

Calculating **break-even** *Point*

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Before you start your own business and, maybe, leave the current one, try to work out whether your entrepreneurial venture be worth the risk.

You may be convinced that there is a real demand for your product or service and that the market will pay your price. The next step is to work out how much you have to sell each month (the time spent or the amount of product) to profit.

Usually it is unrealistic to expect your business to be profitable from the first day, especially because you have to spend money on marketing in order to attract customers. Sales will probably be slow at the beginning, but with hope to take the swing.

In the meantime, you have your certain fixed costs (general expenses) that you must pay each month in order to continue with business. These include the rent, installment

loans, utilities, interest on debts, telephone and internet connection, etc.

In addition, you have other costs that will vary depending on sales levels. These variable costs include materials used for manufacture of products or for inventories, shipping cost, commission or overtime for the production of goods.

All this means that the average business in the early stages will operate with a loss up to a point where the income from the sale is the same as operating costs. This is known as the break-even point. If sales continue to grow, you will start to make a profit every month.

Below are two quick and applicable way to test the viability of your business venture. In any case, it is assumed that you know the fixed costs and variable costs of producing goods or providing services.

Manufacturing company

Here are examples of companies that manufactures wooden garden benches.

First, develop a gross margin for each bench. That is the difference between the selling price of the product and variable costs of production. For example:

The cost of each bench

You have decided that the real market price of the bench is 120 kn

The cost of the workforce (40 kn) and material (25 kn) for each bench is 65 kn

The difference between 120 kn and 65 kn is your gross margin of 55 kn

In order to justify the risk, you want this profit each year 80,000 kn

General operating costs of your business are 20,000 kn

Thus, the gross margin that you need from the sale is 100,000 kn

Required sales

To find out how many benches you have to sell every year to fill in your income goal, divide the required 100,000 gross margin per annum by gross margin by a bench of 55 kn. The result shows that you need to sell 1,818 benches per year.

What is the average per week? If you decide that you want a break of at least four weeks every year, divide 1,818 by 48 weeks and your targeted break-even point is 38 benches per week.

So, you think you can sell an average of 38 benches per week? Remember, this is only a break-even point. It will cover the necessary earnings, but there is no additional profit margin necessary for the growth of your business.

Try out your own calculations.



Service Company

In the service company, you sell your time, so you can take a slightly different viewing angle. Let us suppose you have the same goals and you work alone, except one person working part-time performing administrative tasks so that you can spend more time on customers. This income adds 20,000 kn to your overall operating costs.

What you want from your company

In order to justify the risk, you want this profit each year	80,000 kn
General operating costs of your business are	40,000 kn
Thus, the gross margin of sales that you need is	120,000 kn

Available time

You decide to work five days a week in 48 weeks or 240 days a year. Subtract 15 days of sick leave and public holiday, leaving a total of 225 working days.

You are planning to invest 8 hours a day, but subtract another 3 hours for travelling and working such as the preparation of tenders and contracts. This leaves 5 billable hours a day.

Working hour price

You are now ready to calculate the cost of your working hours.

Billable hours per year = 5×225 or 1,125 hours.

Divide your goal of 120,000 kn by 1,125 billable hours and your minimum wage per hour must be 107 kn. Remember, this is only the calculation of coverage to cover operating costs and desired profit. There is no additional profit for business expansion.

The issues that you have to think about:

- What is the working hour cost of 107 kn compared with the industry average. Is it competitive?
- Can you really charge 535 kn per day (107×5 billable hours) or 2,675 kn every 5 working days a week?

Try with your calculation to see what hourly rates you will get and decide whether the hourly rate competitive and profitable. Will you be able to meet the goal of 25 billable hours each week? Your business will operate with a loss until you complete that goal.

Use the cash flow forecast

Cash flow forecast is a useful way to check the calculation of your break-even point. Completion of forecasts will make you think more carefully about variable and fixed costs. Consult, if necessary, with your accountant because part of some costs, such as additional use of electricity, according to the rule belongs to the variable costs of production, rather than fixed costs.

Completion of the sales forecasts of cash flow will also help you identify what your entrepreneurial venture might need to cover.

For example, in the production the company will need to sell 1,818 garden benches during the year. However, the demand is likely to be very low in the winter before it rises again in the spring. Meanwhile, operating expenses need to be paid every month.

Lower value of calculation for each month will show you when the business is likely to reach the break-even point and how much money you will need for business to continue to operate.

Next Steps

- Determine the break-even point of your business, and arrange with the accountant to check your calculations
- Pay attention to all sales expectations - make sure they are based on good market research
- Make sure you have not overlooked some costs, such as paying taxes or irregular payments such as insurance premiums
- Use a forecast cash flow to determine how many resources you need as working capital to keep your business in motion until it begins to make a profit
- Decide if you can earn enough from your business venture to justify the effort and risk

Determine the price of your products

There are many ways to reach the price that will be charged to customers. Whichever method you use to determine the price of the product, you must know how much it costs to offer your product, in order to make sure that you are able to do business with profit.

