

So the general conclusion is that price promotions do not stimulate long-term volume and often lose money generating the short-term ‘spike’ in additional sales. At best, temporary promotions might be seen as a defensive mechanism to help retain volume against competitors.

However, there is another issue, as price-promotion activity will cause competitors to also offer regular price cuts. There is evidence that in product categories where frequent price promotions are the norm, customers become used to buying ‘on deal’ and can usually find an acceptable brand available at a cut price. In these categories, as much as half the total category volume can be sold at cut-price, and nearly everybody buys ‘on deal’ at some time (see Table 9.6).

TABLE 9.6 The majority of consumers buy ‘on deal’ at some time

| Categories | Percentage volume on promotion | Percentage buying ‘on deal’ |
|---------------------------|--------------------------------|-----------------------------|
| Chilled and frozen pizzas | 55 | 83 |
| Toilet tissues | 41 | 82 |
| Yoghurt drinks | 35 | 68 |
| Cakes and biscuits | 32 | 98 |
| Fromage frais | 31 | 65 |
| Nappies | 31 | 71 |
| Baked beans | 23 | 62 |
| Air fresheners | 21 | 49 |
| Razor blades | 17 | 26 |
| Condiments and spices | 7 | 28 |
| Average | 29 | 62 |

Source: Kantar Worldpanel data, October 2014

Other reasons to cut prices might be to reach volume targets, to clear surplus stock or to satisfy trade requirements for promotional items. Clearing surplus stock should only be occasionally necessary—if not, you should look at your production planning or demand forecasting processes! The requirement to reach volume targets, especially those that require growth, is too complex a subject to address here. However, there



must be a question as to whether there is any real value in short-term volume blips achieved at the cost of reduced profitability, compared with using marketing spend to attempt to develop long-term repeat-buyers, with the profitability that can follow.

The issue of satisfying the trade is also complex. Supermarkets and other large chains believe that they need some special offers in order to continue to entice customers into their stores in what is a highly competitive business. Brand owners need to evaluate objectively how much they have to participate in (and indeed, fund) this activity, versus the alternative of using the money in other ways that would benefit the brand.

Finally, we will briefly mention **optimisation**. Is it possible to establish an optimum price? That depends on whether we are trying to optimise for volume, revenue or profit. It is impossible to find a solution that satisfies all three, and in practice the ideal price will involve a compromise of volume, revenue and profit objectives. Lower prices increase volume, but higher prices may deliver higher revenue, and higher prices still deliver maximum profit (but lower revenue and volume).

* **optimisation:** Setting the best price to achieve an organisation's objective, e.g. maximum profit, sales or profit margin.

Price segmentation

For any given product or service, customers will differ in the prices they are willing to pay. Even the same customer can differ in the price they will pay across different time periods and situations—think of how much you would pay for a cold drink at the peak of summer versus the middle of winter. When a single price is set for the entire market, it limits the potential sales and revenue the company can achieve. At any price point, there will be some customers that do not buy because they consider the price too high. At the same time, there will be customers that do purchase, but would have still done so if the price had been even higher.

When there are substantial differences in price sensitivity among customers, companies may use a **price segmentation** approach to pricing. This involves dividing the market into segments based on the prices they are willing to pay, and adjusting prices for each segment accordingly. Lower prices are offered to segments that are less willing or less able to pay, while segments with greater demand receive higher prices.

* **price segmentation:** Setting multiple prices for the same product or service across segments that have differing price sensitivity.

Price segmentation needs to satisfy a set of conditions for the strategy to be feasible. Firstly, customer membership into each segment needs to be easily identifiable in a buying situation. Customers are highly unlikely to identify themselves as belonging to a segment that will have to pay a higher price. The situation must also have a low likelihood of arbitrage. (Arbitrage is where members of the lower price segment purchase for the purpose of reselling to other segments at prices below what the company is offering them, e.g. a general store owner buying bulk amounts of non-perishable products from Costco and then reselling them in their store.) The segmentation should also be conducted in a manner that is considered fair to avoid any customer backlash or breaking any laws.



Price segmentation may be conducted on the basis of a consumer characteristic. Age is perhaps the most commonly used characteristic. Companies often offer discounts for children, students and senior citizens. The discounts are a way to increase sales among these groups that typically have less disposable income and are less able to pay. The wider community generally considers this type of price segmentation to be fair. Classification of these customers into the segments can be achieved relatively easily. Children can be identified visually, while students and senior citizens will typically have some form of ID they can provide.

Beyond age, there are limited opportunities for customer characteristics to be a basis for price segmentation. Segmenting on other observable characteristics, such as gender or race, can not only be considered unfair and unethical, but may also be illegal. There are opportunities in certain industries, such as insurance and financial services, where companies can require customers to provide detailed personal information. This information is then used to adjust prices for each customer.

Timing of purchase or consumption is another basis that can be used for price segmentation. If the demand for a category fluctuates, prices can be adjusted accordingly. Airlines use this strategy, where the price of a flight can differ depending on the time of year, day of the week, and time of the day. Airlines even charge customers different amounts for the exact same flight, depending on when the flight was purchased: people buying a flight closer to take-off will pay more.

