

# **Finance for Growth**

# Session 1: Financial analysis for strategic decision-making

## Learning Objectives

- Basics of financial statements (Balance sheet, Income statement, Cash flow)
- Financial analysis techniques (Ratio analysis, Trend analysis)
- Understanding financial performance indicators

## Application of concepts

- Example: Microsoft's Financial Resilience, Apple's Strategic Financial Management
- Case Study: Infosys' Financial Transparency and Investor Relations
- Interactive Exercise - Financial Statement Analysis

## Case Study:

Infosys Annual report [https://drive.google.com/file/d/1OE1DyQFskulc\\_ho9xuclquCHRYzjPXMt/view?usp=sharing](https://drive.google.com/file/d/1OE1DyQFskulc_ho9xuclquCHRYzjPXMt/view?usp=sharing)

**Session 1:**  
**Financial analysis for strategic decision-making**

# Relevance of Finance fundamentals for Managers

Sl.	Performance KPIs	Competency to be acquired
1	Create program budgets & oversee project budgets	Budgeting and forecasting, KPIs (RoI)
2	Monitor expenditures to control costs	Monitoring, Earned value method
3	Financial consideration of decisions Scope adjustments Resource allocation Schedule delays	Cash Flow analysis, Cost variance
4	Identify risk of operations & contingency plans	Ratio analysis, trend analysis, corrective actions, such as reallocating funds or renegotiating contracts

# Session 2: Commercial - Budgeting & Financial Planning

## Learning Objectives

- Resource allocation and Cost estimation
- Preparing budget and Monitoring progress
- Financial forecasting techniques

## Application of concepts

- Examples: Google's Revenue Streams and Cost Management, Amazon's Approach to Financial Innovation, Reliance's Capital Expenditure Decisions, Wipro's Approach to Working Capital Management, Tata Group's Diversification Strategy
- Case Study: Infosys' Financial Transparency and Investor Relations
- Interactive Exercise - Budgeting and Resource allocation projection in spreadsheet

**Case Study:** Infosys drivers of valuation <https://drive.google.com/file/d/1VNfLo657TdpvOPQ0mxM3BFfCyd6osGER/view?usp=sharing>

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## Case Study:

Infosys Annual report [https://drive.google.com/file/d/1OE1DyQFskulc\\_ho9xuclquCHRYzjPXMt/view?usp=sharing](https://drive.google.com/file/d/1OE1DyQFskulc_ho9xuclquCHRYzjPXMt/view?usp=sharing)

## **Pre read for the session**

1. Infosys Annual Report

[https://drive.google.com/file/d/1OE1DyQFskulc\\_ho9xuclquCHRyZjPXMt/view?usp=sharing](https://drive.google.com/file/d/1OE1DyQFskulc_ho9xuclquCHRyZjPXMt/view?usp=sharing)

2. Handouts summarizing key financial ratios and trend analysis methods

## **Required during session**

3. Spreadsheet software (Excel/Google Sheets)
4. Whiteboard and markers

# **Session 1: Financial analysis for strategic decision-making**

## **Learning Objective:**

Provide foundational understanding of financial management and decision-making, to budget effectively, control cost, assess risk, track financials and make informed decisions

## **Learning Outcomes:**

- Improve project selection and prioritisation - Analyse a project's economic viability, financial stability, and commercial profitability
- Apply financial analysis techniques to assess organizational performance
- Manage cash flow, profit and loss accounts and balance sheets to monitor and control costs during a project

**Focused Skills** – Financial planning, control and decision-making for a program



# **Session Duration:** 4 hours (105 minutes + 120 minutes) + Q&A

## **9:30 am to 11:15 am**

Presentation and Case Study (60 minutes)

Interactive Exercise (45 minutes)

Break

## **11:30 am to 1:30 pm**

Presentation and Group discussion (75 minutes)

Interactive Exercise (45 minutes)

Open floor: Q&A and further engagement

Lunch

# **Learning Objective 1.1: Basics of Financial Statements**

**Skill Sets to acquire:** Understanding Financial Statements, Financial Storytelling, Decision-Making

# Reading and interpreting Financial Statements

A **balance sheet** communicates how much an organization is worth - its “book value.” as of a specific date.

- Insights on success of policy or new initiatives for internal team
- Insights on resources available and sources of finance
- investment decision for external stakeholders

An **Income statement** summarizes the impact of revenue, gain, expense, and loss transactions for a given period.

- The financial story of a business activities in a certain period i.e. actual vs expected
- Pivot strategy if organization is missing target plan

A **Cash flow statement** states how much money a company has to distribute to investors, or reinvest, after all expenses have been covered. This is different from profit.

- Organization's ability to operate in the short and long term
- Amount of cash different types of activities generate

# Understanding the Balance Sheet

The accounting equation: **Assets = Liabilities + Equity**

Assets	This Year	Last Year
<b>Current Assets</b>		
Cash and Cash Equivalents	10,000	10,000
Account Receivable	35,000	30,000
Inventory	25,000	20,000
<b>Total current assets</b>	<b>70,000</b>	<b>60,000</b>
<b>Fixed assets</b>		
Plants and machinery	20,000	20,000
Less depreciation	-12,000	-10,000
Land	8,000	8,000
Intangible assets	2,000	1,500
<b>Total Fixed assets</b>	<b>18,000</b>	<b>19,500</b>
<b>Total assets</b>	<b>88,000</b>	<b>79,500</b>
<b>Liabilities and Shareholders' Equity</b>		
<b>Liabilities</b>		
Accounts payable	20,000	15,000
Taxes payable	5,000	4,500
Long-term bonds issued	15,000	10,000
<b>Total Liabilities</b>	<b>40,000</b>	<b>29,500</b>
<b>Shareholders equity</b>		
Common stock	40,000	40,000
Retained earnings	8,000	10,000
<b>Total Shareholders equity</b>	<b>48,000</b>	<b>50,000</b>
<b>Liabilities and Shareholders' Equity</b>	<b>88,000</b>	<b>79,500</b>

**Assets:** Assets are items owned by your organization that will yield future benefits.

Those you can expect will become beneficial within the year are called **current assets**.

Those that are tangible and will generate longer-term income are called **fixed assets**.

**Liabilities:** Liabilities are expenses your organization owes other parties. Current liabilities are required to be paid off within the year, while long-term liabilities are not.

**Equity:** According to the [Corporate Finance Institute](#), owners' equity refers to the portion of assets an organization can claim as its own.

# Analyzing the Income or Profit and Loss (P&L) Statement

Income Statement		
Revenue	1000	100%
COGS	300	30%
Gross Profit	700	70%
Sales and Marketing	200	20%
R&D	200	20%
General and Admin	100	10%
Operating Income	200	20%
Interest and Taxes	60	6%
Net Income	140	14%

## **Revenue or Sales or Turnover or Top line:**

Income is the amount of money an organization earns by selling goods or services.

**Expenses:** Expenses are the amounts spent by an organization to produce and deliver goods and services

**Depreciation:** The extent to which assets (for example, aging equipment) have lost value over period

## **Income or Earnings or Net profit or Bottom line:**

Expenses are the amounts spent by an organization to produce and deliver goods and services.

