'Whether you are a potential business school student or an experienced executive, this is the must-have reference guide to MBA models.'

STEPHEN MARTIN, Director General, Institute of Directors



# MBA MODELS

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theories were adapted to the realities of the business world. For example, by creating slightly different products at different price points, firms could take advantage of the different levels of 'willingness to pay' from their prospective customers. Prices were also seen as changing over time – for example, as the cost of production came down. And the pricing strategies of competitors were also brought into the mix, often using game theory to help predict how they might respond when, for example, you raise your prices.

The notion of dynamic pricing, while it had existed earlier, really took off in the dawn of the internet era. Internet technology gave firms more detailed information about customers' buying behaviour than before, and at the same time the internet created enormous transparency on pricing of products and services. These trends have allowed firms in many industries to adjust their prices in real time – increasing them when demand is high and reducing them when it is low.

#### What it is

Your pricing strategy depends on three broad sets of factors. The first is the profit targets that your product/service is expected to achieve; most companies have clear expectations about what is an acceptable level of profitability. The second is customer demand, and the overall willingness to pay. The third is competition: in an established market, your pricing strategy is highly constrained by current prices; in a new market, where you don't have immediate competitors, you clearly have a far greater degree of freedom in what you can charge.

Taking these sets of factors into account, your pricing strategy is then a strategic choice that typically seeks to maximise your profitability over the long term. A number of different models are used, often varying significantly by industry:

 Target-return pricing: Set the price to achieve a target returnon-investment. This is very common in established categories, such as most supermarket products.

- Cost-plus pricing: Set the price at the production cost, plus a
  certain profit margin. This is becoming less common but is
  still seen in some sectors for example, government
  procurement.
- Value-based pricing: Base the price on the effective value to the customer, relative to alternative products. This is common in emerging product areas, such as games and written content online, or a new line of smartphones.
- Psychological pricing: Base the price on factors such as signals of product quality or prestige, or what the consumer perceives to be fair. Many luxury goods are priced in this way.

Over the last 15 years, 'dynamic pricing' has emerged as a fifth model. It is particularly common in markets where the product is 'perishable' and the available capacity is fixed – for example, airline seats, holiday bookings and hotel rooms. And it has been made possible by the internet, which gives both customers and suppliers much greater information than they had before. In these markets, you want to charge as much as possible to fill up all the available capacity. This is why skiing holidays cost twice as much during half-term holidays as in the regular season, and why airline prices vary almost on a daily basis.

### How to use it

Here is an example of dynamic pricing. If you want to book a hotel room online, you will notice that the prices vary from day to day. From the hotel's point of view, the right rate to charge for a room per night is what the customer is prepared to pay. If the rate is too low, they are leaving money on the table; if the rate is too high, they may price themselves out of the market. So the changes in prices are all about the hotel trying to match supply and demand. As demand increases, prices rise; if demand stalls, prices go down again. As the date of your hotel stay approaches, the situation becomes even more complex, because the hotel realises it would prefer to sell an available room at a very low price rather than leave

it empty. If you end up booking at the last minute, you sometimes get a great deal (because there is a lot of unsold demand) and you sometimes pay a fortune (because there are only a few rooms left).

The techniques that firms use for dynamic pricing are complex. They involve lots of information about prior demand levels, expectations about future demand, competitor products and prices, and the volume of products you have available to sell over what period. Pricing changes typically are made automatically using software agents called pricing 'bots'.

#### Top practical tip

The most important thing in defining your pricing strategy is to understand your customer's willingness to pay. It is easy to figure out how much your product costs and to use that information to anchor your price. But it is typically better to start out by asking how much value the customer gets from your product, and to work back from there. Sometimes, it is even possible to increase the perceived value of the product by charging more for it (this works for luxury goods, for example).

The advent of the internet has made it much easier to experiment with different pricing strategies, and to adapt pricing quickly in response to demand. Amazon.com was a pioneer in the dynamic pricing of books, and low-cost airlines easyJet.com and Southwest Airlines were early movers in dynamic pricing in their industry.

#### Top pitfalls

There are a couple of obvious pitfalls associated with dynamic pricing. One is that you don't want to become too well known for dropping your prices to very low levels when demand is low. Customers will figure out you are doing this, and they will withhold their purchase until the last minute. Many firms get around this problem by selling their lowest-price products in a disguised way through a middleman: for example, if you want to get a deal on a hotel room through lastminute.com, you often don't find out the name of the hotel until you have actually booked it.

Another pitfall is that too much variation in pricing can upset customers – they might perceive the differences as unfair and they can become confused, which leads them to take their custom elsewhere. Most firms that use dynamic pricing are careful not to change their prices too much or too often.

## **Further reading**

**Raju**, J. and Zhang, Z.J. (2010) *Smart Pricing: How Google, Priceline and leading businesses use pricing innovation for profitability*. Upper Saddle River, NJ: FT Press.

**Vaidyanathan, J. and Baker, T.** (2003) 'The internet as an enabler for dynamic pricing of goods', *IEEE Transactions on Engineering Management*, 50(4): 470–477.