POLITECNICO MILANO 1863

AFC – budgeting year 2024

operating budget
goal is calculating EBIT

Targets:

- **ROS (Return On Sales) 2024 > 15%** ebit and rev!
- **ROA (Return On Assets) 2024 > 10%** no idea of asset in operating budget

Hypotheses for building the 2024 Budget:

- The company manufactures only one type of product;
- Inventories are accounted using the *Last In First Out* (LIFO) method; because of storage structure
- Inventories of Finished Goods are accounted using the *full costing* method; direct and indirect
- The scale of production cannot be increased in the short-term; can't buy new equipment
- Target levels of inventories at 31/12/2024:
  - Raw materials: + 5% kg compared to 31/12/2023;
  - Finished Goods: + 50 units compared to 31/12/2023 (this decision cannot be modified).

Inventories at 31/12/2023 (Pre-Consumptive)

	Quantity	Value (€)
Raw Materials	1,000 kg	1,000 €
Finished Goods	75 u	3,000

1 € per kilo

Relevant data for budgeting the Income Statement in 2024: standard data normal efficiency

a) Revenues:
- Sales: 1,000 units;
- Price: 70 €/unit;

b) Operations:
- Maximum capacity (hours of maintenance included): 3,000 hours/year;
- Scheduled maintenance: 150 hours/year;
- *Standard* data for 2024:

Resource	Consumption	Cost
Direct Raw Material	6 kg/units	2.00 €/kg
Direct Labour	2 hours/unit	8.00 €/hour
Machine Time	3 hours/unit	

- Standard indirect costs (useful for the 2024 Budget):
  - Variable: 1.50 €/machine hour (only working hours)
  - Fixed:
    - Equipment depreciation: 3,000 €;
    - Supervisor's salary: 2,000 €;
    - Rent: 605 €.
- Price for purchasing finished goods from an outsourcer[1]: 45 €/unit.

c) Other costs (non-manufacturing): period cost

- Labour:
  - Wages sales department: 4,800 €;
  - Wages administration/human resources/finance & control: 5,000 €;
- Sales commissions: 2% of revenues;
- Advertising and marketing expenses: 4,300 €;
- Costs for administrative activities: 2,000 €;
- Expenses for R&D: 5,000 €.

[1] The company prefers keeping as inventory products that have been internally manufactured.

financial budget

Assignments (first part):

1. *Determine the expected EBIT (Net Operating Income) for 2024.*
2. *Check if the expected ROS (Return On Sales) will be more than 15%.*

Relevant information for financial budgets

we don't have the real data

Balance Sheet at 31/12/2023 (Pre-Consumptive) – data in thousands of euros

ASSETS		EQUITY & LIABILITIES	
Cash	2	Share Capital	24
Receivables	15	Reserves	7.4
Inventories	4	2022 Net Income mistake (2023 net income) 2022 would be in retaind earnings which must be in reserves	2
Long-term Tangible Assets	25	Payables	3
Financial long-term Assets	3	Debts with banks	8
		Bonds	4
		Debts for unpaid taxes	0.6

OTHER RELEVANT INFORMATION:

a) Assets and depreciation[2]:

- Assets already in the Balance Sheet refer to manufacturing equipment and will be depreciated for 1,000 €.
- On 01/01/2024 the company will buy another equipment for 10,000 €, depreciation over 10 years. This asset will be paid as follows: 5,000 € in 2024 and 5,000 € in 2025.
- On 01/01/2024 the company will buy an information system for production scheduling for 5.000 € that will be paid in the second semester of 2024.
  This investment will be depreciated over 5 years from 2024.

b) Financial assets/liabilities:

- Bonds for 2,000 € will be repaid together with the relative coupons of 400 € in 2024.
- Debts with banks will be repaid in 2027. The interest rate on bank loans is 10% per year and must be paid on 31/12 every year.
- Financial revenues: 600 €.

c) Taxes:

- Tax rate = 50% paid at 31/12 every year.

d) Other data:

- Dividends: 50% of 2023 net profit;
- DSO (average collection period for trade receivable): 3 months;
- DPO (average payable period) for raw materials suppliers: 6 months;
- DPO (average payable period) for other suppliers: not relevant;
- Revenues and raw materials purchase are uniformly distributed throughout the year;

Assignments (second part):

3. *Determine the expected cash flow for year 2024.*
4. *Check if the expected ROA (Return On Assets) will be more than 10%.*

   OPTIONAL

5. *Use the Du Pont Analysis to investigate how the company will use the financial leverage.*

[2] There is no depreciation other than the ones related to the operations.

conclusion of budgeting is analysing of leverage!!! (not master document)