

# ROI CALCULATOR



How to use Example

### **ROI Calculator**

The ROI, also known as Return On Investment, Calculator helps you to calculate if your earnings are enough to recover initial investments. You can use the ROI Calculator if you make an investment for your first product or service. With the ROI calculator you calculate whether you will earn back your investment with the sale of this product or service.

### Tips for use

You can use the ROI Calculator yourself but it is useful to get help from someone who has deeper financial knowledge, such as someone from your finance department (if you have one).

Do you already have existing products or services and invest in an addition to your company (for example a new line). Then you can also include the income from your other products/services in the Calculator.

#### How to use

Follow the steps to make an ROI Calculation.

#### The investment

Start with your initial investment. Estimate how much the new product or service will cost to develop, produce and bring to market. Think of all the costs that related to the new product or service:

- Development,
- Buying needed machines or machine parts,
- Costs for buildings or adjustments to buildings,
- Costs of knowledge,
- Other things that you will need to be able to create your product.

The investment does not include the costs for materials or personnel needed for creating a product. So only include the initial purchasing costs, not the maintenance costs.

#### **Taxes**

A part of your income needs to be paid to the government or state as a corporate tax, also known as income tax. This tax is applied to the net profit, so the revenue minus the costs. Enter the right tax percentage for your country or region. To get a good estimate of your return on investment you have to take the taxes into account. Write your tax percentage in the Calculator.

#### **Products sold**

The chance that you will earn back your investment within less than a year is slim. Therefore, a forecast is made over several years. You can choose for how many years you want to calculate your return. If you choose a longer periode, keep in mind that this bears more risk since there is a higher chance that your estimations are wrong. Estimate

the number of products that you will sell in each year. You can choose to estimate for up to five years.

Keep in mind that a strong growth in sales can also lead to new costs or additional investments. For example, if you have to hire new staff to meet the demand.

#### **Price**

What is the price that you will ask for each product? Enter the price of your product on the sheet. Think about whether you are going to increase or decrease your price during the years. If you think that your price will change within a year then take the average price.

#### Costs

To get a realistic estimate of your Return on Investment, you also need to take into account costs. There are two types of costs:

- Variable costs meaning those costs that only exist when a product is being made. Think of materials, production materials or labor. Enter the variable costs per product for each year.
- Fixed costs are costs that occur independent of the number of products made. Think of loans, insurance, rent, gas, electricity, water or phones.

#### Return on investment and payback period

Once you have entered all the necessary information, the Excel sheet gives you the results. The Excel also shows you the development of the cashflow and the estimated payback period.

The first result is the Return on Investment. If it says that there is a "negative return on investment" it means that you have not earned back your investment. When the return of investment shows a percentage it means that at the end of the period you have earned back your investment and even more than that. For example, if you made a € 1,000 investment and the return on investment shows 75%, you have earned back the € 1,000 and at the end of the period you have €750 in addition. In total you have earned € 1,750.

The second result shows you the payback period. If it says that "the investment is not earned back", it means that you did not make enough money at the end of the period to cover the initial investments. When the payback period shows a number it means that within that number of years the investment is earned back.

Since the calculations are based on estimations, there is no way in saying if this will be the actual return and payback period. However, it does give an indication to whether it is a profitable idea or not. It can also show you that you need to adjust your price or increase your sales effort.



## **Example Freitag**

industry Retail

products & Handbags and backpacks made from recycled truck

services tarpaulins

size of 185 employees

revenue € 465,000

location Zurich, Switzerland



Freitag became successful with the sales of durable handbags and backpacks made from old truck tarpaulins. Because of the success they decided to expand their activities, now the company also produces shirts and pants from recycled materials. Freitag starts out with just one type of clothing, to test the market. The ROI Calculator helps to determine whether this is a profitable idea.

#### **ROI Calculation for Freitag**

In the example we see that Freitag invested € 15,000 in developing a clothing line. Costs are for example, for a new machine, making a design for the clothing and implementing this completely new production process. We also see that Freitag expects enthusiasm for the sale of clothing among a number of regular customers (500), but that it estimates a slower market growth and expects a doubling of sales only in five years' time.



**RETURN ON INVESTMENT** 

122%

PAYBACK PERIOD

3,3 year

INITIAL INVESTMENT € 15.000,00 42% TAX

	— Cumu la	tive cash f	low 🕳	Earnings after tax			
20000							
15000							
10000							
5000							
0 —			<u> </u>		-		
-5 000	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5		
-10000							
-1 5000							
-2 0000							
<u></u>							

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	-2
Products sold	€500,00	€600,00	€720,00	€864,00	€1.037,00	
Price_	€90,00	€90,00	€90,00	€90,00	€90,00	_
Revenue _	€45.000,00	€54.000,00	€64.800,00	€77.760,00	€93.330,00	•
						€1
Variable cost per product _	€45,00	€45,00	€45,00	€45,00	€45,00	. €
Total variable cost	€22.500,00	€27.000,00	€32.400,00	€38.880,00	€46.665,00	€
Fixed costs _	€20.000,00	€20.000,00	€20.000,00	€25.000,00	€25.000,00	€
Total costs	€42.500,00	€47.000,00	€52.400,00	€63.880,00	€71.665,00	€
						€
Earnings before tax	€2.500,00	€7.000,00	€12.400,00	€13.880,00	€21.665,00	€
Tax _	€1.050,00	€2.940,00	€5.208,00	€5.829,60	€9.099,30	- €
Earnings after tax	€1.450,00	€4.060,00	€7.192,00	€8.050,40	€12.565,70	. €
Initial investment _	-€15.000,00					. €
CUMULATIVE CASH FLOW	-€13.550,00	-€9.490,00	-€2.298,00	€5.752,40	€18.318,10	-