Determine your cost

The first step is always to determine how much it costs us to offer/deliver the product. To do this, determine the direct and indirect costs (also known as fixed and variable costs) involved in the production and delivery of your product.



The manufacturer should, for example determine the total cost of all materials used in the manufacture of the product, as well as some costs, such as salaries and wages (including production and administrative personnel), rents and fees, transport and insurance, office supplies and utilities.

Retailer's costs will include the cost of the product or group of products if they are connected in the package and overheads including salaries, advertising, rent etc.

Ask your accountant or financial advisor to review your calculations/figures to make sure you have not overlooked an important cost.

Costs-plus pricing model

With the method for determining cost-plus pricing, you add a fixed percentage of the total cost to ensure an acceptable level of profit. Manufacturers will often add between 40 and 50% on the product cost to reach the selling price. Therefore, if the production of the product costs 20 kn, the selling price will be between 28 kn and 30 kn.

The method of cost-plus pricing works best in a market with a lot of price competition and high sales volume. Be aware that this model is based on input costs and ignores other factors such as the customer's perception of quality, the price the market would pay for the product and how much your competitors charge.

Pricing model based on values

With the method of pricing based on the value, your price is not based on cost but on what we believe that customers will be willing to pay for the product. The method of determining the price based on the value gives you the flexibility to reach the price that is higher than that specified in the method of determining cost-plus pricing, allowing you to create perceived value of your product.

The method of determining the price based on the value works best in a market where you have a distinct advantage over their competitors and where you have established customers who are willing to pay a premium for your product - either because of the quality, as the first on the market with the latest technology or because you offer organic or environmentally friendly opportunities which your competitors do not provide.

Competitive oriented pricing methods

With competition-oriented method of determining the price, the price of your product will be based on the price charged to your competitors. If you feel you have an advantage on the market and people perceive your product as superior, you can decide to set the price slightly above the maximum rates charged by your competitor.

If you want that others start to perceive you as a manufacturer that offers good quality at a reasonable price, you can set the price of your products to about 10 to 20% below your market competitors. If you want to be perceived as a manufacturer that offers value for money, you can set a price around the level or just below, from the lowest price charged by your competitors.

Prestigious pricing method

If you are the first on market with a new product or have a well-known brand, you can consider the prestige pricing. Similar to the pricing model based on the value, you charge what you think

your customers will pay - adding a premium for the prestige associated with the purchase of top fashion brand and the latest technology.

Most small businesses will probably not use this pricing model, but you can consider it if you develop a leading brand and market-leading product.

Loss leader pricing methods (strategies of market penetration)

One fairly common tactic is to lure customers into your stores with loss leader method which you use to determine your prices well below the prices of their competitors, sometimes even below the cost of products, to encourage customers to come and buy from your store with the expectation that once they come, they will buy other products at normal price.

Supermarkets are known for their use of loss leader methods on daily price-sensitive products, such as milk and bread, on the assumption that most people will buy other groceries once they are already in the store.

Loss Leader method can be an effective way to attract new customers, but you must ensure sufficient sales of other products so you can benefit from it. If people are buying only loss leader products from you and they do not visit your store again, you will lose money.

Discounts

Offering discounts, such as 20% for a limited period can be an effective way to increase sales, but the reduction should not become so regular so people would look for it. If you offer regular, predictable discounts, your customers will soon learn to wait for regular discounts, and they will not buy a product at the normal price.

It is also interesting to note that most customers see a free gift as more valuable than a discount – you should rather consider to think to offer a free sample of the product with the purchase, than simply offer a 15% discount.

Volume discounts

With the model of volume discount, you will offer your customers the savings if they buy more products. You can specify the price of one product to 5 kn, but offer customers a discount on the amount of the three items for 10 kn. With volume discounts, it would be good to set your volume discount price on your standard cost plus percentage and add the extra cost to each individual product.

Pricing below a round number

If the price you specify for your products is close to the psychological level or obstacles such as 10 kn, where 9.99 kn is perceived as cheaper, you can decide to lower the price and keep it under 10 kn. Alternatively, you can choose to increase the price to 12.99 kn (still under the next round price of 15 kn), with the expectation that the increase in profit will compensate somewhat less sales revenue.



Determine the price for your service

Many providers simply set a price somewhere near the middle of the prevailing market levels. But, it is better to calculate the overall cost and price schedule to determine what price should be charged to ensure that the income from your business meets your expectations.

Your general operating expenses

The first thing you should determine is how much money you need to cover your overhead or fixed costs for a year. Be sure to include all the costs of rent, utilities, advertising, computer and internet costs, stationery and postage, administration and transportation costs.

Ask your accountant or financial advisor to check your calculations to see if you forgot to include something.

Your earnings

Determine how much money you want to (or can) earn in a year. This can be based on your personal expenses and bills that you have to pay or it can be based on current industrial rate for someone of your level of experience and ability. If you use a specific rate of other service providers in your area, remember that this will not be the rate of net earnings - it will be the rate charged to customers, and will include their overall costs.