# Example - Microsoft's Financial Resilience

**Diversification of Revenue Streams:** 2021 Microsoft revenue was \$168 B, with Intelligent Cloud (Azure, server products) accounting for 36%, Productivity and Business Processes (Office, LinkedIn) 33%, and More Personal Computing (Windows, Xbox, Surface) 31%. This diversification helps Microsoft mitigate risks associated with economic downturns as weakness in one segment can be offset by strength in another.

Google (80% of total revenue) and Meta's heavy reliance on advertising revenue, making it more susceptible to economic cycles. Google's Cloud segment has been growing but is not yet as profitable as Azure.

**Strong Balance Sheet Management:** Microsoft had \$130 B in cash and marketable securities in 2021, one of the strongest balance sheets in industry (Google \$142 B, Apple \$191 B). This allowed Microsoft to make strategic acquisitions, increase R&D spending during downturns, & return to shareholders through dividends & share buybacks.

In 2020, Microsoft returned \$35 B in form of dividends & share repurchases.

**Focus on High Growth Areas:** Azure has seen revenue growth rates frequently >50% QoQ, significantly outpacing the overall market growth. Microsoft's early and aggressive investment in cloud infrastructure positioned it as the second-largest cloud services provider after Amazon, securing a substantial market share in a high-growth industry.

Mark Mahaney, a leading tech analyst notes that Microsoft's aggressive move into cloud computing and its integration with legacy products provide a competitive moat that is difficult for competitors to breach.

# Decoding the Cash Flow Statement

Free cash flow indicates how much money a company has to distribute to investors, or reinvest, after all expenses have been covered.

Free cash flow is arguably the most important metric. It's a strong indicator of profitability. Analysis over long term shows that great businesses generate high return on invested capital, meaning "Free Cash Flow".

Free cash flow helps make present day decisions based on expected future payoffs, such as budgeting or hiring. It can indicate

- Rapidly growing startup or a mature and profitable org
- Org going through transition or in a state of decline
- How your department is contributing to organization's health
- basis of valuation calculations (ie. DCF method)

# How does Revenue link to Free Cash Flow

## Income Statement

Revenue	1000	100%
COGS	300	30%
Gross Profit	700	70%
Sales and Marketing	200	20%
R&D	200	20%
General and Admin	100	10%
Operating Income	200	20%
Interest and Taxes	60	6%
Net Income	140	14%

## Statement of Cash Flows

Net Income	140	14%
Non- Cash Items	60	6%
Change in Working Capital	40	4%
Cash from Operations	240	24%
Capex	140	14%
Free Cash Flow	100	10%

Operating levers to convert revenue to free cash flow

—————→ Gross Margin

—————→ Operating Margin

—————→ Working Capital

—————→ Capital Intensity



# Sections of Cash Flow Statement

- Cash flows from **Operating activities** - includes cash from services delivery, includes both revenue and expenses.
- Cash flow from **Investing activities** - includes purchasing or selling assets using free cash (not debt) like PP&E, vehicles, patents, marketable securities, acquisition etc.
- Cash flow from **Financing activities** - includes cash flow from both debt and equity financing like dividend paid, issuance of debt, repurchase of stock etc.

Cash Flow can be calculated

- **Directly** from actual transaction data - take all cash collections from operating activities and subtract all of the cash disbursed from the operating activities)
- **Indirectly** starting with the net income in the P&L and makes adjustments to undo the impact of the accruals (non-cash expenses like depreciation and amortization)

# Path to Free Cash Flow

Organization

Financials with free cash flow



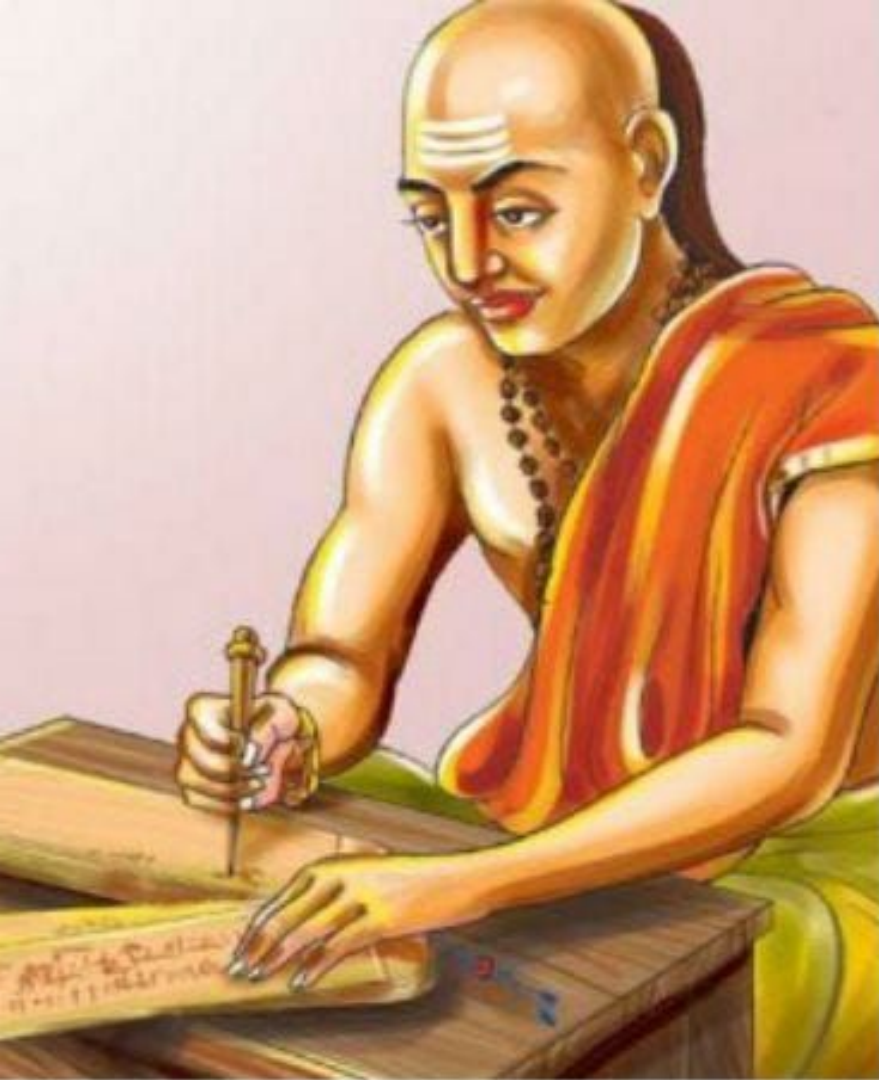
Business Unit

Profitable product line, business segment or Region's financial metrics



Customer unit

Customer Acquisition + Service Cost << Lifetime Revenue from Customer



"अन्ते लाभो न चापत्तिर्मध्ये विघ्नानि  
केचन। यदि स्यादेवमन्येत व्यापारः स  
विशिष्यते॥"

If a business yields profit in the end, does not cause loss and there are only a few obstacles in the middle, then one should consider that business to be excellent.

Chanakya's Arthashastra

1.15

# Common follow-up questions

1. "Can you explain the primary differences between a balance sheet and an income statement?"
2. "How does the cash flow statement complement the information provided in the income statement and balance sheet?"
3. "Why is it important to analyze all three financial statements together rather than in isolation?"
4. "What are some common signs of financial health you can identify from a company's balance sheet?"



