# Financial Model FM-PRO 3.0 Template User Manual

Professional Financial Modeling Tool

Moscow 2019

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## Purpose

The FM-PRO 3.0 financial modeling template is a universal professional tool for creating a plan and receiving reports on the financial activity of a project (company). The template allows to:

- create financial plans for the implementation of projects (companies) of diverse complexity with the aim of building a business plan,
- create a financial calculation of planning and analyzing of the existing company (project) activities,
- carry out a graphical analysis of the results, use the data in other documents and reports,
- do work collectively, forward calculations to colleagues for studying, present to investors.

## Functional Description

The simplicity and flexibility of using the source data, the speed of creating basic calculations. When the template is filled with the source data in accordance with the methodology, you will need from 15 to 30 minutes to obtain basic calculations.

**Multicurrency support.** The template allows to make calculations in ten different currencies at once, to assign your own currency and the rate of settlement operations.

For each revenue or expenditure item, you can establish the currency of account and specify the amount. The FM will automatically recalculate the entered value in the main currency of account.

**Simplicity and flexibility of planning.** The tool allows to execute a complex financial plan of the project implementation. To set source data and flexibly manipulate the calendar flow over the entire planning horizon, to link sales and costs, to determine the share ratio of cost items, to specify local validity periods.

**Scalability**. The template is dynamically scalable and has no limits on the amount of input source information. It is you who decide how much and what information to use.

**Analytics and analysis.** The template allows to define your own catalog of products and services, product groups, set analytical groups for further analysis for all types of income and expenses of the project.

**Usability** of source data input. The template allows to structure and collect your source data in one place. Built-in tools for rapid planning, such as "periodicity", "organization of connections between objects" significantly save time.

**Open source.** The template has an open architecture. This will allow to independently develop the product, generate calculations, create your own calculations, integrate with external data sources.

**Cross-platform.** The template was developed using standard Excel formulas common for MS Excel 2010 – 2016 (365), does not contain scripts, external add-ins, or Visual Basic for Applications programming models, and this allows using the tool equally effectively on MAC and PC platforms.

## For Developers

**Open source.** For specialists, we offer the possibility to modify the template code. The tool uses only the basic data handling logic.

**Usability** of intermediate calculations. The template collects intermediate calculations of the first and second levels in a simple, understandable form for further independent use and generation of own calculations and reports.

## Agreement

This agreement describes the relationship between the Developer and the Consumer (between Itillect LLC and the Buyer) in case of introduction of modifications in the template.

1.  We strongly recommend not to change the calculations, logic, relationships forming the integrity of the generic template, if the current user qualification is lower than "experienced operator".
2.  In accordance with this Agreement, the Buyer shall have an opportunity to:
    a.  independently change the data in MS Excel source data entry forms as they see fit, add sheets to the template, use current calculations to build additional calculations,
    b.  include own calculations in the template, change the existing data processing logic.
3.  The Developer does not provide technical support in terms of training, explanations regarding the mathematical and logical solutions used in the template.
4.  The Developer disclaims the responsibility of technical support for the modified template.
5.  Each template file has a unique identifier, and is linked to the Buyer. By purchasing the financial model, you agree to the following terms and conditions:

    •    Do NOT make the template file freely available to the public;

    •    Do NOT resell the template file to third parties on a commercial basis;

## Technical Requirements

| parameter | minimum | recommended |
|---|---|---|
| PC configuration | CPU at least i5, not less than 4GB. | CPU i7, RAM 8 GB and more. |
| OS | Windows 7, 8<br>MAC OS 10.9 Mavericks or higher | Windows 10<br>MAC OS 10.9 Mavericks or higher |
| Excel | MS Excel 2010 – 2016(365) (local lang)<br>MS Excel 2011-2015 for MAC (local lang) | |

## Template Structure

The template is created as a normal standalone MS Excel file, without using macros and add-ins. The basis for data entry and generation of calculations are regular Excel sheets.

The sheets contain:

- related fields (cells) of data entry,
- fields with calculating formulas,
- fields with drop-down lists.

The data entry fields are green (1). Fields containing formulas and relationships have a background of yellow color (2), blue fields contain drop-down lists (3).



The template consists of:

source data entry forms and navigation linking them.
- The color of source data entry sheets is light green.



- The color of sheets containing tables, reports and diagrams is green.

## Work with the Tool

The essence of filling the template with data is sequential input of information in the input forms. In the process of entering the initial data, the template automatically calculates totals and builds reports and graphs based on them.

Fig. Structure

```
        ┌─────────────────────┐
        │    Project start    │
        │  source data entry  │
        └─────────────────────┘

  ┌─────────────────────┐
  │  Analytics settings │
  └─────────────────────┘

    ┌──────────────┐      ┌──────────────┐
    │  Plan sales  │      │  Plan costs  │
    └──────────────┘      └──────────────┘

              ⬇

        ┌─────────────────────┐
        │  Plan the financing │
        └─────────────────────┘

              ⬇
```

| Reports | Investment performance data | Forecasts | Graphical analysis |
|---|---|---|---|
| • summaty total of planning<br>• cash flow<br>• Profit and loss<br>• sales analysis<br>• prime cost analysis<br>• cost analysis<br>• break-even point | • IRR<br>• NPV<br>• PI<br>• PP<br>• DPP | • realistic<br>• optimistic<br>• pessimistic | • cash flow<br>• structure of income and expenses<br>• cost structure<br>• prime cost structure<br>• financing structure |

# Navigation

The template has a simple navigation structure.



Each sheet contains an independent navigation allowing to quickly move between input forms and calculations.



All sections are grouped by purpose:

(1.)  Customize the environment.
(2.)  Plan sales.
(3.)  Plan costs.
(4.)  Plan the financing.
(5.)  Reports.
(6.)  Settings.

It is convenient to navigate through sections using the built-in navigation or regular Excel sheets.

# Quick Building of a Financial Plan.

Axioms of Effective Planning.

1. It is impossible to predict the future, it is impossible to build an accurate financial plan that will be 100% implemented.
2. The most accurate plan and superficial planning have one thing in common – both plans will never come true.
3. The goal of any plan is to predict the "bracket" of the really expected results.
4. The most accurate planning is possible only when it is based on the historical data of own business activity and personal experience.
5. The ideal is unattainable. 80% of financial results need to be got within 20% of the time.

## Principles of the Template Use.

Enter the data in the template in "layers". With each "layer", refine certain indicators, achieving the expected annual values of cash flows and net profit in a given planning period. If external financing was involved, then control investment indicators.

step 1. Set the start planning year (1).
Determine the planning period, (2) the number of years.



step 2. Create a basic calculation using only the basic business indicators. With the minimum allowed detalization of the source data, set the initial values of income and expenses and market trends.
For this, each section has **basic data entry fields**:
1.1. Name of the item or planning object.
1.2. Cost indicator (sales price or amount of expenses) depending on the selected input form.
1.3. Quantitative indicator of the planning object being sold or purchased.
1.4. Starting date of selling prices or amounts of expenses.
step 3. The template will automatically calculate the financing requirement of the business project.
IMPORTANT. Achieve a positive cash flow over the entire planning period.

step 4.  Specify the source planning data, achieve values close to the expected result. It is necessary to clarify the periods of growth, to identify the stages of active investments, the expected growth based on these investments.

step 5.  Carry out the analysis, evaluate the result.

# Build a Financial Model

## Project Organization Planning

Before starting financial planning, we strongly recommend that you create a general organizational project implementation plan. This will allow to:

1. Get the start of planning year and the planning period.
2. Identify key stages (dates) of financial planning.
3. Use the plan to control the financial activity stages at the end of the modeling.

Plan Sample

| year<br>stage | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| stage 1. Investment period 1 | From 03/17 to 12/17 | | | | |
| stage 2. Beginning of sales. | | From 01/18 | | | |
| stage 3. Investment period 2 | | 09/18 to 12/18 | | | |
| stage 4. Increase in sales volume | | | From 01/19 | | |

Build a Financial Model

Project Organization Planning

## Source Data

Go to the "setup" section and fill in the fields:

- Start planning year (mandatory).
- Planning period, full years (mandatory).
- Primary tax currency (mandatory).
- Own (share) capital (mandatory).
- Beginning cash, the last year result (if available – mandatory).

## Additional Tools

### Indexing of Results

Financial calculations can generate estimates consisting of a large number of digits. Reading and transferring values of 6–7 characters may be uncomfortable. A tool has been added to the template to reduce the dimensionality of the reports.

In the section "Source Data", go to the subsection "Capacity of Totals".

| capacity of totals | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| all values of report are divided into: | 1 000 | | index | 1/1 | 1/10 | 1/100 | 1/1000 | 1/x | other |
| индикатор | | | select | ○ | ○ | ○ | ◉ | ○ | 1 |

Select the divisor to the right (1). All data in the reports:

1. Totals
2. Cash flow
3. Profit and loss
4. Investment performance data

will change the dimensionality according to the selected value.

