

## Steps

1. Data Cleaning
2. Financial Ratio
  - Liquidity Ratio
    - $\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$
    - $\text{Quick Ratio} = (\text{Current Assets} - \text{Inventory}) / \text{Current Liabilities}$
    - $\text{Cash Ratio} = (\text{Cash} + \text{Cash Equivalents}) / \text{Current Liabilities or Current Assets} / \text{Total Liabilities}$
  - Solvency Ratio
    - $\text{Debt to Equity Ratio} = \text{Total Debt or Total Liabilities} / \text{Total Equity}$
    - $\text{Debt to Assets Ratio} = \text{Total Debt or Total Liabilities} / \text{Total Assets}$
    - $\text{Interest Coverage Ratio} = (\text{Earnings Before Interest and Taxes}) \text{ EBIT} / \text{Interest Expense or (Gross Profit} + \text{Interest)} / \text{Total Assets}$
  - Profitability Ratio
    - $\text{Profit Margin} = \text{Net Income} / \text{Total Revenue or Net profit} / \text{Sales}$
    - $\text{Return on Assets (ROA)} = \text{Net Income} / \text{Total Assets}$
    - $\text{Return on Equity (ROE)} = \text{Net Income} / \text{Average Shareholders' Equity or } [(\text{Net profit} / \text{Sales}) / (\text{Equity} / \text{Total Assets})] * \text{Sales} / \text{Total Assets}$
  - Efficiency Ratio
    - $\text{Inventory Turnover Ratio} = \text{Cost of Goods Sold} / \text{Average Inventory or Sales} / \text{Inventory}$
    - $\text{Accounts Receivable Turnover Ratio} = \text{Net Credit Sales} / \text{Average Accounts Receivable or Sales} / \text{Receivables}$
    - $\text{Asset Turnover Ratio} = \text{Net Sales} / \text{Average Total Assets or Total Sales} / \text{Total Assets}$
3. Descriptive Statistics
4. Correlation Analysis
5. Report