*** price skimming:**

Launching a product at a high price to receive large margins from customers with high initial demand.

*** price penetration:**

Launching a product at a low price to achieve high initial sales volume.

Price skimming and **price penetration** strategies are other examples of how companies use time as a basis for segmentation. These strategies involve adjusting prices in accordance with the product life cycle. Price skimming can work when a new product has a feature that customers are willing to pay a premium for. The logic is to initially obtain large margins from the customer segment with high initial demand, and then lower prices to draw in more customers. Alternatively, with a price penetration strategy, a product is launched with a low price to attract as many customers as possible. Price can then be increased once the product establishes its position in the market.

Location is another commonly used basis for price segmentation. The demand for a product can depend on customers' current needs and situations. Providing convenience can add a premium to the price customers are willing to pay. The prices of identical products will generally be higher in a convenience store than in a supermarket. Similarly, the price of food and beverages at a major sporting event or a cinema will be higher than what most customers would consider reasonable in other everyday situations.

Differences in demand can also arise between different geographic locations, due to factors such as competition and the socio-demographic profile of the area. Fast food and retail chains often adjust prices between individual stores to match the demand of the surrounding region. Many companies will also adjust their prices when selling in multiple countries. In addition to adjusting for local differences in demand, international pricing will also need to take into account additional costs such as shipping, tariffs and other local taxes.



Application to business-to-business marketing

As mentioned in previous chapters, there are relatively few customers in most business markets. For example, in Australia there are just three companies producing a total of about 2 million tonnes of aluminium annually, in six smelting facilities (Australian Aluminium Council, 2010). So, the Australian markets for highly specialised production equipment and related technical services used by these smelting operations comprise just three customers—although collectively their annual purchases of smelting production equipment and related technical services would amount to many millions of dollars.

As this example indicates, for a B2B marketer, each of its largest customers could purchase a high proportion of its annual output. Consequently, such customers would have a relatively strong negotiating position with the supplier, since the loss of one of these large customers could result in a major loss of business and profits for the supplier. Clearly, in such situations, a marketer must consider each individual customer when developing pricing strategies.

Similarly, some organisational purchases relate to extremely large projects. For example, the Australian National Broadband Network forecasted a capital expenditure of more than \$35 billion (National Broadband Network Company, 2011). For a major supplier to this project, pricing would have been an extremely important issue because of the scale of operation, potentially becoming a strategic issue at the corporate level.

Therefore, one major difference between pricing within B2B marketing situations is the influence of individual (major) customers or projects on pricing strategy within B2B marketing. Some B2B marketing firms estimate the lifetime value of major prospects or customers, even applying discounted cashflow techniques to those calculations.

Another difference relates to negotiations. On the one hand, substantial negotiations between buyer and supplier organisations often occur within B2B marketing situations. For very large projects, such negotiations could involve employees from various functional areas within buyer and supplier organisations, extending over many months or even several years. Such lengthy negotiations almost never occur within B2C marketing. Conversely, some organisational customers, such as governments, require potential suppliers to submit pricing and related supply proposals via formal tenders (or bids), in which little or no negotiation is possible after the tender submission. Such tendering processes are virtually unknown within B2C marketing.

Since quantities purchased by large firms are so much greater than those purchased by households, prices paid by those organisations are much lower than those paid for similar products by individual consumers, even if there is a significant degree of customisation of products for particular organisational customers.

From the viewpoint of the organisational customer, price is often of secondary importance to total cost, or to other factors such as product quality or supply reliability. For example, a manufacturer needing to replace production equipment might consider



a high-quality but expensive brand of equipment to constitute a lower total cost of ownership (and production) than a low-quality but inexpensive brand, if the former is believed to have a much longer productive life and much lower maintenance costs. Similarly, a manufacturer of a high-quality, high-priced brand might prefer a supplier with a reputation for high-quality components, even if that supplier is more expensive than other suppliers lacking that reputation. Finally, if supply interruptions are extremely serious (perhaps involving a complete cessation of operations combined with high costs of restarting those operations), the organisation would probably prefer a supplier able to ensure supply continuity and reliability even at a higher price.

Such considerations are relevant to services as well as physical goods. For example, many large organisations (including governments) appear willing to pay high prices for advice from prestigious consulting firms rather than risk accepting advice from less expensive but unknown, smaller firms. Quite simply, the risk of implementing poor advice is far greater than the potential cost savings through lower consulting fees.

Conclusion

Pricing is complicated. Companies have to price their products to recover their overall costs and to try to generate a surplus (profit) to pay tax and a return to shareholders. But costs vary with volume, which in turn will vary with price. Businesses also have to consider the competitive landscape in which they operate, and the value they offer to the consumer relative to the landscape and consumers' wants.