The tool will divide all values in the report by the selected division index, thereby reducing the size of the values obtained. At the top of the table, information will appear that all data in the table should be taken into account based on the selected index, for example, x 1000.

| (CF) cash flow | | |
|---|---|---|
| today : February 2019 | | |
| main currency (USD)(x1000) | | |
| name | result of a previous period | янв 1 |

## Sales Planning.

The template has two built-in sales planning mechanisms.

1. Automated.
2. Manual.

### "Automated mode"

Determine the product features (name, price, quantity, etc.), and the rules of conduct in the selected planning period. The tool will automatically build a "lifeline" for each product, taking into account the selected rules.

Basic Management Rules

1. Sales period management.
2. Management of the life period of the product with selected product features.
3. Seasonality management.
⭐ 4. Management of the product growth in the first year of life.

Go to the "sales planning" section and fill in the required fields. Compulsory minimum:

- Product name
- Selling price per unit
- The amount of products sold per month
- Sales start date

revenue

today : 16 Февраль 2019
main currency (USD)

| name | prise | qty | operate qty | total | on/off vat | vat | currency | set first year sales growth | growth of sales in a year | seasonality | | | | start date | period | end data |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | winter | spring | summer | autumn | | | |
| | | | setting | | | | | | | | | | | | | |
| manual | manual | manual | drop-down | auto | drop-down | manual | drop-down | drop-down | manual | manual | | | | manual | manual | auto |
| product 1 | 100,00 | 10 | off | 1 000,00 | on VAT | 20% | USD | default | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| product 2 | 330,00 | 20 | off | 6 600,00 | on VAT | 20% | USD | default | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| product 3 | 740,00 | 30 | off | 22 200,00 | on VAT | 20% | USD | default | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| product 4 | 998,00 | 40 | off | 39 920,00 | on VAT | 20% | USD | default | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| service 1 | 15,00 | 50 | off | 750,00 | on VAT | 20% | USD | default | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| - | - | - | off | - | on VAT | 20% | USD | default | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |

In addition, for projects starting their business activities "from scratch", it is recommended to determine the behavior of sales in the first year of product life (1).

| vat | currency | set first year sales growth | growth of sales in a year | |
|---|---|---|---|---|
| | | setting | | winter |
| manual | drop-down | drop-down | manual | |
| 20% | USD | default | 10% | 100% |
| 20% | USD | default | 10% | 100% |
| 20% | USD | default ▾ | 10% | 100% |
| 20% | USD | default | 10% | 100% |
| 20% | USD | plan 12 moth | 10% | 100% |
| 20% | USD | plan 9 moth | 10% | 100% |
| 20% | USD | plan 6 moth | 10% | 100% |
| 20% | USD | plan 3 moth | 10% | 100% |
| 20% | USD | default | 10% | 100% |
| 20% | USD | default | 10% | 100% |

The tool allows to determine the first 12 months of product growth percentage wise. For this purpose, "schemes" are used. Go to setting (2). There are 5 schemes in the template:

1. "default". Sales from the first month of sales have nominal volumes.
2. "12 months scheme". Sales will grow evenly over the first 12 months, from 10% to 100%.
3. "9 months scheme". Sales will grow the first 9 months, from 30% to 100%
4. "6 months scheme". Sales will grow the first 6 months, from 20% to 100%
5. "3 months scheme". Sales will grow the first 3 months, from 40% to 100%

Schemes may be rebuilt as you see fit.

scheme of growth of sales 1 year
return to revenue

| plan | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| default | 0 | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| plan 12 moth | 12 | 10% | 15% | 25% | 35% | 45% | 50% | 55% | 60% | 70% | 80% | 90% | 100% |
| plan 9 moth | 9 | 30% | 35% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | 100% | 100% | 100% |
| plan 6 moth | 6 | 20% | 40% | 60% | 80% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| plan 3 moth | 3 | 40% | 70% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Scheme name and percentages can be changed. In manual mode, determine the growth order for the selected scheme.

**Important. If you defined the name earlier and then changed it in the setting, you need to redefine the scheme in the sales section again.**

## The following may be defined additionally

(1.) Sales growth rate, % per annum
(2.) Seasonality
(3.) Sales period

| ıles | growth of sales in a year | seasonality | | | | start date | period | end data |
|---|---|---|---|---|---|---|---|---|
| | | winter | spring | summer | autumn | | | |
| | manual | manual | | | | manual | manual | auto |
| | 10% | 100% | 100% | 100% | 100% | янв.19 | 28 | апр.21 |
| | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |
| | 10% | 100% | 100% | 100% | 100% | янв.19 | | дек.28 |

## "Manual Mode"

In the "manual mode" you can set the quantity of products sold monthly.

To use this mode, for each position in the "sales planning" section, in the "manage quantity" column, set the "drop-down list" switch to the "on" position.



- (1) for the selected position of the sales plan, enable the mode (on|off),
- (2) go to the quantity management section.

## IMPORTANT. The manual sales management mode takes precedence over the "automatic mode" settings.

## Multicurrency Calculations

The tool allows to calculate the project in ten different currencies. Set the main currency of the calculation and specify the currency of income or expenditure transactions in the currency in which they will be executed.
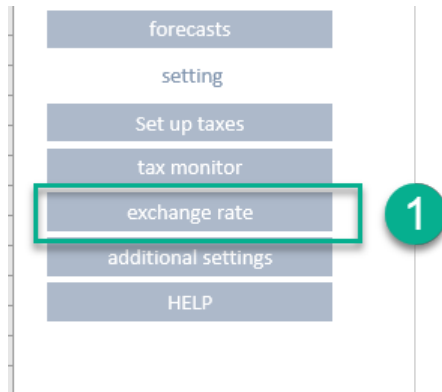
The main currency for the project calculation is set in the "project setting" section (1)



For any position in each section, you can select the currency of the planned operation.

## Currency Rate

The template has a separate interface for managing currency rates. In the main navigation, go to the "setting" block in the "exchange rate" section.



There are 2 blocks in the section:

(1) Currency calculator
(2) Exchange-rate determination tool



| drop-down | USD | EUR | GBP | CNY | CHF | JPY | CAD | RUR | KZT | my |
|---|---|---|---|---|---|---|---|---|---|---|
| USD | 1,00 | 0,88 | 0,77 | 6,74 | 1,00 | 109,73 | 1,33 | 66,06 | 377,97 | 26,96 |

to change

| | USD | EUR | GBP | CNY | CHF | JPY | CAD | RUR | KZT | my |
|---|---|---|---|---|---|---|---|---|---|---|
| USD | 1,00 | 0,88 | 0,77 | 6,74 | 1,00 | 109,73 | 1,33 | 66,06 | 377,97 | 26,96 |
| EUR | 1,136 | 1,000 | 0,875 | 7,659 | 1,136 | 124,693 | 1,511 | 75,068 | 429,511 | 30,636 |
| GBP | 1,299 | 1,143 | 1,000 | 8,753 | 1,299 | 142,506 | 1,727 | 85,792 | 490,870 | 35,013 |
| CNY | 0,148 | 0,131 | 0,114 | 1,000 | 0,148 | 16,280 | 0,197 | 9,801 | 56,079 | 4,000 |
| CHF | 1,000 | 0,880 | 0,770 | 6,740 | 1,000 | 109,730 | 1,330 | 66,060 | 377,970 | 26,960 |
| JPY | 0,009 | 0,008 | 0,007 | 0,061 | 0,009 | 1,000 | 0,012 | 0,602 | 3,445 | 0,246 |
| CAD | 0,752 | 0,662 | 0,579 | 5,068 | 0,752 | 82,504 | 1,000 | 49,669 | 284,188 | 20,271 |
| RUR | 0,015 | 0,013 | 0,012 | 0,102 | 0,015 | 1,661 | 0,020 | 1,000 | 5,722 | 0,408 |
| KZT | 0,003 | 0,002 | 0,002 | 0,018 | 0,003 | 0,290 | 0,004 | 0,175 | 1,000 | 0,071 |
| my | 0,037 | 0,033 | 0,029 | 0,250 | 0,037 | 4,070 | 0,049 | 2,450 | 14,020 | 1,000 |

To set the currency rate, in the drop-down list (1) select the currency symbol, against which the exchange rate values will be set.



In line (2), change the exchange rate of the currency to be used in the calculations

The selected values will be reflected in the table (3)

### Add your own currency

If in the drop-down list of currencies there is no necessary symbol, it can be added. Go to the "additional setting" section.



In the list of currencies (1) in the last line, replace the symbol "my" with your own symbol.

Return to the "exchange rate" section, and determine the conversion rates for the newly added currency symbol.

## Cost Planning.

## Variable Costs

"Variable costs" section

The planning work consists of determining:

1. Products (materials), resources, services to be purchased, rental of production space.
2. Determining of quantitative indicators, "price", "quantity".
3. Determining of the timing, the start date. If the validity period is limited, indicate the validity period of the specified parameters.
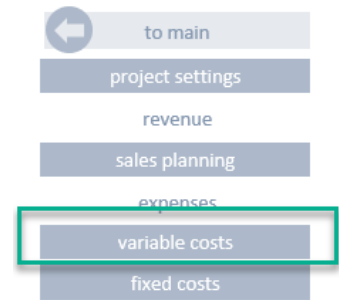
Plan the costs associated with production of goods or creation of services. The template allows to plan:

- Variable (indirect) costs associated with production of goods or creation of services.
- Direct costs directly related to the creation of a product or service.
- Determine the size of the purchased material or product in proportion to the sales plan for a particular product or the total sales.