# Assessment



## Assignment 1

**Which of the following is NOT a component of the balance sheet?**

- A) Assets
- B) Liabilities
- C) Equity
- D) Revenue

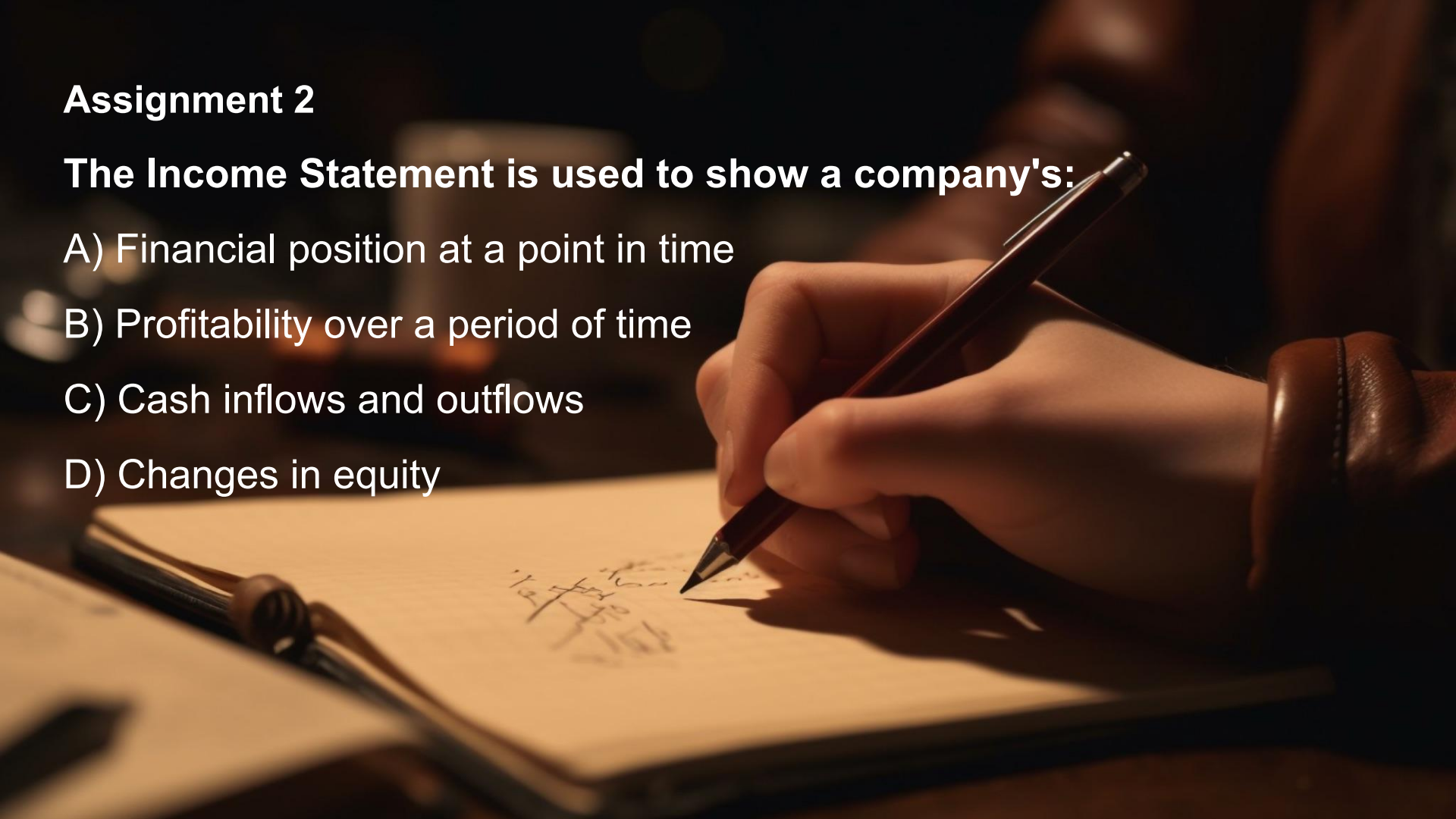




## Assignment 2

**The Income Statement is used to show a company's:**

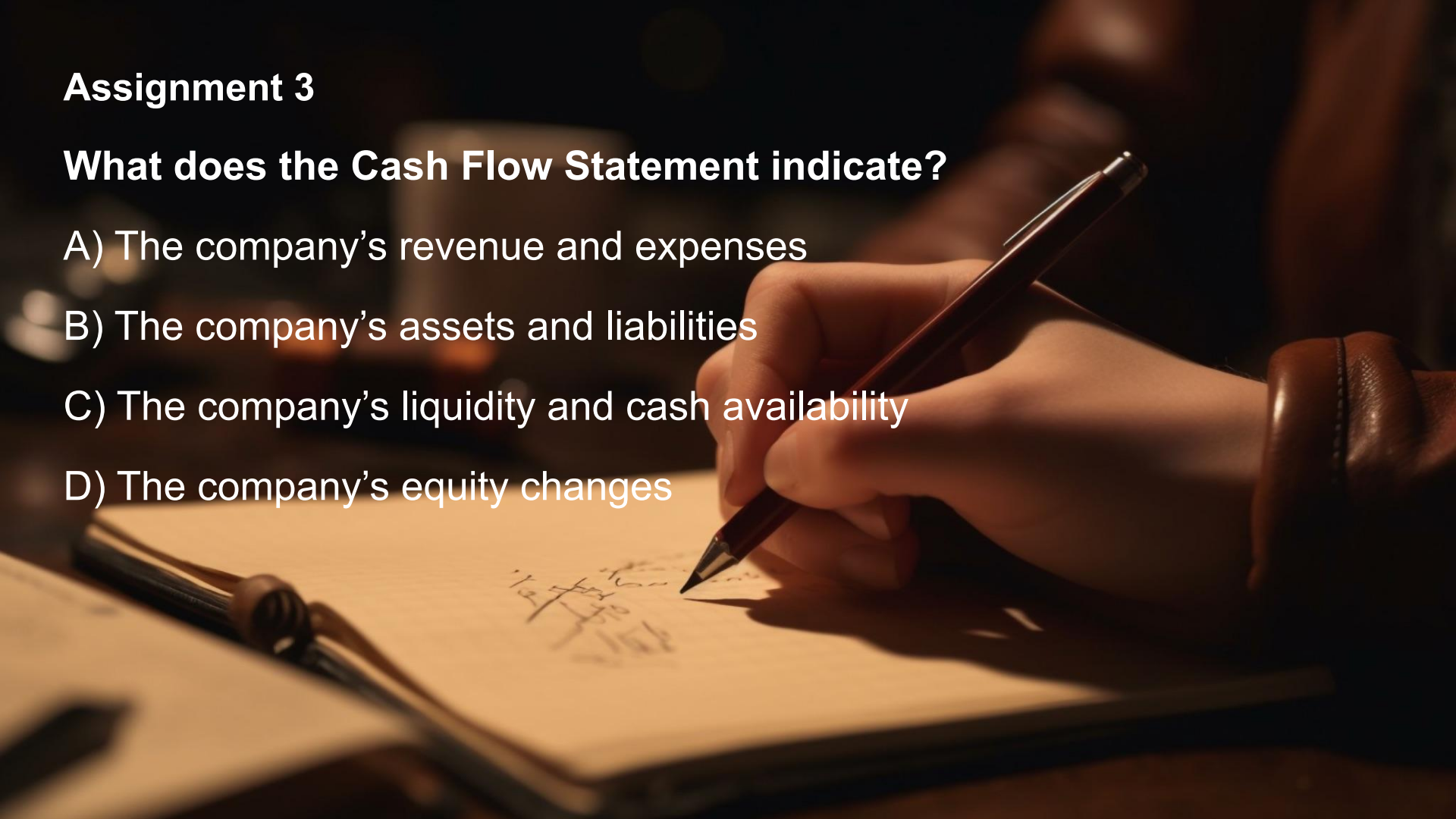
- A) Financial position at a point in time
- B) Profitability over a period of time
- C) Cash inflows and outflows
- D) Changes in equity