While cost-based accounting and margins can set simple formulae for producing a price, these are subject to discretion in cost allocation, and do not consider the competition. There is no simple formula for producing an optimum price. In many companies, the price of products may have evolved without much strategic thought, through a combination of costs and response to competitive and intermediary pressure. This can be regarded as the natural result of market forces; however, smart companies will study their own pricing and market pricing continuously in order to understand the effects of their actions, and to improve (if not necessarily optimise) their price strategy.



Summary

- + There are many approaches to setting prices, from basic cost-based pricing to more sophisticated market-based pricing.
- + While many companies use cost-based pricing quite successfully, they cannot be sure that they are maximising profits, because the method is inwardly focused on company information and does not consider what customers are willing to pay.
- + Market-based pricing assesses what customers are willing to pay and from there the company can work out whether it can operate profitably.
- + Changes in input costs, competitive pressure, or the desire to increase sales or market share may drive a company to change its price level. To do so sensibly, it is vital that the company understands price elasticity—the effect that a change in price has on sales. The most important consideration in elasticity is whether a price change takes a price past that of the price leader or reference price, in which case a large change in sales can be expected.
- + Price-based promotions are an addiction for many marketers, and yet they generally do not add new customers, have only temporary sales effects and tend to have a large negative effect on profits.

REVISION QUESTIONS

- 1 Outline the basic approaches to cost-based pricing. Explain the limitations of each method.
- 2 How would you work out a gross profit margin target of 50 per cent?
- 3 What is price elasticity, and what is known about it in competitive market situations?
- 4 How do the pricing strategies followed by large firms and small firms differ?
- 5 Explain the different pressures exerted by sales, marketing, finance and production departments on pricing.
- 6 When pricing for a new product introduction, what considerations should be kept in mind during the new product development process?
- 7 Explain why the cheapest brand is generally not the largest brand in its category.
- 8 Explain why pricing is a compromise between organisational goals such as profit maximisation, sales volume and market share.
- 9 Give an example of how managerial decisions on cost allocation can affect market prices.

FURTHER READING

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WEBLINKS

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MAJOR CASE STUDY

The tyre case: Analysing your situation to make good pricing decisions

BY ELIZABETH GUNNER



Four different companies decide to enter the tyre market. Each company decides to produce a different product and, although their raw materials are exactly the same, the competition and demand for each market is quite different:

- *Company A* produces standard car tyres: demand is high but there are lots of established competitor brands including a few large-scale producers that control prices.
- *Company B* produces special tyres for army tanks: they are contracted by the government, and so they have only one customer and no competitors but the contract will be reviewed annually.
- *Company C* produces tyres for four-wheel-drive vehicles: demand is lower than for standard car tyres, but there is less competition.
- *Company D* produces tyres for fixed-gear bicycles: a growing market with few established competitors but with a growing number of new producers entering the market to meet growing consumer demand.

Questions

- 1 What are the different price-setting techniques that the companies could use to set their prices?
- 2 Select one pricing method for each firm and give a reason (or reasons) why you think this would be the most appropriate method.
- 3 Think about the differences in the customer base for each product. Which types of tyres would be more price elastic and why?
- 4 Carbon black is one of the key raw materials used to make tyres. The cost of carbon black has increased significantly, causing an increase in the production costs for all four tyre companies.
 - a Would this be an increase in fixed costs or variable costs?
 - b If all four companies raised their prices in response to the increased production cost, whose sales do you think would be most affected and why?
- 5 *Company D* is considering a temporary price promotion. List some scenarios where this could be a benefit for the company.



Mark Geraghty



General Manager, RACV
Motor Insurance

My first degree was a Bachelor of Science, majoring in chemistry. In fact, it wasn't until I'd finished studying and landed my first graduate job in a large consumer goods company that I became interested in marketing.

I was working as a scientist for Reckitt & Colman's product development department at the time, in a role that required close collaboration with the marketing team. I quickly found myself very interested in the work that the marketers were doing, and became more and more curious about their role within an organisation. Ultimately, it was this experience that inspired me to change career paths and enrol in a Masters of Commerce, majoring in marketing. My decision paid off quickly and, while still studying, I was promoted to the role of Assistant Brand Manager for Deodorants. It was my first hands-on experience: I learnt to analyse markets, identify opportunities for growth and execute marketing plans.

After that, I worked in a variety of marketing roles, gaining experience and developing the knowledge and skills that eventually led to my current role at RACV. Of course qualifications are vital, but the key skills for a senior managerial role are those that develop with experience: a combination of strategic and analytical thinking, relationship management skills and the commercial understanding to make sound business decisions.

Being a marketer does mean hard work—you might face a limited budget and often strong internal pressure to perform, but you'll never be bored. That's probably the thing I like best about my role at RACV: no two days are ever the same. Of course, the core responsibility is always to develop and execute the marketing plan, but this breaks down into so many areas: pricing decisions, identifying opportunities for product development, monitoring sales, managing the communication of key product and branding messages (using different media) and so much more.



RACV has a huge range of products, so one of the most important aspects of my job is always keeping the big picture in mind—each decision needs to fit with the long-term strategic plan for that product, the product category and the organisation as a whole. It's a lot to be on top of, but it is also incredibly satisfying when you see the results of all your hard work.