Each purchase can be determined in time with a specified periodicity (1). This allows to set the volume and schedule of purchases as objectively as possible, to manipulate data during modeling.
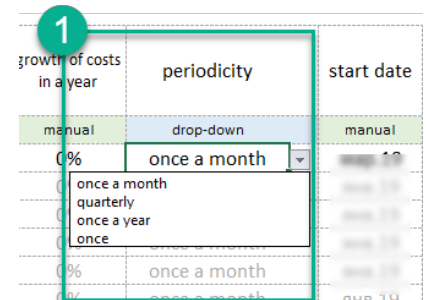
### "Connection with Products" Tool

In order to charge the costs to a particular product or service, in the template in the "dependence of sale" section, you should give a name to the product (1), enable connection with products (2)

Specify the name of the product being purchased, and establish connection with the product. The tool will take the quantity of goods sold to calculate the purchased goods. In this case, all the goods that were purchased will be sold in the specified planning period.

By manipulating with dates, you can shift the purchase schedule against the sales schedule.

Sales plan product 1                                          Purchase plan product 1

| | start date | period | end data | янв 19 | фев 19 | мар 19 | апр 19 | май 19 | июн 19 | июл 19 |
|---|---|---|---|---|---|---|---|---|---|---|
| autumn | | | | | | | | | | |
| | manual | manual | auto | | | | | | | |
| 100% | июн.19 | 28 | сен.21 | - | - | - | - | - | 1 000,00 | 1 000,00 |
| 100% | янв.19 | | дек.28 | 6 600,00 | 6 600,00 | 6 600,00 | 6 600,00 | 6 600,00 | 6 600,00 | 6 600,00 |
| 100% | янв.19 | | дек.28 | 22 200,00 | 22 200,00 | 22 200,00 | 22 200,00 | 22 200,00 | 22 200,00 | 22 200,00 |
| 100% | янв.19 | | дек.28 | 39 920,00 | 39 920,00 | 39 920,00 | 39 920,00 | 39 920,00 | 39 920,00 | 39 920,00 |
| 100% | янв.19 | | дек.28 | 750,00 | 750,00 | 750,00 | 750,00 | 750,00 | 750,00 | 750,00 |
| 100% | янв.19 | | дек.28 | - | - | - | - | - | - | - |

Purchase plan product 1

| | start date | period | end data | analytics | янв 19 | фев 19 | мар 19 | апр 19 | май 19 | июн 19 | июл 19 | авг 19 | сен 19 | ок |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | manual | manual | auto | auto | | | | | | | | | | |
| | мар.19 | | дек.28 | direct costs | - | - | 500 | 500 | 500 | 500 | 500 | 500 | 500 | |
| | янв.19 | | дек.28 | | - | - | - | - | - | - | - | - | - | |
| | янв.19 | | дек.28 | | - | - | - | - | - | - | - | - | - | |

## "Product Purchase Volume" Tool

Allows to take into account the purchase volume, expressed as percentage of the product sales volume or total sales. In order to charge the costs to a particular product or service, in the template in the "dependence of sale" section,

### variable costs, material etc

today : 17 Февраль 2019
main currency (USD)

| | name | prise | qty | note | connection with sales | share of | share size | total |
|---|---|---|---|---|---|---|---|---|
| | manual | manual | manual | auto | drop-down | drop-down | manu | auto |
| | purchase product 1 | 50,00 | 1 | per unit of product | product 1 | product share | 50% | 50,00 |
| | | | | - | no share of sales | not selected | | dependence on sales |
| | | | | - | no share of sales | not sele | | |
| | | | | - | no share of sales | not | connection with sales | share of | share s |
| | | | | | no share of sales | | | |

| | connection with sales | share of | share s |
|---|---|---|---|
| | drop-down | drop-down | manual |
| | not selected | off | 0% |
| | not selected | off / product share / share of sales | |

step 1.    Specify the name of the product
step 2.    Specify the calculation mode
           "product share" (1) or "dependence on total sales" (2)

step 3.    If at step 2 a connection with the product was established, specify the product (3).
step 4.    Determine the product volume percent or total sales percent.

Important. For correct operation of the selection and product and costs connection tool, it is necessary to finally enter the list of products. If, after establishing a connection, you changed the product name, it is necessary to redefine the product again in the selection list (3).

## Fixed Costs

The section allows to plan non-manufacturing costs of the project. Rent, utilities, IT, security, banking, exhibitions and more.

### "Fixed Costs" Section

The planning work consists of determining:

1. Cost items
2. Determining of quantitative indicators, "price", "quantity".
3. Analytical signs of procurement for further analysis.
4. Determining of the timing, the start date. If the validity period is limited, indicate the validity period of the specified parameters.
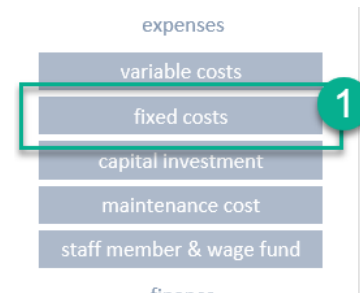
Each purchase can be determined in time with a specified periodicity (1). This allows to set the volume and schedule of costs as objectively as possible, to manipulate data during modeling.

### Analytics.

The feature of filling in the data in this section is the possibility to define a cost accounting analytics. The working directory contains the following analytics:

- marketing
- lease
- communal
- IT
- banking
- other
- employee benefits
- commission to intermediaries
- storage of products
- other marketing costs
- transport services
- employee training
- low-value equipment
- safety
- outsource

You can change this data or add your analytics in "additional setting" (1)

Apart from that, the filling consists of the same actions as in the sales planning.
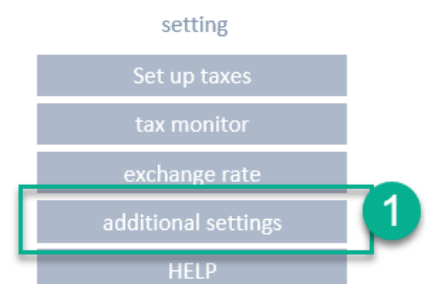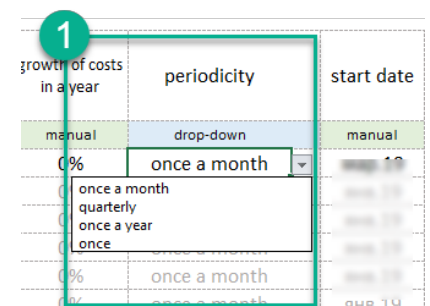
## Capital Investment

The tool allows to determine the purchase of equipment, real estate, land, corporate software, transport. Typically, these costs are associated with capital expenditure of the initial stage of the project, but the tool does not limit the period of investment.

To determine the investment, it is sufficient to specify:

1. Name of investment objects (1).
2. Indicators "price", "quantity" (2,3).
3. Time parameters, purchase date (5).

**assets, capital expenditure**

today :February 18 2019
main currency (USD)

| name | creation asset | prise | qty | total | on/off vat | vat | currency | type of asset | payment date | date of commissioning | Jan 19 |
|------|----------------|-------|-----|-------|------------|-----|----------|---------------|--------------|------------------------|--------|
| manual | drop-down | manual | manual | auto | drop-down | drop-down | drop-down | drop-down | manual | auto | |
| ford transit | no selected | 70,000.00 | 2 | 140,000.00 | on VAT | 20% | USD | transport | Jan-19 | Feb-19 | 140,000 |
| car elevator | no selected | 3,500.00 | 1 | 3,500.00 | on VAT | 20% | USD | equipment | Jan-19 | Feb-19 | 3,500 |
| hangar 3000 м2 | no selected | 17,000.00 | 1 | 17,000.00 | on VAT | 20% | USD | real estate | Jan-19 | Feb-19 | 17,000 |
| | no selected | - | - | - | on VAT | 20% | USD | not defined | Jan-19 | Feb-19 | - |

⭐ It is necessary, besides the general parameters, to define the analytics – the type of asset (4).

In accordance with the selected analytics, this asset will have its own depreciation term. The depreciation term can be changed in the "additional setting" section.

| type of asset | years |
|---------------|-------|
| not defined | 0 |
| equipment | 5 |
| transport | 5 |
| real estate | 10 |
| earth | 0 |
| intangible asset | 4 |

## Expenditure Allocation Timing.

During the construction of real property, equipment, creation and integration of corporate software, expenditures should be allocated over time. At the end, all expenditures need to be consolidated within one facility/object being created.

The "creation asset" section is used for this.

You can go to this section from the "capital investment" section.



In the "additional setting" section, all created objects of fixed assets should be listed.

In the table, all expenditure items related to the facility/object being created should be successively listed.

(1) Select an asset in the drop-down list.
(2) Give the name to the expenditure item.
(3) Determine the cost.
(4) Determine the quantity.
(5) Determine the planned investment date.

