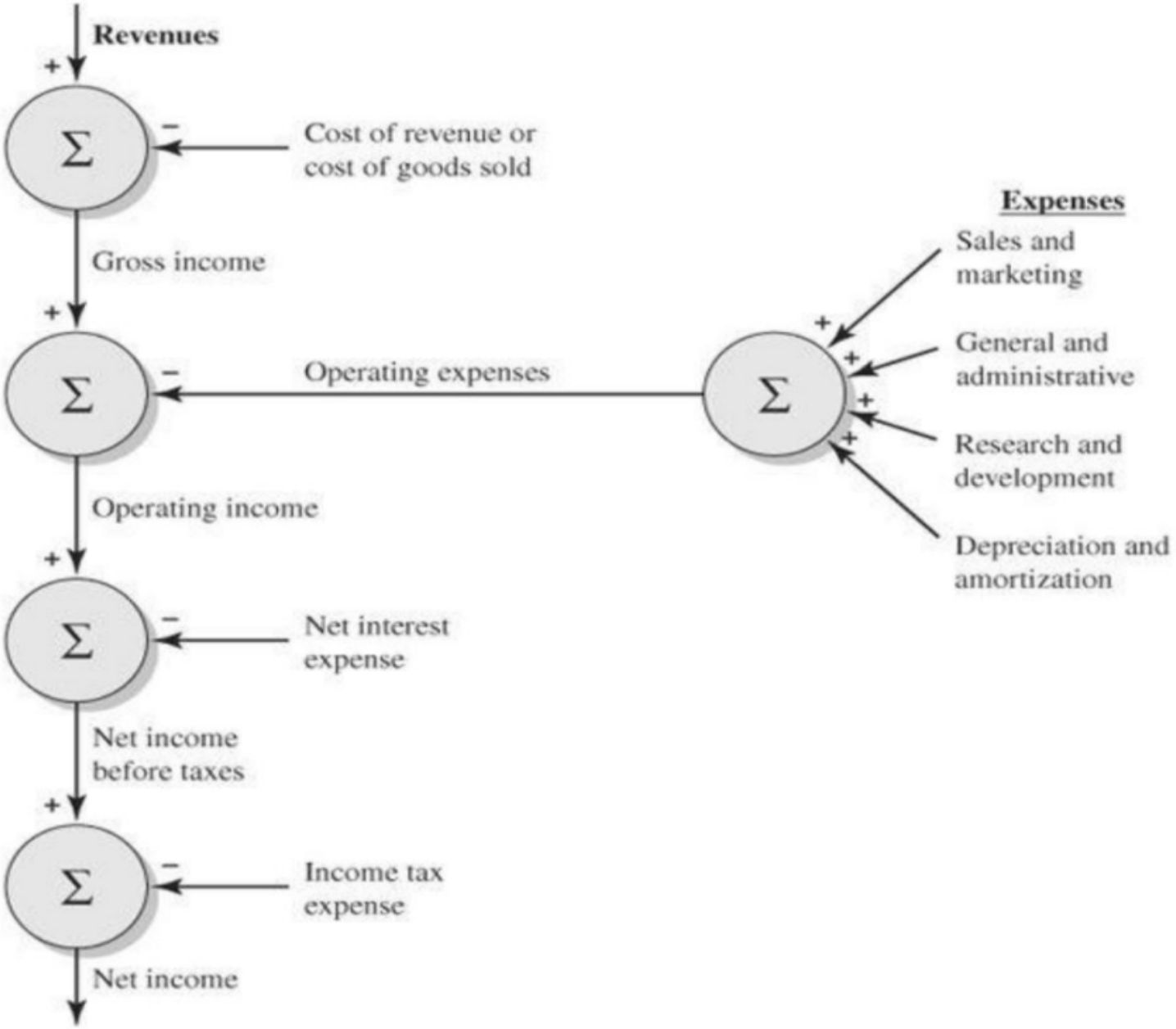
M9, M10 - Startup Finance

For Reference:

Fundamental Accounting Equation

$$Assets - Liability = OwnerEquity$$



Revenue

Amount earned by company before deducting any expenses

Cost of Goods Sold (COGS)

Direct cost of producing products (including everything like raw materials, manufacturing etc)

Gross Profit

$$GrossProfit = Revenue - COGS$$

Gross Profit Margin

$$\text{Gross Profit Margin} = \left(\frac{\text{Revenue} - \text{COGS}}{\text{Revenue}}\right) \times 100 = \left(\frac{\text{Gross Profit}}{\text{Revenue}}\right) \times 100$$