## Assignment 3

### What does the Cash Flow Statement indicate?

- A) The company's revenue and expenses
- B) The company's assets and liabilities
- C) The company's liquidity and cash availability
- D) The company's equity changes

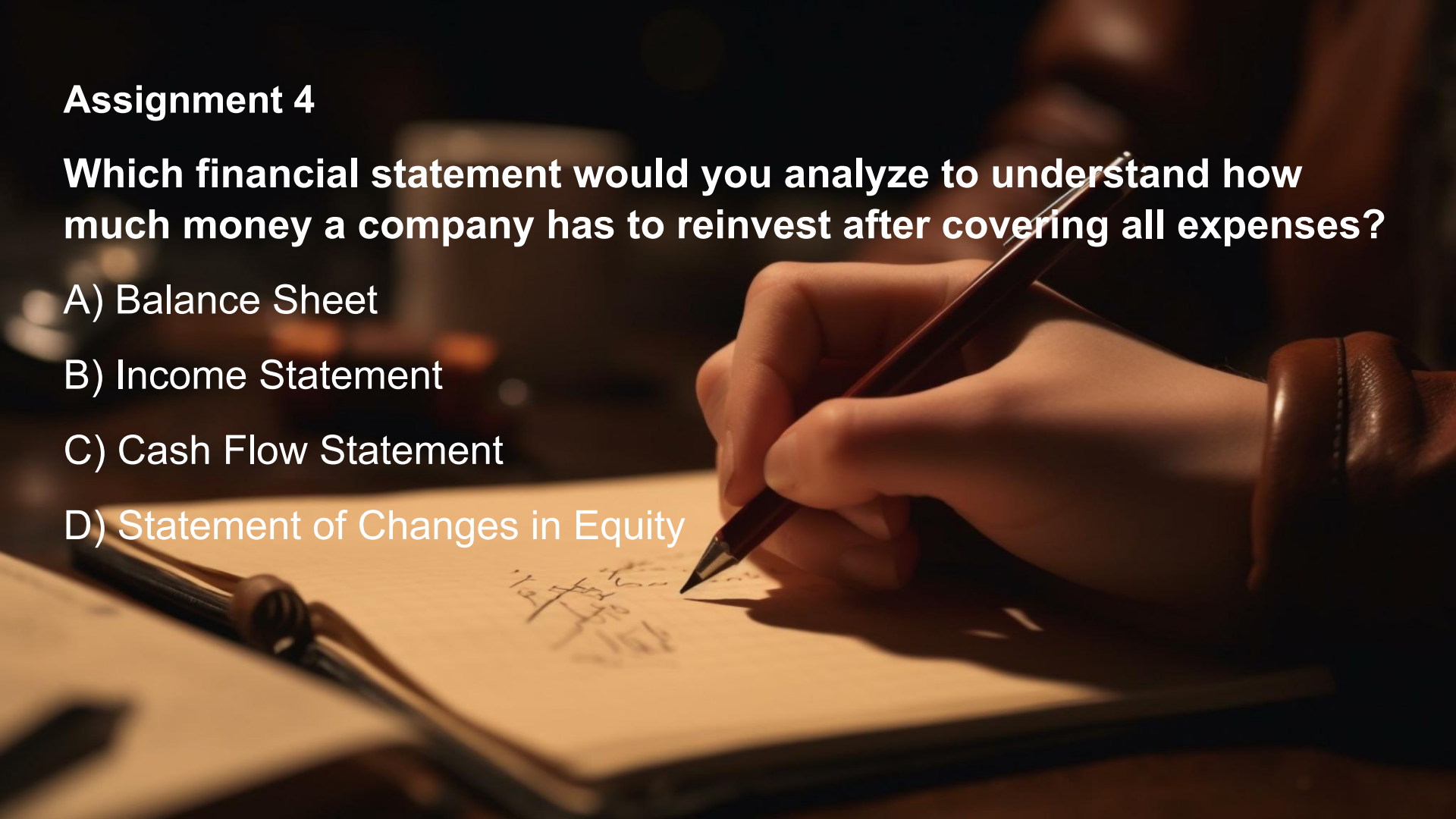




## Assignment 4

**Which financial statement would you analyze to understand how much money a company has to reinvest after covering all expenses?**