### creation asset

today : February 18 2019
main currency (USD)

back

| creation asset | name | prise | qty | total | on/off vat | vat | currency | payment date |
|---|---|---|---|---|---|---|---|---|
| setting | | | | | | | | |
| drop-down | manual | manual | manual | auto | drop-down | manual | drop-down | manual |
| hotel building | project | 3,000.00 | 1 | 3,000.00 | off VAT | 20% | USD | Dec-19 |
| hotel building | house footing | 4,500.00 | 1 | 4,500.00 | off VAT | 20% | USD | Feb-19 |
| hotel building | construction material | 15,000.00 | 1 | 15,000.00 | off VAT | 20% | USD | Mar-19 |
| hotel building | delivery | 3,000.00 | 1 | 3,000.00 | off VAT | 20% | USD | Apr-19 |
| hotel building | construction of the buildir | 55,000.00 | 1 | 55,000.00 | off VAT | 20% | USD | May-19 |
| no selected | | | | - | off VAT | 20% | USD | Jun-19 |
| no selected | | | | - | off VAT | 20% | USD | Nov-19 |

After all planned investments are listed, return to the "Capital investment" section, and define the created object in the free line in the "creation asset" column, in the drop-down box (1).



**Important**. The tool will automatically calculate the date of registration (2) and the start of depreciation.

## Maintenance capex

The section allows to plan the costs associated with modernization and asset servicing.

Go to the "maintenance capex" section

To determine the costs of modernization and servicing it is sufficient to specify:
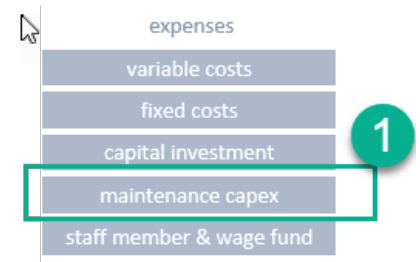


1. The item name (1).
2. Determine the connection with the asset for which the costs should be allocated (2).
3. Indicators "price", "quantity" (3, 4).
4. Periodicity of operations (5)
5. Time parameters of investments (6).

### maintenance capex | service, modernization of assets
today : ДД ММММ ГГГ
main currency (USD)

| name | connect to assets | prise | qty | total | on/off vat | vat | currency | growth of costs in a year | periodicity | date of commissioning (reference information) | start date | period | end data |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| manual | drop-down | manual | manual | auto | drop-down | manual | drop-down | manual | drop-down | auto | manual | manual | auto |
| remont communications of the building | hotel building | 1,500.00 | 1 | 1,500.00 | on VAT | 20% | USD | 0% | once a year | Jan 20 | Jan-20 | | Dec-28 |
| hardware upgrade | car elevator | 500.00 | 1 | 500.00 | on VAT | 20% | USD | 0% | once | Feb 19 | Jan-20 | | Feb-24 |
| | not defined | - | - | - | on VAT | 20% | USD | 0% | once a month | | Jan-19 | | Dec-28 |
| | not defined | - | - | - | on VAT | 20% | USD | 0% | once a month | | Jan-19 | | Dec-28 |
| | not defined | - | - | - | on VAT | 20% | USD | 0% | once a month | | Jan-19 | | Dec-28 |

To fill in the data in the section, you can determine the periodicity of expenses (5).

| once a year ▼ |
|---|
| once a month |
| quarterly |
| once a year |
| once |
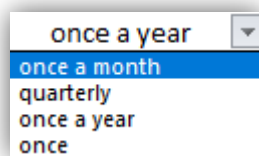
This list is complete. It is not subject to change.

## Employee

Section allows to describe the positions and salaries of employees.

Special Features.

1. Determine positions (1).
2. Salary at the time of the start of planning (2).
3. Determine the number of personnel (3).
4. Determine the time period for the start of salary payments (4).
5. Determine the salary calculation scheme (5).
   a. Salary only
   b. % + salary
   c. only % of the total sales of the project or of the sale of a particular product or service.
6. It is advisable to define groups of employees
   a. Production,
   b. Non-Production.

### company employees

today : February 18 2019
main currency (USD)

| position | salary | worker qty | total | currency | salary growth per year | salary calculation schema | options scheme | % product | % revenue | start date | period | end data | group worker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| manual | manual | manual | auto | drop-down | manual | drop-down | drop-down | drop-down | manual | manual | manual | auto | drop-down |
| CEO | 5,000 | 1 | 5,000 | USD | 0% | % + salary | of total sales | not selected | 1.0% | Apr-19 | | Dec-28 | office staff |
| CFO | 4,500 | 1 | 4,500 | USD | 0% | salary only | of product | not selected | 0.0% | Apr-19 | | Dec-28 | office staff |
| Marketing director | 4,000 | 1 | 4,000 | USD | 0% | salary only | of product | not selected | 0.0% | Apr-19 | | Dec-28 | office staff |
| Commercial director | 4,000 | 1 | 4,000 | USD | 0% | salary only | of product | not selected | 0.0% | Apr-19 | | Dec-28 | office staff |
| Seller | 2,500 | 5 | 12,500 | USD | 0% | only % | of product | product 1 | 10.0% | Apr-19 | | Dec-28 | office staff |
| Engineer | 2,000 | 2 | 4,000 | USD | 0% | salary only | of product | not selected | 0.0% | Apr-19 | | Dec-28 | production workers |
| Worker | 2,500 | 7 | 17,500 | USD | 0% | salary only | of product | not selected | 0.0% | Apr-19 | | Dec-28 | production workers |
| Security guard | 1,500 | 2 | 3,000 | USD | 0% | salary only | of product | not selected | 0.0% | Apr-19 | | Dec-28 | production workers |
| Driver | 1,000 | 1 | 1,000 | USD | 0% | salary only | of product | not selected | 0.0% | Apr-19 | | Dec-28 | production workers |
| | - | - | - | USD | 0% | salary only | of product | not selected | 0.0% | Jan-19 | | Dec-28 | office staff |
| | - | - | - | USD | 0% | salary only | of product | not selected | 0.0% | Jan-18 | | Dec-28 | office staff |
| | - | - | - | USD | 0% | salary only | of product | not selected | 0.0% | Jan-18 | | Dec-28 | office staff |
| | - | - | - | USD | 0% | salary only | of product | not selected | 0.0% | Jan-18 | | Dec-28 | office staff |

## Financing

### Calculation of Required Financing.

The tool automatically calculates the need for financing, finds the period in which the money is not enough and selects the amount of necessary financing.

To begin assessing the need for financing, go to the "external financing" section.



IMPORTANT! The need for financing is a "cash gap". The business project does not have enough money for operations. Such situation should be eliminated.

The need for financing is reflected in the field (1)



There are three options for solving the problem.

1. To attract external returnable financing. A loan or investor's money.
2. To attract non-returnable financing. Aids, or other form of non-returnable cash.
3. Equity capital, share capital.

Financing is planned in the table in the same section. The following fields are required:

(1) Name of the loan, or name of the credit institution.
(2) Amount of loan
(3) Loan interest rate
(4) Date of receipt
(5) Start of return date



| name | amount of financing | currency | type of financing | interest rate (%) | scheme of return | date of financing | to begin return with... | period | date of return | interest (USD) | loan principal (USD) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| manual | manual | drop-down | drop-down | manual | drop-down | manual | manual | manual | auto | auto | auto |
| loan | 750 000 | USD | returnable | 5% | default | Jan 2019 | Jan 2019 | | Dec 2028 | 202 770 | 750 000 |
| | | USD | returnable | 0% | default | Jan 2019 | Jan 2020 | | Dec 2028 | - | - |
| | | USD | returnable | 0% | default | Jan 2019 | Jan 2020 | | Dec 2028 | - | - |
| | | USD | returnable | 0% | default | Jan 2019 | Jan 2020 | | Dec 2028 | - | - |

The tool allows to plan aids, grants, shareholders' investments.

| name | amount of financing | currency | type of financing | interest rate (%) | scheme of return |
|---|---|---|---|---|---|
| manual | manual | drop-down | drop-down | manual | drop-down |
| loan | 750 000 | USD | returnable | 5% | default |
| | | USD | returnable | 0% | default |
| | | USD | returnable | 0% | default |

Determine the type of financing (1):

    a.  "returnable"
    b.  "non-returnable"

IMPORTANT! For "non-returnable" types of financing, no interest is accrued and no added value refund is accrued.

