# Costing and Pricing a Product or Service 

Business Information Factsheet
BIF054 • January 2020

## Introduction

Setting the right price for a new product or service can be one of the hardest tasks faced by small business owners. Costing a product or service is relatively straightforward, but pricing is essentially set by the marketplace.

The price of a product or service needs to cover all the costs and allow for a profit, but it must also take account of what competitors are charging and how much customers will be prepared to pay. Setting too high a price can lead to lost sales. Setting too low a price will reduce profits and possibly result in the business failing.

It is important to understand the impact of pricing on profitability and be able to choose the best pricing strategy for a business. This factsheet outlines some of the costing and pricing issues that should be considered and looks at alternative pricing strategies that can be used.

## Glossary of common terms

This section outlines some of the most common terminology used when considering costs and pricing.

## Costs

- Direct costs. The direct cost of a product or service is the cost incurred in producing and supplying the product or service. These costs are also known as variable costs, because they vary in direct proportion to the number of units produced. Direct costs include, for example, the cost of raw materials, bought-in components or goods and direct wages (that is the wages of staff employed specifically to produce the product or service).
- Fixed costs. Every business has costs that are incurred regardless of whether any products are produced or sold. These fixed costs are also known as overhead costs and include items such as the owner's salary or drawings, employee salaries, rent, rates, insurance and depreciation in the value of any fixed assets such as machinery and equipment.


## Pricing

- Cost-plus pricing. This is a traditional method of calculating the price to charge and is often used in pricing products rather than services. It is based on applying a percentage markup on top of the direct costs of a product in order to cover fixed costs and make a profit.
- Value-based pricing. This involves setting a price based on what the market will bear. The impact of factors such as fashion, convenience and market share affect the price level that can be achieved.


## Profit

- Breakeven point. The breakeven point is the point at which revenue from sales exactly equals all the costs incurred by a business. A higher level of sales will result in a profit; fewer sales will result in a loss.
- Gross profit. Gross profit is the selling price minus the direct costs involved in making a product or delivering a service.
- Operating profit. A business's operating profit is the gross profit minus the fixed costs.
- Contribution. As long as a business sells a product for a higher price than the direct cost, the income received from the sale of the product will make a contribution to the fixed costs of the business and then to the operating profit. If a business sells a range of products, it should look at the gross profit generated by each product to compare their contribution. The product that has the highest volume of sales may not have the highest level of contribution, but could still be a useful product for the business to offer in order to attract and retain customers.


## Understanding costs

In essence, costing and pricing is very simple: work out all the costs and then charge a price that is higher than those costs. In practice, the process is more complicated as it is sometimes difficult to identify exactly what are variable costs and what are fixed costs.

All costs incurred by a business ultimately need to be covered by the sales of its products or services, so that the more it sells, the less contribution is needed from each unit sold in order to cover the overheads. Costing therefore depends on an estimate of how many products or hours of time the business can sell.

## Calculating costs for a production-based business

A production-based business can calculate the total cost per unit produced, but it will need to know the direct costs for each unit, as well as the actual or expected fixed costs for the business. A business producing just one product will need to divide its total fixed costs by the number of units it expects to produce. Adding this figure to the direct cost per unit will give the total cost per unit. If a business produces several products, it will need to apportion its fixed costs to each different product range, and divide by the number of units produced in each range.

For example, consider a cabinet maker's business that makes desks to order. The business expects to make and sell 100 desks during the year. The direct costs of materials used to make each desk, such as wood, glue, screws and packaging, are $£ 50$. The total fixed costs or overheads of the business (which includes the value of the owner's time) for the year are estimated to be $£ 30,000$, which gives a fixed cost for each desk of $£ 300$. The total cost to produce each desk is therefore £350.