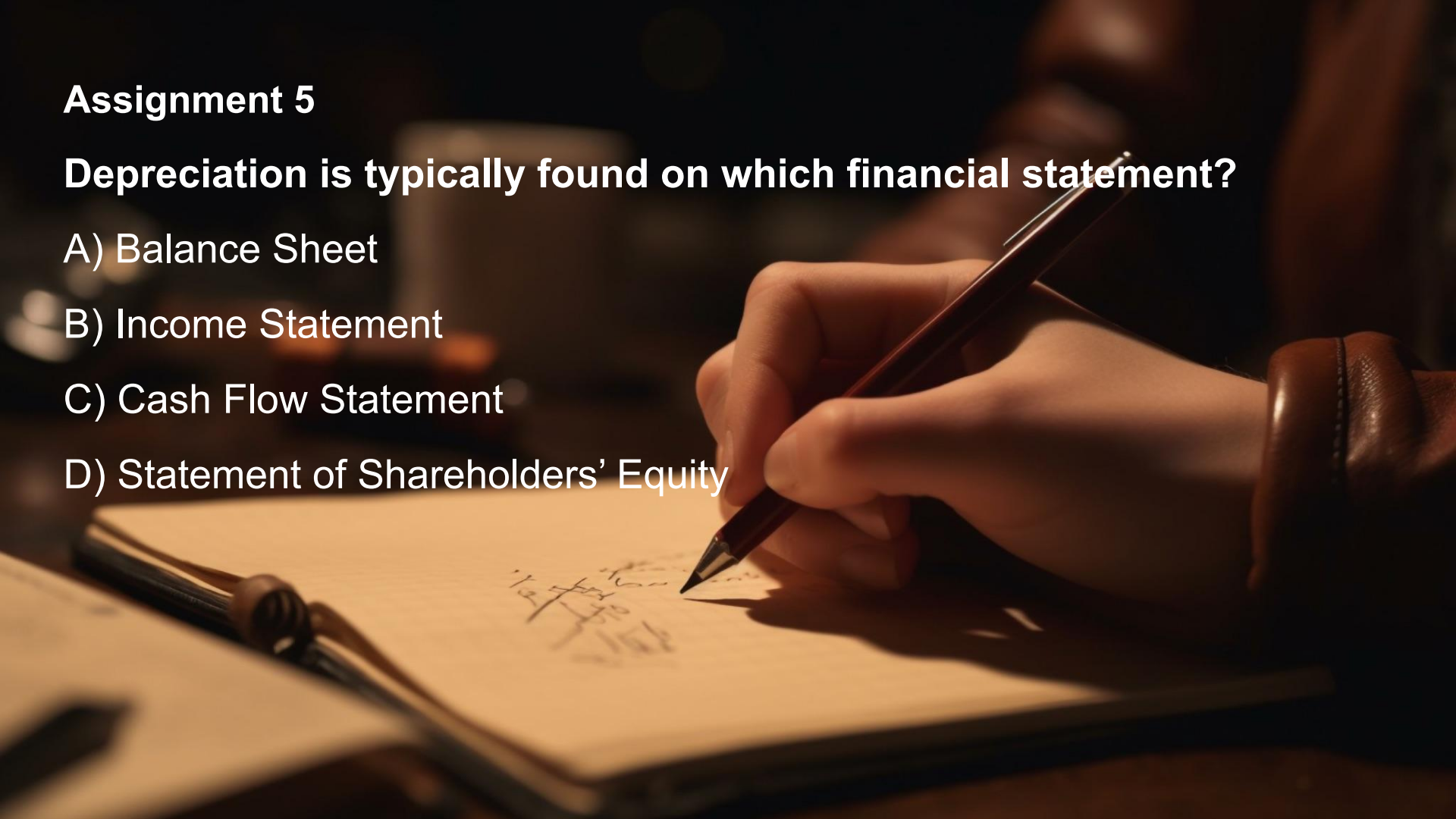
- A) Balance Sheet
- B) Income Statement
- C) Cash Flow Statement
- D) Statement of Changes in Equity



## Assignment 5

**Depreciation is typically found on which financial statement?**

- A) Balance Sheet
- B) Income Statement
- C) Cash Flow Statement
- D) Statement of Shareholders' Equity



## **Learning Objective 1.2: Financial Analysis Techniques**

**Skill Sets to acquire:** Ratio analysis, Trend analysis, Comparative analysis

# Financial Analysis Techniques

- Overview of ratio analysis and trend analysis
- Importance of financial benchmarks and industry comparisons

## Financial Analysis:

- **Ratio Analysis:** Using financial ratios to assess a company's performance and financial health, such as liquidity ratios, profitability ratios, and efficiency ratios
- **Trend Analysis:** Examining financial data over time to identify patterns, trends, and potential areas for improvement
- **Variance Analysis:** Comparing actual financial results to budgeted or expected results to identify deviations and take corrective actions

# Ratio Analysis

**Vertical analysis:** as % of base figure, for a statement

Income Statement		
Revenue	1000	100%
COGS	300	30%
Gross Profit	700	70%
Sales and Marketing	200	20%
R&D	200	20%
General and Admin	100	10%
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Interest and Taxes	60	6%
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Statement of Cash Flows		
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**Horizontal analysis:** Changes over multiple reporting periods, mostly absolute can be %

- Growth over last year or quarter
- The inflation for various cost items vary ie. rent can be 10%, admin service 5%
- Increase in revenue can have a very high impact on profitability, low if org is not structured properly
- Check reasons for increase - extra manpower wrt prior periods, macro factors
- Check increase wrt competition & market

# Variance Analysis

## Tools and Techniques for Variance Analysis

- **Flexible Budgeting:** Adjusting budgets based on actual activity levels.
- **Trend Analysis:** Analyzing trends over time to identify patterns.
- **Variance Reports:** Regularly scheduled reports highlighting variances.
- **Key Performance Indicators (KPIs):** Metrics that indicate performance against targets.

## Common Causes of Variances

- **Price Changes:** Fluctuations in the price of raw materials or finished goods.
- **Volume Changes:** Differences in the volume of sales or production.
- **Efficiency Changes:** Variations in the efficiency of operations.
- **Economic Conditions:** Changes in the economic environment affecting costs and revenues.

## Practices in Variances Analysis

- **Data Segmentation:** Segment data by departments, products, regions, etc., for more granular analysis
- **Root Cause Analysis:** Use techniques like the 5 Whys or Fishbone Diagram to determine the underlying causes of variances
- **Rolling Forecasts:** Use rolling forecasts to adjust budgets periodically based on the latest actuals and trends
- **Visualizations:** Use graphs and charts to visually represent variances and trends

# Common follow-up questions

1. "What are the most commonly used financial ratios, and what do they indicate about a company's performance?"
2. "How can trend analysis help in predicting a company's future financial performance?"
3. "Can you provide an example of how ratio analysis can identify potential financial issues?"
4. "What are the limitations of using ratio analysis and trend analysis in financial decision-making?"