The template provides for the possibility of non-standard return of borrowed funds. You can separate the loan and interest repayment periods, determine your own repayment scheme for the loan and interest.

| type of financing | interest rate (%) | scheme of return | date of financing |
|---|---|---|---|
| drop-down | manual | drop-down | manual |
| returnable | 5% | special | Jan 2019 |
| returnable | 0% | default | Jan 2019 |
| returnable | 0% | default | Jan 2019 |
| returnable | 0% | default | Jan 2019 |
| returnable | 0% | default | Jan 2019 |
| returnable | 0% | default | Jan 2019 |

| special scheme interest | | | special scheme body | | |
|---|---|---|---|---|---|
| to begin return with... | date of return | periodicity | to begin return with... | date of return | periodicity |
| manual | manual | drop-down | manual | manual | drop-down |
| Jan 2019 | 01.01.2020 | quarterly | Jan 2019 | 01.01.2021 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Jan 2020 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Jan 2020 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Jan 2020 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Jan 2020 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Jan 2020 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Jan 2020 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Aug 2019 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Aug 2019 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Aug 2019 | Dec 2028 | quarterly |
| Jan 2019 | Dec 2028 | quarterly | Aug 2019 | Dec 2028 | quarterly |

From the "Financing" section you can quickly go to:

(1)  Schedule of financing
(2)  Estimated interest repayment values
(3)  Principal amount of loan

| need for financing | - | | | |
|---|---|---|---|---|
| financing is planned | 750 000 | | personal funds | - |

| schedule of financing | interest | principal |
|---|---|---|

| name | amount of financing | currency | type of financing | interest rate (%) | scheme of return |
|---|---|---|---|---|---|

## Taxes.

The tool contains a built-in tax arrangement constructor.

By default, tax calculation is turned off. To activate the tax arrangement, go to the "set up taxes" section
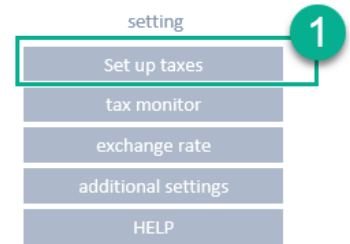
The tool allows to model the calculation of:

- Simplified tax system
    - percent (revenue)
    - percent (revenue – costs)
- VAT
- Income tax
    - flat scale
    - progressive scale
- personal income tax
    - flat scale
    - progressive scale
- assignments from wage fund
    - pension fund
    - medicare
    - social security
- property taxes
- land occupation tax

Each mode can be turned on by moving the switch (1) to the "on" position.

Modes are activated by selecting the appropriate "option button"
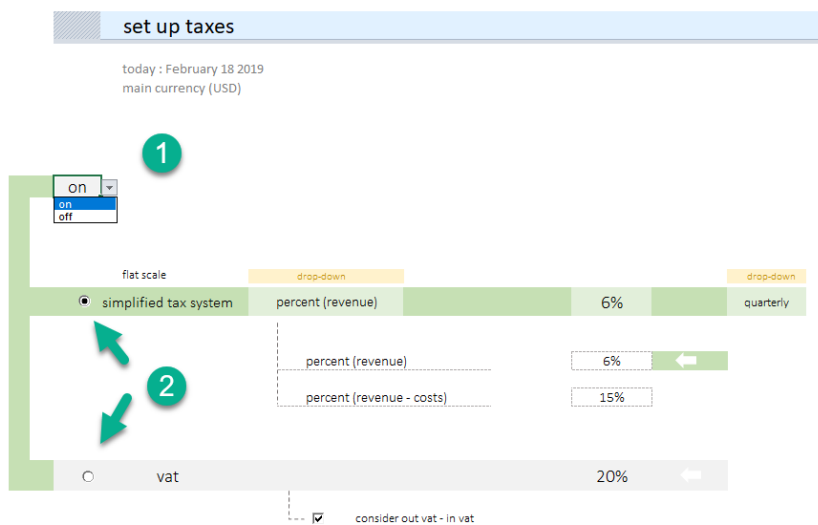
When income tax (1) calculation is activated, it is possible to switch (2) the modes:

- flat scale
- progressive scale



## "Flat scale" setting

1. Turn the switch (1) to the on "flat scale" position.
2. Block (2). Allows to include one of the components of income tax.
3. Block (3). Allows to set an income tax component expressed as percentage.
4. Block (4). Automatically calculates the amount of income tax.
5. Block (5). Allows to set the tax accrual mode:
   a. once a month
   b. quarterly
   c. once a year

## "Progressive Scale" Setting

| | | | | | | scale, year | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| from | - | 9 076 | 36 901 | 89 351 | 186 351 | 405 101 | 406 751 | 407 001 | - | - |
| to | 9 075 | 36 900 | 89 350 | 186 350 | 405 100 | 406 750 | 407 000 | | | |
| % | 10.0% | 15.0% | 25.0% | 28.0% | 33.0% | 35.0% | 39.6% | | | |

USD
on progressive scale

6. Turn the switch (1) to the "on progressive scale" position.
7. Block (2). Fill out the progressive tax value for the region you plan to do business in.
8. Block (3). Automatically calculates the lower limit of the tax bracket.

# Reports and Analytics

The template automatically generates the following reports:

1. Totals
2. Extensive totals
3. Cash flow (by month)
4. Profit and loss (by month)
5. Investment performance data
6. Future sales analysis
7. Prime cost analysis
8. General cost analysis
9. Diagrams (dynamic)
10. Break-even point
11. Analysis of forecasts

reports and fnalytics

| total |
| detail report |
| cash flow |
| profit and loss |
| Indicators of investments |
| report of sale |
| prime cost |
| cost analysis |
| diagrams |
| Break-even point (BEP) |
| forecasts |

## "Total" Report Form

final report

today :February 19 2019
main currency (USD)(x1)

| name | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|---|---|---|
| revenue | 626 594 | 917 504 | 1 000 368 | 1 083 732 | 1 167 096 | 1 250 460 | 1 333 824 | 1 417 188 | 1 500 552 | 1 583 916 |
| volume of a product or service | 1 278 | 1 854 | 2 016 | 2 184 | 2 352 | 2 520 | 2 688 | 2 856 | 3 024 | 3 192 |
| variable costs, material etc | 91 848 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 |
| fixed \| administrative costs | 9 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 |
| company employees | 387 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 |
| assets, capital expenditure | 720 500 | - | - | - | - | - | - | - | - | - |
| service, modernization of assets | - | 2 000 | 1 500 | 1 500 | 1 500 | 1 500 | 1 500 | 1 500 | 1 500 | 1 500 |
| taxes | 50 310 | 82 394 | 144 264 | 212 988 | 276 130 | 457 026 | 544 781 | 614 126 | 683 640 | 753 333 |
| financing | 760 000 | - | - | - | - | - | - | - | - | - |
| Interest paid | 36 621 | 33 513 | 30 247 | 26 813 | 23 204 | 19 410 | 15 422 | 11 230 | 6 823 | 2 191 |
| loan principal | 60 738 | 63 846 | 67 112 | 70 546 | 74 155 | 77 949 | 81 937 | 86 129 | 90 535 | 87 054 |
| Net Profit before dividents | —66 852 | 12 733 | 36 993 | 55 067 | 78 898 | 102 410 | 125 457 | 143 669 | 161 925 | 180 228 |
| Cash as of the end of the period | 30 577 | 119 865 | 230 646 | 356 068 | 501 710 | 549 822 | 593 542 | 651 282 | 722 871 | 816 245 |
| Gross Profit | 534 746 | 799 040 | 881 904 | 965 268 | 1 048 632 | 1 131 996 | 1 215 360 | 1 298 724 | 1 382 088 | 1 465 452 |
| capex | 720 500 | - | - | - | - | - | - | - | - | - |
| opex | 487 848 | 646 464 | 646 464 | 646 464 | 646 464 | 646 464 | 646 464 | 646 464 | 646 464 | 646 464 |
| EBIT | 138 746 | 237 527 | 323 657 | 410 455 | 497 428 | 584 586 | 671 938 | 759 494 | 847 265 | 935 261 |
| EBITDA | 257 412 | 413 440 | 496 304 | 579 668 | 663 032 | 629 146 | 689 060 | 772 424 | 855 788 | 939 152 |
| Return Of Investment, (ROI ),% | -% | -% | -% | -% | -% | -% | -% | -% | -% | -% |
| Return On Sales, (ROS), % | -% | 1.4% | 3.7% | 5.1% | 6.8% | 8.2% | 9.4% | 10.1% | 10.8% | 11.4% |
| interest coverage ratio | 378.9% | 808.8% | 1 170.1% | 1 630.8% | 2 243.7% | 3 111.8% | 4 457.0% | 6 863.1% | 12 517.1% | 42 778.0% |

## "Detail Report" Form

A full detailed report of the project is generated monthly for the entire planning period.

