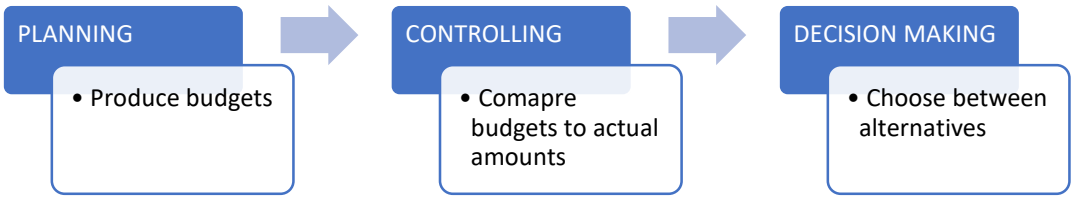
What is management accounting?

- Management accounting focuses on internal users and making decisions internally

Why?

- Managers want to **increase firm's efficiency to decrease costs**!



Cost Classifications

- **Direct Cost**: direct relation between cost and cost object (direct material & labour)
- **Indirect Cost**: supports cost object → converts material to products (overhead, utilities)
- **Prime Cost** = Direct materials + Labour
- **Conversion Cost** = Labour + Overhead

  **Labour is included in both prime and conversion cost.

  **Need labour and overhead to convert materials to products

- **Product (Inventoriable) Cost**: all costs incurred to get product ready for sale
- **Period Cost**: all costs incurred after product ready for sale (marketing, selling, admin)
  - **Fixed cost**→ as the # of units increases, cost remain unchanged
  - **Variable cost**→ as the # of units increases, cost changes
  - **Total cost = FC + VC**

Example: Classify the following costs as inventoriable or period:

a) Electricity at a manufacturing plant: *Inventoriable Cost* (need electricity to manufacture product and get it ready for sale)

b) Electricity at a retail store: *Period Cost* (the products are ready for sale)

Example: Classify the following costs as fixed or variable:

a) Insurance: *Fixed Cost*

b) Inventory purchased for sale: *Variable* (the more units purchased, the higher the cost)

Cost-Volume-Profit Relationships

- **Operating Income** = Revenue – Variable Costs – Fixed Costs
- **BEP (Break-even point in Units)** = $\frac{Total\ Fixed\ Costs}{Contribution\ Margin\ per\ Unit}$
- **Volume of Units Required to be Sold** = $\frac{Fixed\ Costs + Target\ Operating\ Income}{Contribution\ Margin\ per\ Unit}$
- **Target Operating Income =** $\frac{Target\ Net\ Income}{1 - Tax\ Rate}$
- **Contribution Margin** = Revenue – Variable Costs
- **Contribution Margin %** = $\frac{Contribution\ Margin\ per\ Unit}{Selling\ Price}$
- **Margin of Safety** = Actual Units – Breakeven Point in Units

Example:

Calculate the contribution margin, break-even point in units, margin of safety, and the number units required to achieve the target operating income.

- Sold 200 000 units for $30 per unit
- Variable cost per unit is $25
- Fixed costs are $800 000
- Target operating income is $500 000

a) Contribution Margin = Revenue – VC → (200 000 * 30) – (200 000 – 25)

= $1 000 000

Per unit = 1 000 000 / 200 000

= $5 / unit

b) BEP = Total FC / CM/Unit → 800 000 / 5

= 160 000 units

c) Margin of Safety = Actual – BEP → 200 000 – 160 000

= 40 000 units

d) Units Required = (FC + Target OI) / CM/Unit → (800 000 + 500 000) / 5

= 260 000 units