

4. Production planning

The goal is to calculate the production cost (we will do this in the Project Expert program)

Let's see a video about growing mushrooms:

how it's made mushrooms //

<https://www.youtube.com/watch?v=wdPe1bhVFuU>

This will allow you

- Understand that this section of the business plan requires the advice of technologists
- Will convince you that not everything is so simple

There are other interesting options:

- How It's Made - Kitchen Accessories, Vacuums, Papier-maché, Hydraulic Cylinders // <https://www.youtube.com/watch?v=G-N5-NHYKr4>
- how it's made snickers chocolate // https://www.youtube.com/watch?v=Qkc_2_ZiF9M
- How It's Made - Hot Dogs // <https://www.youtube.com/watch?v=2NzUm7UEEIY>
- How It's Made - McDonald's Fries // <https://www.youtube.com/watch?v=ImQfmo820Qw>

Basic production operations. Scheme, sequence

1. main capital. Accurate assessment of the value of fixed assets
2. life time. Amount of annual depreciation
3. Maintenance (spare parts)
4. Sources of equipment (suppliers). Exact delivery time, shipping costs, import duties, insurance, installation and trial costs
5. Planned capacity. The level of capacity utilization (hours per day, days per week)
6. Capacity of production in the future. Other works (improvement and development of products during low capacity utilization)

7. Payment of **equipment** (financing), conditions and possibilities of acquisition. Terms of sale (purchase) of equipment
8. **Layout** and layout of the plant. Legal addresses. Area, plant layout: necessary for buildings and equipment
9. **Buildings** - a description of the main production premises and offices of companies: lease or ownership, fixed or other accommodation, compliance with current and future needs
10. **Equipment** of industrial buildings and offices of the company Characteristics of the existing and future. Influence on the way of providing production of a product or services
11. Requirements for **raw materials** (sources, names of future suppliers, quantity, order and delivery cycle, detailed conditions and terms of purchase, names of spare suppliers in case, the need to ensure the continuity of production

The cost of raw materials (the cost of a unit of raw materials, all types of average monthly demand). Cost factor / issue per month

Labor force, her qualifications. Availability and categories qualification. The salary scale. Cost of labor. Spending on wages, additional payments, leave, social and medical insurance. Labor productivity, motivation, incentives. Working Conditions, Increasing Responsibility, Benefits

General factory expenses, invoices. Expenses that do not vary or vary slightly, depending on the level of production

The unit cost of the product (the number of products per month, hourly rates (labor, production and overhead)

Cost of Goods Manufactured (COGM) and Sold (COGS)

Statement Formulas (<https://ru.scribd.com/doc/53127423/COGM-COGS-Formula>):

Prime Cost = Direct Materials Cost + Direct Labor Cost

Total Factory Cost or Manufacturing Cost = Direct Materials + Direct Labor Cost + Factory

Overhead Conversion Cost = Direct Labor Cost + Factory

Overhead Cost

Cost of Goods Manufactured (COGM) = Total Factory Cost + Opening Work in Process

Inventory - Ending Work in Process Inventory

Cost of goods sold (COGS) = Cost of goods manufactured + Opening finished goods inventory - Ending finished goods inventory

Number of units manufactured = Units sold + Ending Finished Goods units – Opening finished goods units

Per unit cost of goods manufactured = Cost of goods manufactured / Units manufactured

Materials used or consumed = Opening inventory or materials + Net purchases of materials - Ending inventory of materials

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