**detail report**

today :February 19 2019
main currency (USD)

| name | Jan 19 | Feb 19 | Mar 19 | Apr 19 | May 19 | Jun 19 | Jul 19 | Aug 19 | Sep 19 | Oct 19 | Nov 19 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| revenue | - | - | - | 69 622 | 69 622 | 69 622 | 69 622 | 69 622 | 69 622 | 69 622 | 69 622 |
| volume of a product or service | - | - | - | 142 | 142 | 142 | 142 | 142 | 142 | 142 | 142 |
| | | | | | | | | | | | |
| variable costs, material etc | - | - | 3 000 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 |
| indirect costs | - | - | 3 000 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 | 9 872 |
| direct costs | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | | | |
| fixed \| administrative costs | - | - | - | 55 330 | 55 330 | 55 330 | 55 330 | 55 330 | 55 330 | 55 330 | 55 330 |
| undefined | - | - | - | - | - | - | - | - | - | - | - |
| marketing | - | - | - | 1 000 | 1 000 | 1 000 | 1 000 | 1 000 | 1 000 | 1 000 | 1 000 |
| lease | - | - | - | 2 002 | 2 002 | 2 002 | 2 002 | 2 002 | 2 002 | 2 002 | 2 002 |
| communal | - | - | - | 3 006 | 3 006 | 3 006 | 3 006 | 3 006 | 3 006 | 3 006 | 3 006 |
| IT | - | - | - | 4 012 | 4 012 | 4 012 | 4 012 | 4 012 | 4 012 | 4 012 | 4 012 |
| banking | - | - | - | 5 020 | 5 020 | 5 020 | 5 020 | 5 020 | 5 020 | 5 020 | 5 020 |
| other | - | - | - | 6 030 | 6 030 | 6 030 | 6 030 | 6 030 | 6 030 | 6 030 | 6 030 |
| employee benefits | - | - | - | 7 042 | 7 042 | 7 042 | 7 042 | 7 042 | 7 042 | 7 042 | 7 042 |
| commission to intermediaries | - | - | - | - | - | - | - | - | - | - | - |
| storage of products | - | - | - | - | - | - | - | - | - | - | - |
| other marketing costs | - | - | - | - | - | - | - | - | - | - | - |
| transport services | - | - | - | - | - | - | - | - | - | - | - |
| employee training | - | - | - | - | - | - | - | - | - | - | - |
| low-value equipment | - | - | - | 10 090 | 10 090 | 10 090 | 10 090 | 10 090 | 10 090 | 10 090 | 10 090 |
| safety | - | - | - | 9 072 | 9 072 | 9 072 | 9 072 | 9 072 | 9 072 | 9 072 | 9 072 |
| outsource | - | - | - | 8 056 | 8 056 | 8 056 | 8 056 | 8 056 | 8 056 | 8 056 | 8 056 |
| | - | - | - | - | - | - | - | - | - | - | - |
| | - | - | - | - | - | - | - | - | - | - | - |
| company employees | - | - | - | 43 000 | 43 000 | 43 000 | 43 000 | 43 000 | 43 000 | 43 000 | 43 000 |

## "Cash Flow" Report Form

Cash Flow Report is generated monthly for the entire planning period.

**(CF) cash flow**

today : February 2019
main currency (USD)(x1)

| name | result of a previous period | Jan 19 | Feb 19 | Mar 19 | A |
|---|---|---|---|---|---|
| **Cash flow from operation activities** | | | | | |
| Cash inflow-TOTAT, incl.: | | - | - | - | |
| From customer (not incl. VAT) | | - | - | - | |
| Other payment VAT | | - | - | - | |
| Other proceed output VAT | | - | - | - | |
| Payments Total, incl: | | **3 167** | **3 146** | **6 125** | |
| Cash paid to suppliers | | - | - | 3 000 | |
| *Materials and production rent* | | - | - | *3 000* | |
| *Commercial and administrative expenses* | | - | - | - | |
| Payroll | | - | - | - | |
| Interest paid | | 3 166.67 | 3 146.06 | 3 125.36 | |
| Income tax paid | | - | - | - | |
| Other taxes | | - | - | - | |
| Insurance contributions | | - | - | - | |
| Other payments | | - | - | - | |
| Other payments input VAT | | - | - | - | |
| **TOTAL Cash flow from operation activities** | | **—3 167** | **—3 146** | **—6 125** | |
| | | | | | |
| **Cash flows from investing activities** | | | | | |
| Cash inflow-TOTAT, incl.: | | - | - | - | |
| Proceeds from long-term borrowings | | | | | |

## "Profit and Losses" Report Form

"Profit and Losses" Report

 A full detailed report of the project is generated monthly for the entire planning period.

### (P&L) profits and losses

today : ДД ММММ ГГГ
main currency (USD)(x1)

| name | Jan 19 | Feb 19 | Mar 19 | Apr 19 | May 19 | Jun 19 |
|---|---|---|---|---|---|---|
| **Revenues** | | | | | | |
| Sales | - | - | - | 69 622 | 69 622 | 69 622 |
| Costs og goods sold | - | - | 3 000 | 9 872 | 9 872 | 9 872 |
| Gross Profit | - | - | —3 000 | 59 750 | 59 750 | 59 750 |
| Selling expenses | - | - | - | 1 000 | 1 000 | 1 000 |
| Administrative expenses | - | - | - | 54 330 | 54 330 | 54 330 |
| other expenses \| wage fund | - | - | - | 43 000 | 43 000 | 43 000 |
| **Profit from operating activities** | - | - | —3 000 | —38 580 | —38 580 | —38 580 |
| **Profit from other activities** | | | | | | |
| Interest receivable | | | | | | |
| Interest payable | 3 167 | 3 146 | 3 125 | 3 105 | 3 084 | 3 063 |
| Other income | | | | | | |
| Amortisation | - | - | 11 867 | 11 867 | 11 867 | 11 867 |
| Payroll | - | - | - | - | - | - |
| Other taxes | - | - | - | - | - | - |
| **Profit before income taxes** | —3 167 | —3 146 | —17 992 | —53 552 | —53 531 | —53 510 |
| Current income taxes | - | - | - | - | - | - |
| Including deferred tax liabilities | | | | | | |
| Change deffered tax liabilities | - | - | - | - | - | - |
| Change deffered tax assets | | | | | | |
| Income tax payable | - | - | - | - | - | - |
| **Net Profit before dividents** | —3 167 | —3 146 | —17 992 | —53 552 | —53 531 | —53 510 |

## "Investment Indicators" Report

The report calculates the investment performance data of the project.

### Investment performance data

- NPV – Net Present Value
- IRR – Internal Rate of Return
- PI – Profitability Index
- PP – Payback Period
- ARR – Accounting Rate of Return

**Investment indicators**
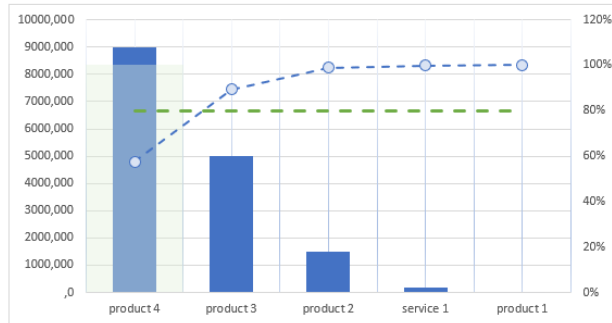
main currency (USD)

| Discount rate in %% | 4% |
| start date project | 2019 |

| year | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|---|---|---|
| period number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Investment activities | − 720 500 | − 2 000 | − 1 500 | − 1 500 | − 1 500 | − 1 500 | − 1 500 | − 1 500 | − 1 500 | − 1 500 |
| operational expenditure (OPEX) | 51 815 | 178 512 | 219 368 | 236 222 | 271 652 | 214 259 | 231 195 | 266 747 | 302 342 | 337 985 |
| cashflow | 30 577 | 112 666 | 150 756 | 164 176 | 195 997 | 134 810 | 147 758 | 179 118 | 210 307 | 249 431 |
| gross cash flow | 30 577 | 143 243 | 293 999 | 458 175 | 654 173 | 788 983 | 936 741 | 1 115 859 | 1 326 166 | 1 575 597 |
| discount factor | 1.00 | 0.92 | 0.89 | 0.85 | 0.82 | 0.79 | 0.76 | 0.73 | 0.70 | 0.68 |
| Discounted Cash Flow | 30 577 | 104 166 | 134 022 | 140 339 | 161 095 | 106 542 | 112 284 | 130 880 | 147 759 | 168 507 |
| Discounted Cash as of the end of the period | 30 577 | 134 743 | 268 765 | 409 103 | 570 199 | 676 741 | 789 025 | 919 905 | 1 067 664 | 1 236 171 |
| NPV - (net present value) | − 1 430 678 | − 1 267 483 | − 1 073 799 | − 873 158 | − 651 112 | − 482 966 | − 308 417 | − 114 604 | 96 764 | 324 082 |

| indicator | units | value | note |
|---|---|---|---|
| NPV - (net present value) | USD | 324 081.8 | the project can be approved by credit institution |
| IRR - (internal rate of return) | % | 22.1% | the project can be approved by credit institution |
| PI - (profitability Index) | коэф. | 2.48 | the project can be approved by credit institution |
| PP - (payback period) | years | 3 years 2 mo. | OK |
| DPP - (discounted payback period) | years | 3 years 4 mo. | OK |
| ARR (Accounting Rate of Return) | % | 30.4% | the value is higher, the investment attractiveness of the project is higher |

## "Report of Sale"

The report and the diagram form the idea the products generating 80% of sales.