Operating Expenses

Ongoing costs a business incurs to run its operations (rent, salaries, utilities, marketing, etc; these do not include the cost of producing goods/COGS)

Operating Profit

$$\text{Operating Profit} = \text{Gross Profit} - \text{Operating Expenses}$$

Operating Profit Margin

$$OPM = \left(\frac{\text{Gross Profit} - \text{Operating Expenses}}{\text{Revenue}}\right) \times 100 = \left(\frac{\text{Operating Income}}{\text{Revenue}}\right) \times 100$$

Net Income

$$\text{Net Income} = \text{Operating Profit} - (\text{Taxes, Interest \& Other Charges})$$

Balance Sheet

Financial statement that shows a company's assets, liabilities, and equity **at a specific time**. It provides a **snapshot of the company's financial health**

Income Statement

Also known as the Profit and Loss Statement, it shows a company's revenues, expenses, and profit (or loss) **over a period of time, such as a month or a year**

Cash Flow Statement

Tracks the movement of cash **in/out of a business**; how much cash is available for operations, investing, and financing

Profit vs. Cash Flow

Profit

("Bottom Line")

- Profit (or net income) is what's left after subtracting all expenses from revenue.
- It's what the company earns on paper and is reported in the income statement.

Cash Flow

("Oxygen" or "lifeblood" of a business)

- Cash flow is the actual movement of money in and out of the business.
- It's tracked in the cash flow statement and determines whether a company can pay its bills.

Example:
If a business sells $100,000 worth of products but allows customers to pay in 90 days, it may show a profit on paper, but **it doesn't yet have the cash to pay expenses.**
Example:
A startup raises $500,000 from investors but spends $50,000 a month. **Even if it's not profitable yet, it has cash flow to survive for 10 months.**

- Cash flow keeps the company running but profitability ensures long term success
- Investors care about both

Valuation

- Two types: pre-money (before an investment), post-money (after an investment)

$$PostMoney = PreMoney + Investment$$

- Founders prefer higher pre-money valuation since they give away less equity
- Investors prefer lower pre-money valuation since they get more equity for the same amount of money

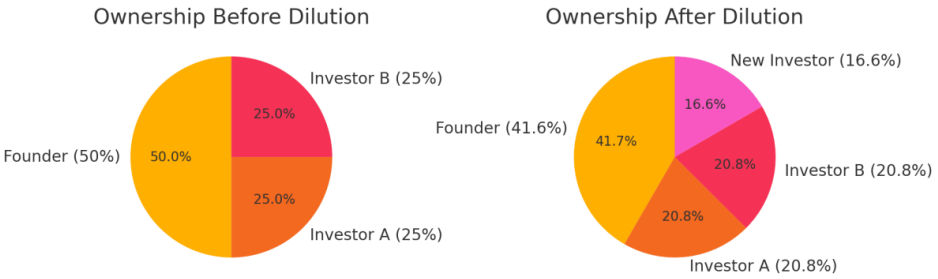
Example

In 2009, Airbnb struggled to raise money and accepted a $600,000 investment at a $2.4 million *pre-money valuation* from Sequoia Capital. What % of the stake did Sequoia Capital get?

- Pre-Money Valuation: $2.4 million
- Investment Amount: $0.6 million ($600,000)
- Post-Money Valuation: $3 million ($2.4M + $0.6M)
- Investor Ownership: 20 % of the startup *(Founder's share went down by the same %)*

Dilution

Decreased ownership % of existing shareholders when startup issues new shares



Before Dilution:

- Total shares = 1,000,000;
- Founder owns 50% (500,000 shares)
- Investor A & Investor B each own 25% (250,000 shares each)

Startup issued 201,923 new shares during the funding round

After Dilution:

Founder now owns 41.6%

Investor A and B each own 20.8%

New Investor owns 16.6%

Burn Rate

Rate at which startup spends cash reserves before it is generating positive cash flow
Eg: Startup spends Rs. 1,00,000 a month but also generates revenue of Rs. 40,000 in revenue per month -> Burn rate = Rs. 60,000/month

Runway

Amount of time the startup can continue operating w/o additional investment or revenue; directly linked to burn rate

$$\text{Runway (months)} = \frac{\text{Cash Balance}}{\text{Burn Rate per Month}}$$

Breakeven

Point at which startup completely covers its fixed and variable costs; total revenue = total costs

$$\text{Breakeven Point (in units)} = \frac{\text{Fixed Costs}}{\text{Selling Price per Unit} - \text{Variable Cost per Unit}}$$

$$\text{Breakeven Point (in revenue)} = \text{Breakeven Point (in units)} \times \text{Selling Price per Unit}$$