# Assessment

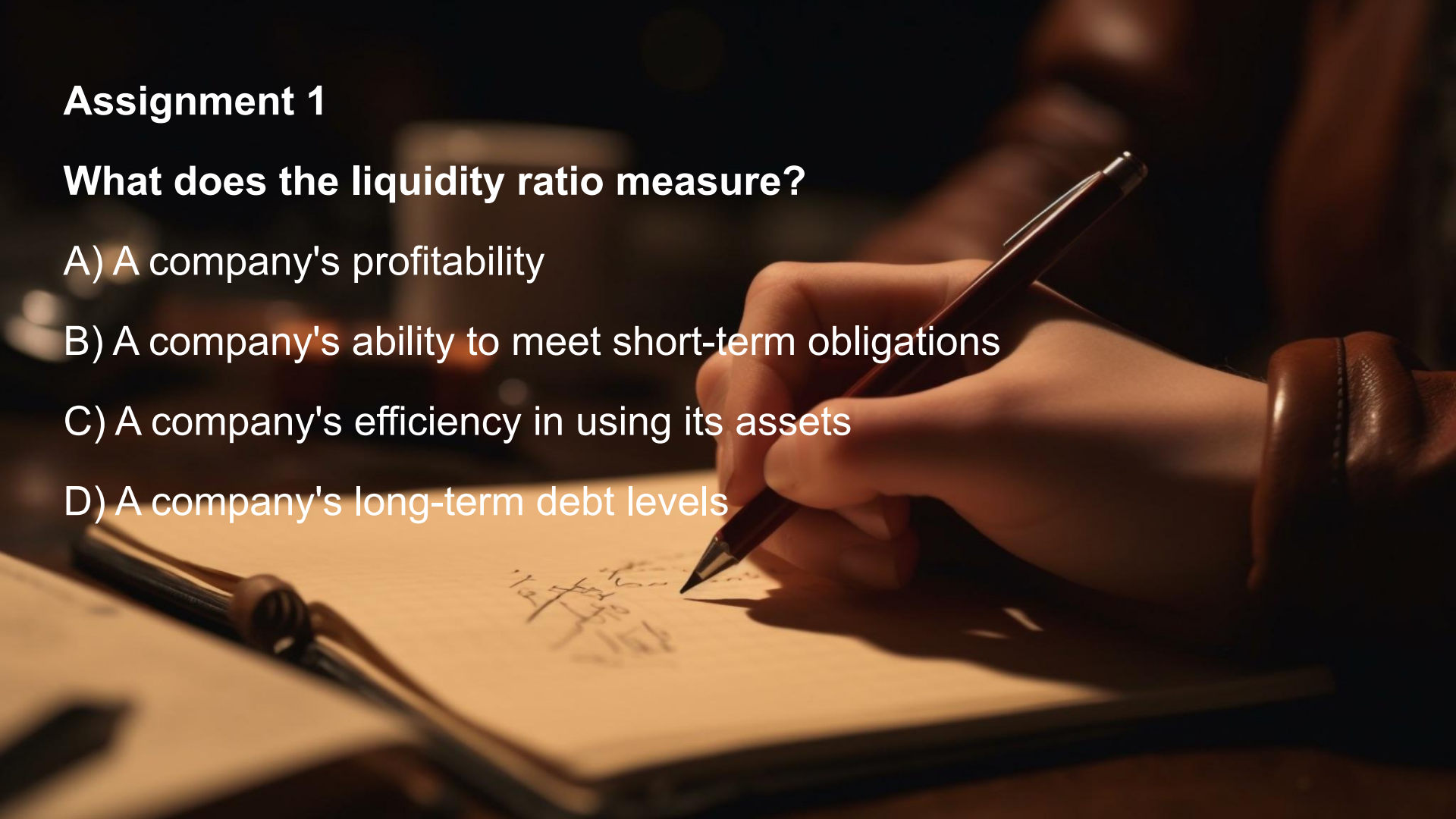




## Assignment 1

**What does the liquidity ratio measure?**

- A) A company's profitability
- B) A company's ability to meet short-term obligations
- C) A company's efficiency in using its assets
- D) A company's long-term debt levels



## Assignment 2

**Trend Analysis is used to:**

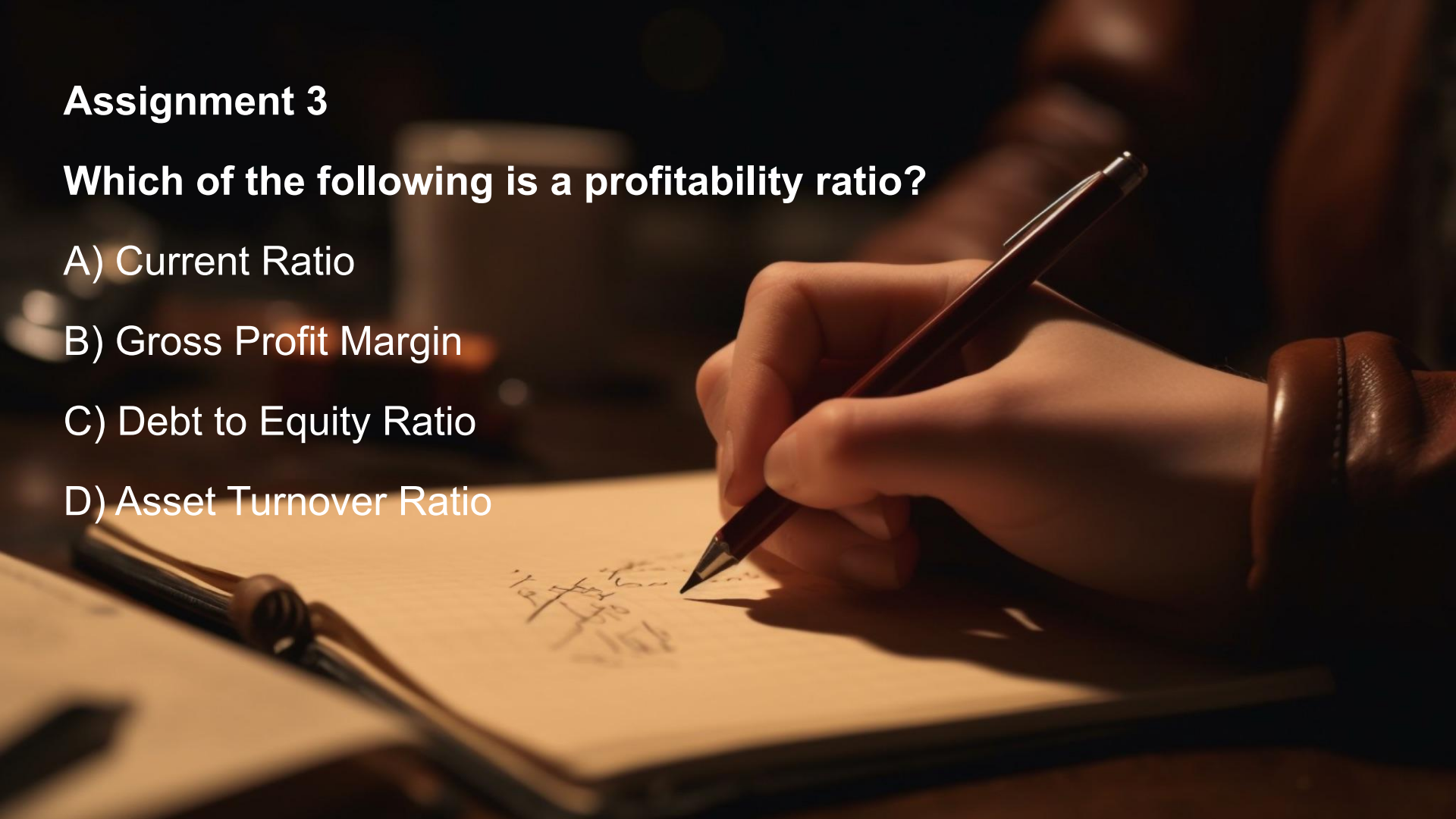
- A) Compare a company's performance with industry benchmarks
- B) Identify patterns over time
- C) Assess financial health using ratios
- D) Monitor daily transactions