**Pareto sale report**



| name | total | % | year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 632 659 | 100.0% | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
| product 1 | 1 909 | 0.0% | 1 364 | 545 | - | - | - | - | - | - | - | - |
| product 2 | 1 485 000 | 9.5% | 59 400 | 95 040 | 110 880 | 126 720 | 142 560 | 158 400 | 174 240 | 190 080 | 205 920 | 221 760 |
| product 3 | 4 995 000 | 32.0% | 199 800 | 319 680 | 372 960 | 426 240 | 479 520 | 532 800 | 586 080 | 639 360 | 692 640 | 745 920 |
| product 4 | 8 982 000 | 57.5% | 359 280 | 574 848 | 670 656 | 766 464 | 862 272 | 958 080 | 1 053 888 | 1 149 696 | 1 245 504 | 1 341 312 |
| service 1 | 168 750 | 1.1% | 6 750 | 10 800 | 12 600 | 14 400 | 16 200 | 18 000 | 19 800 | 21 600 | 23 400 | 25 200 |

## "Prime Cost" Report

The report and the diagram form the idea of how the prime cost of the project will be formed.

**analysis of prime cost**
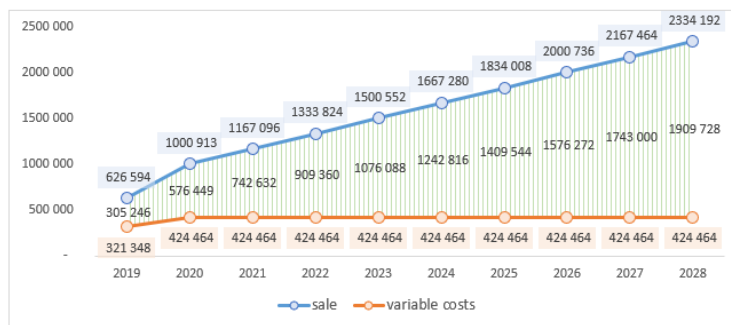


| name | total | year | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| production workers | 2 983 500 | 229 500 | 306 000 | 306 000 | 306 000 | 306 000 | 306 000 | 306 000 |
| material 1 | 354 000 | 30 000 | 36 000 | 36 000 | 36 000 | 36 000 | 36 000 | 36 000 |
| material 2 | 77 220 | 5 940 | 7 920 | 7 920 | 7 920 | 7 920 | 7 920 | 7 920 |
| material 3 | 259 740 | 19 980 | 26 640 | 26 640 | 26 640 | 26 640 | 26 640 | 26 640 |
| material 4 | 467 064 | 35 928 | 47 904 | 47 904 | 47 904 | 47 904 | 47 904 | 47 904 |

## "Cost Analysis" Report

The report and the diagrams provide information for analyzing the structure of production and non-production costs, composition of the salary fund, marketing costs analysis.
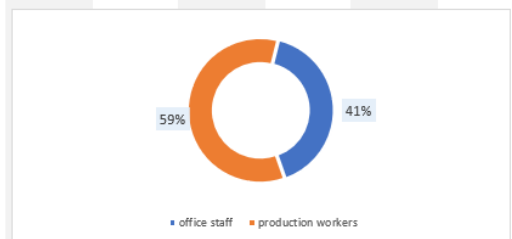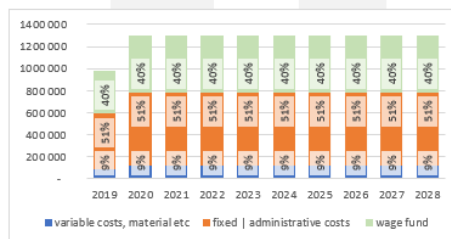
### cost analysis

main currency (USD)(x1)



■ administration costs   ■ marketing and promotion

| name | total | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| undefined | - | - | - | - | - | - | - | - | - | - | - |
| administration costs | 6 356 610 | 488 970 | 651 960 | 651 960 | 651 960 | 651 960 | 651 960 | 651 960 | 651 960 | 651 960 | 651 960 |
| marketing and promotion | 117 000 | 9 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 | 12 000 |



■ variable costs, material etc   ■ fixed | administrative costs   ■ wage fund



■ office staff   ■ production workers

| name | total | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| variable costs, material etc | 1 158 024 | 91 848 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 | 118 464 |
| fixed | administrative costs | 6 473 610 | 497 970 | 663 960 | 663 960 | 663 960 | 663 960 | 663 960 | 663 960 | 663 960 | 663 960 | 663 960 |
| wage fund | 5 031 000 | 387 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 | 516 000 |
| office staff | 2 047 500 | 157 500 | 210 000 | 210 000 | 210 000 | 210 000 | 210 000 | 210 000 | 210 000 | 210 000 | 210 000 |
| production workers | 2 983 500 | 229 500 | 306 000 | 306 000 | 306 000 | 306 000 | 306 000 | 306 000 | 306 000 | 306 000 | 306 000 |

### Diagrams.

In the template, there are several types of diagrams for analysis.

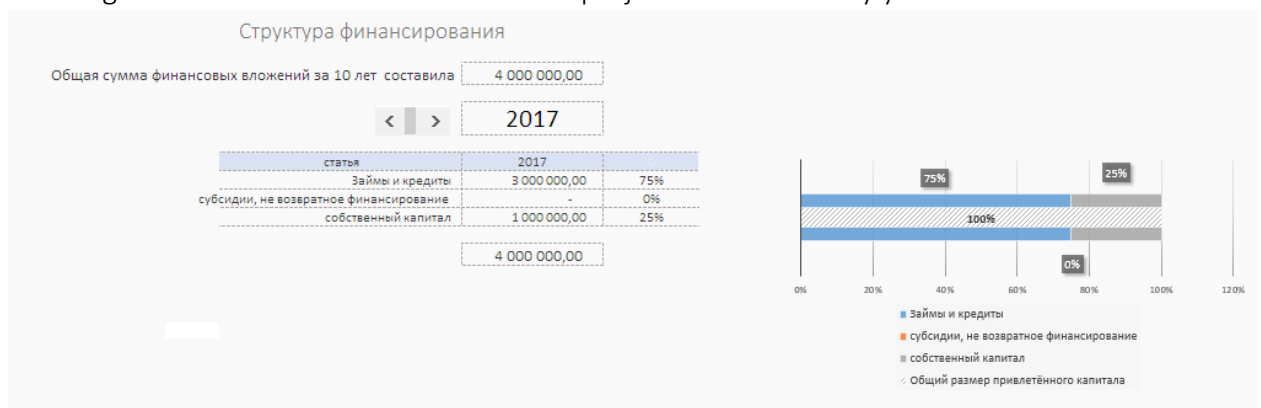All diagrams are dynamic and allow analysis for specified periods.