If the business makes and sells more than 100 desks during the year, the direct cost of each desk will stay the same but the fixed cost and therefore the total cost of each desk will be reduced. Table 1 shows the effect on the fixed cost and the total cost of each desk if the business increases the number of units made:

## Table 1

| Number of desks made | 100 | 150 | 200 |
| :--- | :---: | :---: | :---: |
| Direct (variable) cost per desk | $£ 50$ | $£ 50$ | $£ 50$ |
| Total fixed (overhead) costs | $£ 30,000$ | $£ 30,000$ | $£ 30,000$ |
| Fixed cost per desk | $£ 300$ | $£ 200$ | $£ 150$ |
| Total cost to produce a desk | $£ 350$ | $£ 250$ | $£ 200$ |

Assuming that there are no additional costs incurred, the business can significantly reduce the cost of producing each desk by increasing the number made, so the business could consider selling the desks at a lower price if it adopts a cost-plus pricing approach, or it could maintain the price and achieve a much higher profit if it adopts a value-based pricing approach.

## Calculating costs for a service-based business

A service-based business will need to be able to calculate its average daily or hourly cost. When calculating costs, it is important to understand that not all working hours will be productive and that most service businesses have low direct costs and high fixed costs.

A service-based business needs to consider the amount of time that will be required for promoting the business, buying supplies, managing the business and doing other administrative jobs. An allowance will also need to be made for any holidays staff take and any other time off, such as for illness. To calculate the daily cost, the annual fixed costs of the business should be divided by the number of productive days expected over the course of the year. It is possible to calculate an hourly cost to the business by dividing this figure by the number of hours worked each day.

For example, a photographer may have total overheads in a year of $£ 30,000$, which include their salary, office and vehicle running costs. After allowing for holidays, the photographer estimates that around 200 days of their time will be sold every year. They expect to average five chargeable hours per day, which will leave them time to do marketing and administration tasks, and this equates to 1,000 productive hours per year. Therefore, the photographer's daily cost is $£ 150$ and their hourly cost is $£ 30$. In order to be able to determine a selling price, they will also need to add their direct costs (travel and printing costs) and a profit margin.

## Setting prices

There are two main steps to follow when setting a price:

- Determine the costs of producing a product or delivering a service.
- Set a price that is high enough to cover the costs, but low enough to be competitive.

In the example of the photographer, their average hourly cost is $£ 30$. If they adopted a cost-plus pricing approach for a one-day assignment involving 7.5 hours' work, they would charge their time $(7.5 \times £ 30=£ 225)+$ direct costs for travel and printing ( $£ 40)+$ profit margin $(20 \%=£ 53)+$ VAT ( $20 \%=£ 63.60$ ), which would give a total price of $£ 381.60$.

However, if their market research revealed that the going day rate for photographers in their area is $£ 500$, they could charge on a value-based approach at a rate that the market would bear, and earn considerably more.

It is important for any business to research their market carefully to determine the price range that they will be able to charge. This can be difficult for start ups, since they may have little information on which to base their pricing decision. They can only refer to the prices charged by their competitors and compare these with the market research they have carried out with potential customers.

Once a business is established, pricing becomes easier since it can adjust its prices up and down and review the effect this has on demand.

Prices can always be changed, but there may be customer resistance if an increase is too great or if prices are changed too frequently. Ultimately, the price that is charged depends on what the market will stand - that is, on how much the customer is prepared to pay. By understanding the true cost of producing a product or delivering a service, it is possible to make a decision as to whether it is cost effective for the business to sell goods or services at that price.

## Understanding pricing and profit

It is important to understand the impact of charging different prices for a product or service. Table 2 shows the effect on profitability of increases in the price of a product at the same volume of sales.

## Table 2

| Selling price | $£ 45$ | $£ 50$ | $£ 55$ |
| :--- | :---: | :---: | :---: |
| Revenue from sales of 1,000 units | $£ 45,000$ | $£ 50,000$ | $£ 55,000$ |
| Direct (variable) costs | $£ 20,000$ | $£ 20,000$ | $£ 20,000$ |
| Gross profit | $\mathbf{£ 2 5 , 0 0 0}$ | $\mathbf{£ 3 0 , 0 0 0}$ | $\mathbf{£ 3 5 , 0 0 0}$ |
| Fixed (overhead) costs | $£ 25,000$ | $£ 25,000$ | $£ 25,000$ |
| Operating profit | $\mathbf{£ 0}$ | $\mathbf{£ 5 , 0 0 0}$ | $\mathbf{£ 1 0 , 0 0 0}$ |

At the lowest selling price of $£ 45$, the business is operating at its breakeven point. It generates a small operating profit at a selling price of $£ 50$, but it can increase its operating profit by $100 \%$ if it can sell the product at $£ 55$.