## Assignment 3

**Which of the following is a profitability ratio?**

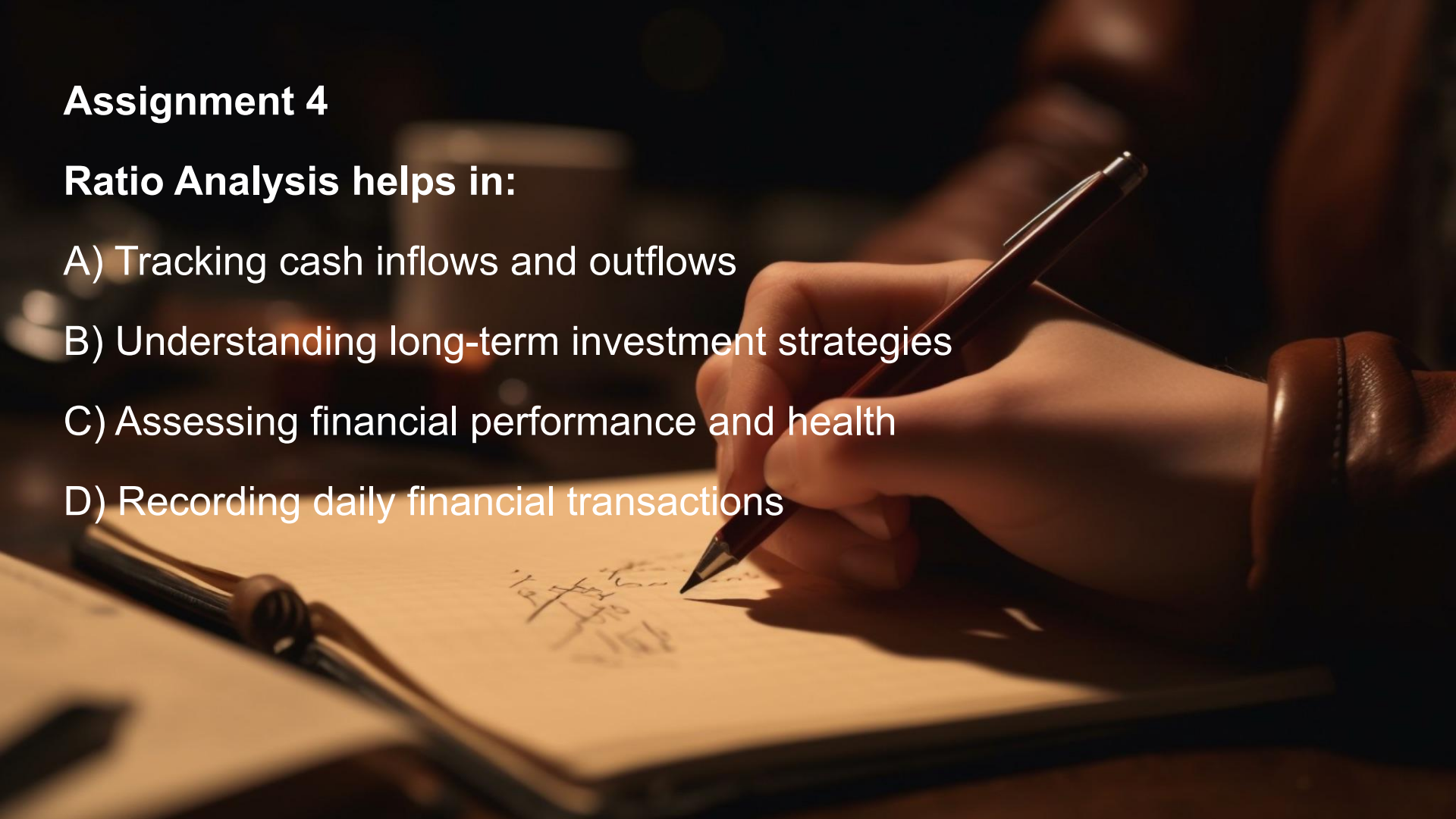
- A) Current Ratio
- B) Gross Profit Margin
- C) Debt to Equity Ratio
- D) Asset Turnover Ratio



## Assignment 4

### Ratio Analysis helps in:

- A) Tracking cash inflows and outflows
- B) Understanding long-term investment strategies
- C) Assessing financial performance and health
- D) Recording daily financial transactions





## Assignment 5

**A higher Debt to Equity Ratio indicates:**

- A) Better liquidity
- B) Higher profitability
- C) Greater financial leverage
- D) Lower financial risk



## **Learning Objective 1.3:**

# **Understanding Financial Performance Indicators**

**Skill Sets to acquire:** KPIs Interpretation, Monitoring Financial Health, Risk Identification

# Interpreting Financial Key Performance Indicators (KPIs)

## Profitability Ratios

**Gross profit margin** The cost of sales refers to the direct cost of production and does not include operating expenses, interest, or taxes or any overhead

$$= (Revenue - Cost of Sales) / Revenue * 100$$

**Net profit margin** Includes all costs for business, including costs of sales, operating expenses, interest & taxes

$$= Net Profit / Revenue * 100$$

**Return on Investment (ROI)** Denote how much profit has been generated from an investment

$$= (Net Profit / Cost of Investment) * 100$$

**Return on Equity (ROE)** Ability to generate profit from shareholders equity

$$= Net Profit / (Beginning Equity + Ending Equity) / 2$$

# Interpreting Financial Key Performance Indicators (KPIs)

**Working Capital** measures operating liquidity which can be used to fund day to day operations

= Current assets - Current liabilities

**Debt to Equity ratio** measures solvency of business by measuring the ability of shareholder equity to cover all debt in the event of a business downturn

= Total Debt / Total Equity



# IT industry Financial KPIs

Profit & Loss account	----- in Rs. Cr. -----				
	Infosys	TCS	HCL Tech	Wipro	LTIMindtree
	Mar '24	Mar '24	Mar '23	Mar '24	Mar '23
<b>Income</b>					
Sales Turnover	128,933.00	202,359.00	46,276.00	66,792.40	31,975.40
Excise Duty	0.00	0.00	0.00	0.00	0.00
Net Sales	128,933.00	202,359.00	46,276.00	66,792.40	31,975.40
Other Income	7,417.00	6,315.00	1,031.00	3,045.80	500.80
Stock Adjustments	0.00	0.00	12.00	-17.90	0.00
<b>Total Income</b>	<b>136,350.00</b>	<b>208,674.00</b>	<b>47,319.00</b>	<b>69,820.30</b>	<b>32,476.20</b>
<b>Expenditure</b>					
Raw Materials	0.00	0.00	168.00	264.20	0.00
Power & Fuel Cost	0.00	0.00	189.00	0.00	49.80
Employee Cost	65,139.00	103,139.00	19,799.00	38,289.50	19,427.40
Other Manufacturing Expenses	0.00	0.00	7,291.00	0.00	4,445.80
Selling and Admin Expenses	0.00	0.00	0.00	0.00	94.00
Miscellaneous Expenses	32,037.00	43,373.00	2,598.00	16,537.60	2,088.00
Preoperative Exp Capitalised	0.00	0.00	0.00	0.00	0.00
Total Expenses	97,176.00	146,512.00	30,045.00	55,091.30	26,105.00
	<b>Infosys</b>	<b>TCS</b>	<b>HCL Tech</b>	<b>Wipro</b>	<b>LTIMindtree</b>
	Mar '24	Mar '24	Mar '23	Mar '24	Mar '23
<b>Operating Profit</b>					
PBDIT	39,174.00	62,162.00	17,274.00	14,729.00	6,371.20
Interest	277.00	673.00	127.00	819.70	144.00
PBDT	38,897.00	61,489.00	17,147.00	13,909.30	6,227.20
Depreciation	2,944.00	3,887.00	2,431.00	1,491.80	639.20
Other Written Off	0.00	0.00	0.00	0.00	0.00
Profit Before Tax	35,953.00	57,602.00	14,716.00	12,417.50	5,588.00
Extra-ordinary items	0.00	0.00	0.00	0.00	0.00
PBT (Post Extra-ord Items)	35,953.00	57,602.00	14,716.00	12,417.50	5,588.00
Tax	8,719.00	14,043.00	3,257.00	3,298.90	1,331.70
<b>Reported Net Profit</b>	<b>27,234.00</b>	<b>43,559.00</b>	<b>11,459.00</b>	<b>9,118.60</b>	<b>4,256.30</b>