### Structure of Income and Expenses

The "waterfall" diagram allows to trace the chain of income and expenses by year.
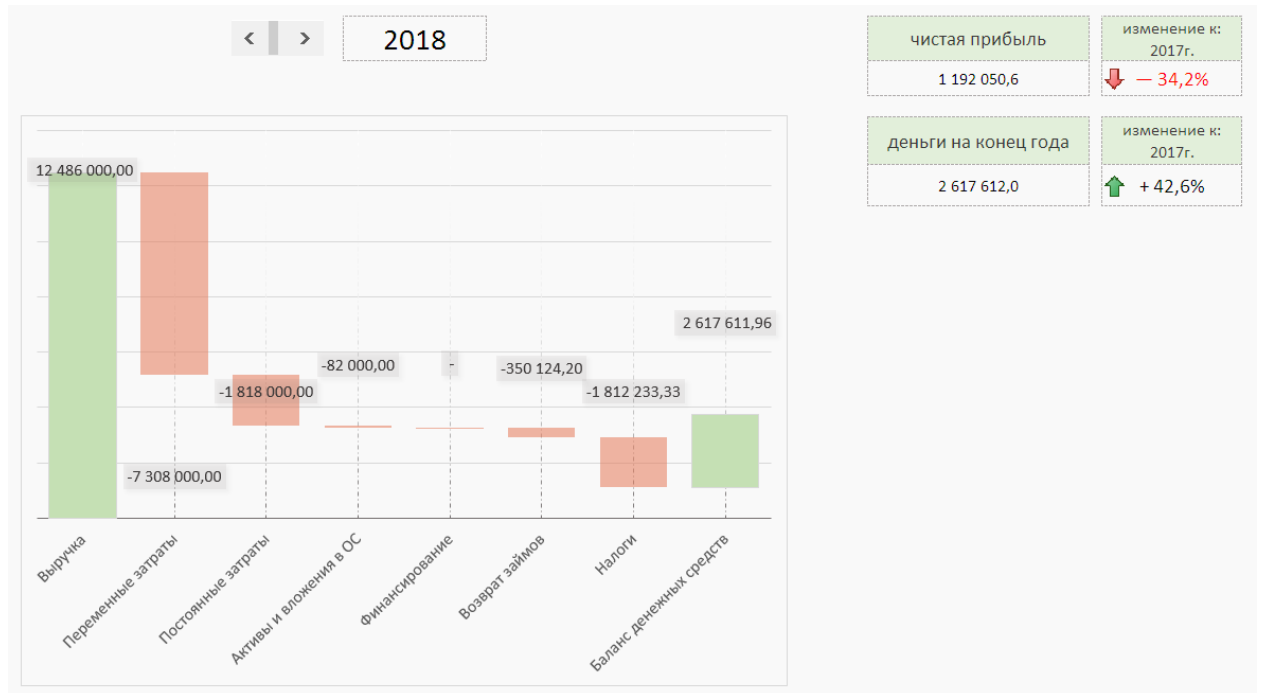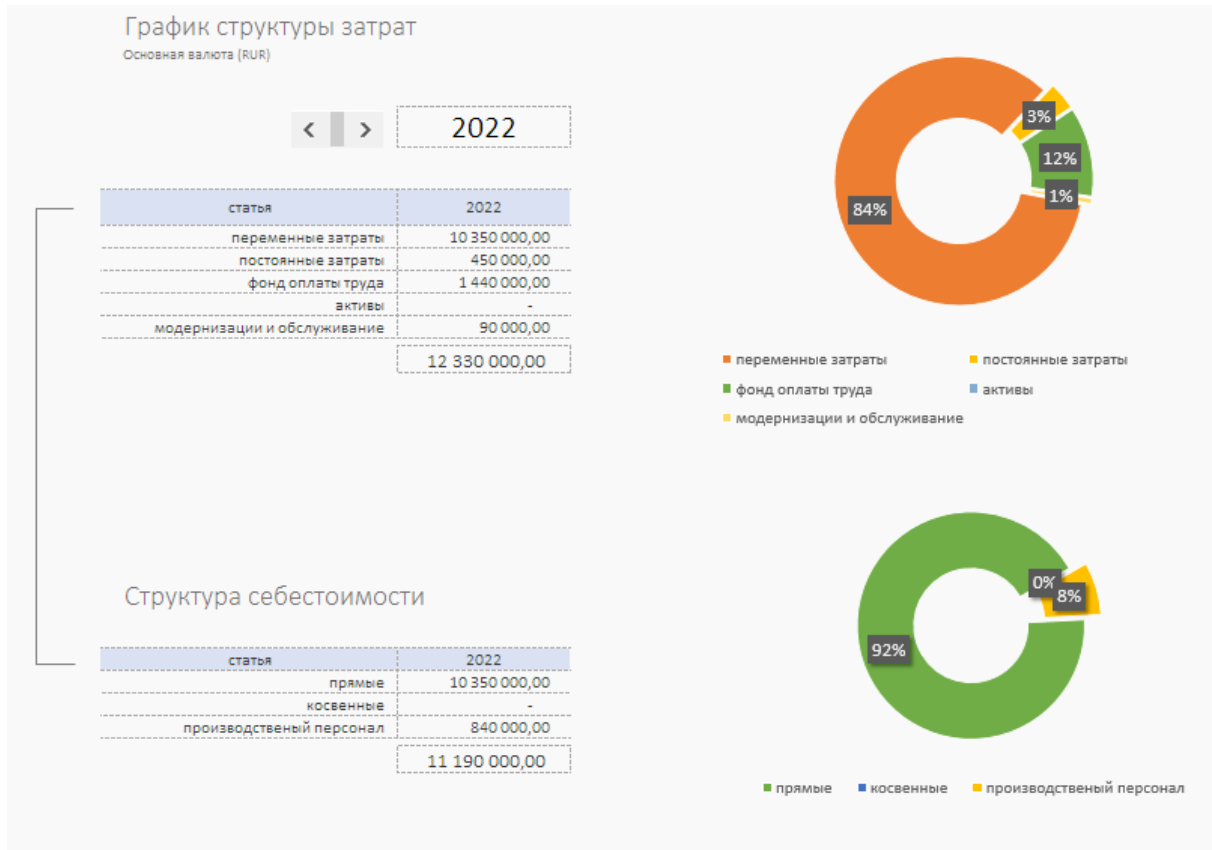


### Financing Structure

The diagram allows to trace the structure of project investments by year.
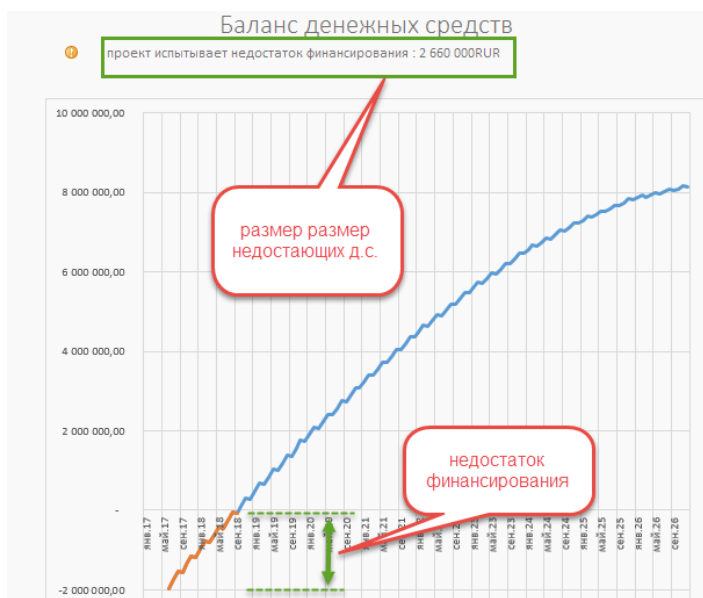
## Cost Structure

Two interconnected dynamically formed diagrams:

- Project cost structure
- Prime cost structure within costs



## Cash Flow Diagram

The diagram allows to visually identify the missing funds and their amount.

## Making Forecasts

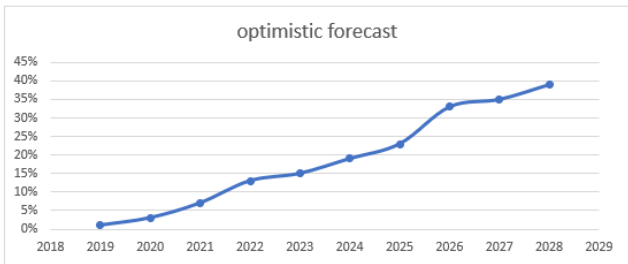The template allows to quickly make forecasts.

**Important!** Forecasts are made at the end of the main process of financial modeling.

Forecasts are made by increasing or decreasing the volume of sales percentage wise.

To build the expectation bracket, three forecasts for project implementation are mandatory:

- Realistic;
- Optimistic;
- Pessimistic;

forecasts

optimistic forecast

| version of the forecast | year | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| realistic forecast | | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| optimistic forecast | 1 | 1% | 3% | 7% | 13% | 15% | 19% | 23% | 33% | 35% | 39% |
| pessimistic forecast | | -20% | -15% | -10% | 0% | 5% | 7% | 9% | 13% | 14% | 15% |

| indicator | units | value | note |
|---|---|---|---|
| NPV - (net present value) | USD | 176 662.6 | the project can be approved by credit institution |
| IRR - (internal rate of return) | % | 20.4% | the project can be approved by credit institution |
| PI - (profitability Index) | коэф. | 2.28 | the project can be approved by credit institution |
| PP - (payback period) | years | 3 years 5 mo. | OK |
| DPP - (discounted payback) | years | 3 years 7 mo. | OK |
| ARR (Accounting Rate of Return) | % | 27.8% | the value is higher, the investment attractiveness of the project is higher |

The forecasts created are your vision of how the project may change under favorable external factors, or what will happen to the project if the implementation goes according to an unfavorable scenario.

**Realistic (baseline) forecast.** This is the current financial model that you generate first. It should reflect real expectations from the implementation of the project time schedule.

**Important.** Save the current file, make two copies, give them names corresponding to the optimistic and pessimistic variant. Go to making the optimistic forecast.

**Optimistic forecast.** (1) Open the copy of the optimistic forecast file. What will happen if the situation changes for the better? Understanding of the diversity of facts that can allow to have an optimistic scenario and the potential for positive change.
Save the current optimistic forecast.

**Pessimistic forecast.** Open the copy of the pessimistic forecast file. Here, it is important to reflect your understanding of the option in which things will go according to the scenario with extremely undesirable consequences.

## Recommendations on Using the Tool

THE FIRST ACTION is to create the first financial model that will be considered a realistic forecast and a basis for making optimistic and pessimistic forecasts.

THE SECOND obligatory action is to make sure that the baseline forecast is "ready". Save the basic calculation in three versions with different names reflecting the future type of forecasting (for example, "realistic.xlsx", "optimistic.xlsx", "pessimistic.xlsx") and only then proceed to building forecasts.

THIRD – remember, subsequent changes in these files generate separate branches of the project financial forecast.

**IMPORTANT.** Change the percentages as you see fit. Do not leave cells empty, this will cause an error.

When creating a pessimistic forecast, pay attention to the appearance of negative sales values on the money flow diagram and to the cash deficit line.

Go to the "external financing" section and eliminate cash shorts using additional financing.

## Technical Features of Working with the Tool

### Adding lines to the template

By default all tables are designed for 40 records. The necessary formulas are inserted in the tables and the tool is ready to expand the number of lines. You can expand the range with the required number of lines as follows:

Step 1. Select the last line of a table with data.

Step 2. On the right side, grab the lower right corner of the selection with the mouse and stretch to the required number of lines.

See Video