## Pricing and sales volumes

The price at which a business sells its products will have an impact on the number of units it is able to sell. However, just selling a greater volume of products does not mean that the business will generate a higher profit. Table 3 shows the number of products that need to be sold at different prices to achieve a gross profit of $£ 35,000$, which generates an operating profit of £10,000.

## Table 3

| Selling price | $£ 45$ | $£ 50$ | $£ 55$ |
| :--- | :---: | :---: | :---: |
| Number of units sold | 1,400 | 1,167 | 1,000 |
| Revenue from sales | $£ 63,000$ | $£ 58,350$ | $£ 55,000$ |
| Direct (variable) costs | $£ 28,000$ | $£ 23,350$ | $£ 20,000$ |
| Gross profit | $£ 35,000$ | $£ 35,000$ | $£ \mathbf{~}$ |

In this example, the business has to sell $40 \%$ more units at a price of $£ 45$ to achieve the same level of profitability it can achieve by selling 1,000 units at $£ 55$. This may be an important consideration if the business has limited production capacity, which may determine the maximum output that can be produced by a machine or a person.

## Pricing against competitors

Many start ups have difficulty calculating the direct costs of their products or services before they start trading and, as a result, effectively let their competitors set the price. They think that as long as they undercut that price, they will succeed. But this approach to pricing is a strategy that often fails for a new business. Because a new business lacks the economies of scale necessary to make its price really competitive, it can end up being unable to make a profit, which is necessary to sustain the business.

Although price is an important consideration for customers, products and services can be differentiated in comparison to competitors in many other ways. Often there are also other factors involved in customers' buying decisions, such as the level of pre-sales service and postsale support provided.

## Other pricing considerations

There are a number of other issues that may affect the prices a business charges.

## Flexible pricing

A business might offer special prices across a range of products at different times of the year.

## Volume discounts

There may be a number of advantages to offering price discounts for customers who make bulk purchases:

- The lower gross profit per unit sold is offset by the higher total gross profit generated by the total bulk order.
- There will be lower costs associated with supplying one larger order to one customer.
- By achieving higher total sales for a product, a business may be able to achieve lower unit costs for each product, due to increases in its productivity and buying power. This reduction in cost can allow the business to increase its gross profit, even though its average unit selling price is lower.


## Total customer value

By understanding the total potential value to a business of an individual customer, it may be possible to achieve a higher gross profit by selling a range of products to that customer at lower prices than the business would typically charge for each individual product.

It may be possible to negotiate fixed prices for the products that the business supplies, based on the customer committing to purchase a minimum volume of the products over an agreed term, so that they will treat the business as their sole or preferred supplier for those products.

Although the business will generate a lower gross profit on individual products sold, the total gross profit generated from the full range of products sold to that customer will be greater, so the business will be more profitable.

## Variable prices

A business might charge different prices for providing premium services at unsociable hours or charge variable rates depending on the season, for example if the business is in the tourism sector.

## Further information

BIF008 Understanding Profit and Loss Accounts
BIF058 How to Forecast Cash Flow
BIF185 Checklist for Start-up Market Research
BIF236 How to Forecast Sales
BIF547 Supply Chain Management

DISCLAIMER While all reasonable efforts have been made, the publisher makes no warranties that this information is accurate and up-to-date and will not be responsible for any errors or omissions in the information nor any consequences of any errors or omissions. Professional advice should be sought where appropriate.

Cobweb Information Ltd, YBN, 7 \& 8 Delta Bank Road, Metro Riverside Park, Gateshead, NE11 9DJ.
Tel: 01914618000 Website: www.cobwebinfo.com