Balance Sheet	----- in Rs. Cr. -----				
	Infosys	TCS	HCL Tech	Wipro	LTIMindtree
	Mar '24	Mar '24	Mar '23	Mar '24	Mar '23
<b>Sources Of Funds</b>					
Total Share Capital	2,075.00	362.00	543.00	1,045.00	29.60
Equity Share Capital	2,075.00	362.00	543.00	1,045.00	29.60
Share Application Money	0.00	0.00	0.00	0.00	484.00
Preference Share Capital	0.00	0.00	0.00	0.00	0.00
Reserves	79,101.00	71,758.00	40,561.00	56,736.90	15,485.50
Revaluation Reserves	0.00	0.00	0.00	0.00	0.00
<b>Networth</b>	<b>81,176.00</b>	<b>72,120.00</b>	<b>41,104.00</b>	<b>57,781.90</b>	<b>15,999.10</b>
Secured Loans	0.00	0.00	191.00	4,175.00	0.00
Unsecured Loans	0.00	0.00	0.00	0.00	0.00
<b>Total Debt</b>	<b>0.00</b>	<b>0.00</b>	<b>191.00</b>	<b>4,175.00</b>	<b>0.00</b>
<b>Total Liabilities</b>	<b>81,176.00</b>	<b>72,120.00</b>	<b>41,295.00</b>	<b>61,956.90</b>	<b>15,999.10</b>
	<b>Infosys</b>	<b>TCS</b>	<b>HCL Tech</b>	<b>Wipro</b>	<b>LTIMindtree</b>
	Mar '24	Mar '24	Mar '23	Mar '24	Mar '23
<b>Application Of Funds</b>					
Gross Block	14,604.00	16,403.00	22,770.00	8,529.20	4,548.00
Less: Accum. Depreciation	0.00	0.00	4,835.00	0.00	1,780.80
<b>Net Block</b>	<b>14,604.00</b>	<b>16,403.00</b>	<b>17,935.00</b>	<b>8,529.20</b>	<b>2,767.20</b>
Capital Work in Progress	0.00	0.00	21.00	0.00	856.00
<b>Investments</b>	<b>34,659.00</b>	<b>32,245.00</b>	<b>10,159.00</b>	<b>50,824.30</b>	<b>6,120.70</b>
Inventories	0.00	27.00	35.00	72.90	3.30
Sundry Debtors	25,152.00	46,068.00	12,913.00	8,515.30	5,318.50
Cash and Bank Balance	8,191.00	6,599.00	6,231.00	3,790.60	2,637.10
Total Current Assets	33,343.00	52,694.00	19,179.00	12,378.80	7,958.90
Loans and Advances	32,344.00	19,806.00	6,066.00	9,916.30	4,753.00
Fixed Deposits	0.00	0.00	0.00	0.00	0.00
Total CA, Loans & Advances	65,687.00	72,500.00	25,245.00	22,295.10	12,711.90
Deferred Credit	0.00	0.00	0.00	0.00	0.00
Current Liabilities	32,310.00	48,957.00	10,903.00	18,244.90	5,652.10
Provisions	1,464.00	71.00	1,162.00	1,446.80	804.60
Total CL & Provisions	33,774.00	49,028.00	12,065.00	19,691.70	6,456.70
<b>Net Current Assets</b>	<b>31,913.00</b>	<b>23,472.00</b>	<b>13,180.00</b>	<b>2,603.40</b>	<b>6,255.20</b>
Miscellaneous Expenses	0.00	0.00	0.00	0.00	0.00
<b>Total Assets</b>	<b>81,176.00</b>	<b>72,120.00</b>	<b>41,295.00</b>	<b>61,956.90</b>	<b>15,999.10</b>

Source: [Infosys Competition, Infosys Comparison with Competitors \(moneycontrol.com\)](#)

# IT industry Financial KPIs

	----- in Rs. Cr. -----				
	Infosys	TCS	HCL Tech	Wipro	TCS
	Mar '23	Mar '23	Mar '23	Mar '23	Mar '24
	12 mths	12 mths	12 mths	12 mths	12 mths
<b>Net Profit Before Tax</b>	<b>23268.00</b>	<b>39106.00</b>	<b>14716.00</b>	<b>9176.70</b>	<b>57602.00</b>
Net Cash From Operating Activities	19169.00	37029.00	13538.00	11191.60	39142.00
Net Cash (used in)/from Investing Activities	821.00	3250.00	-798.00	-4761.60	10807.00
Net Cash (used in)/from Financing Activities	-25857.00	-47224.00	-13267.00	-6803.60	-47793.00
<b>Net (decrease)/increase In Cash and Cash Equivalents</b>	<b>-5736.00</b>	<b>-6735.00</b>	<b>-533.00</b>	<b>-371.10</b>	<b>2182.00</b>
Opening Cash & Cash Equivalents	12270.00	8197.00	2907.00	4898.10	1462.00
Closing Cash & Cash Equivalents	6534.00	1462.00	2374.00	4527.00	3644.00

Compare ROI, ROE, liquidity ratios, profitability ratios

# Example: Apple's Strategic Financial Management

**Robust Cash Reserves:** In 2021 Apple had \$191 B in cash plus marketable securities. Apple maintains a large cash reserve to provide financial stability, support R&D, and enable strategic acquisitions without the need to secure external financing.

Google and Meta's business are concentrated on advertising, have high cash and invest heavily on R&D.

Beyond its flagship iPhone, Apple has developed revenue streams across services (Apple Music, iCloud, App Store) & other products (iPad, Mac, Wearables). This diversification helps stabilize earnings against fluctuating sales cycles of individual products.

**Shareholder Returns:** In 2021, Apple returned \$90 B to shareholders through dividends and share buybacks, which also supports share price during market volatility, reflecting strong shareholder value orientation. Apple's brand strength allows it to charge premium prices, maintaining higher profit margins compared to competitors.

Mark Mahaney (Top Analyst at Evercore ISI) notes that Apple's financial strategy is robust, particularly praising its ability to manage capital returns effectively through strategic buybacks and dividends, fostering strong investor confidence.

**Capital Expenditure:** In 2021 Apple's spent \$ 22 B on product development & supply chain enhancement. Continual investment in technology & manufacturing capabilities to maintain & enhance its competitive edge in product innovation & operational efficiency.

Apple's control over its entire supply chain, from hardware design to software, enhances its profit margins and reduces dependency on external vendors, setting it apart from competitors who rely more on third-party suppliers.

# Common follow-up questions

1. "What are key performance indicators (KPIs) in financial analysis, and why are they important?"
2. "How do profitability ratios differ from liquidity ratios, and what insights do they provide?"
3. "What role do performance indicators play in strategic decision-making?"
4. "Can you discuss how different industries might prioritize different financial performance indicators?"



# Assessment



## Assignment 1

**Gross Profit Margin is calculated as:**

- A)  $(\text{Revenue} - \text{Cost of Sales}) / \text{Revenue} * 100$
- B)  $\text{Net Profit} / \text{Revenue} * 100$
- C)  $\text{Net Profit} / \text{Total Assets}$
- D)  $\text{Total Debt} / \text{Total Equity}$

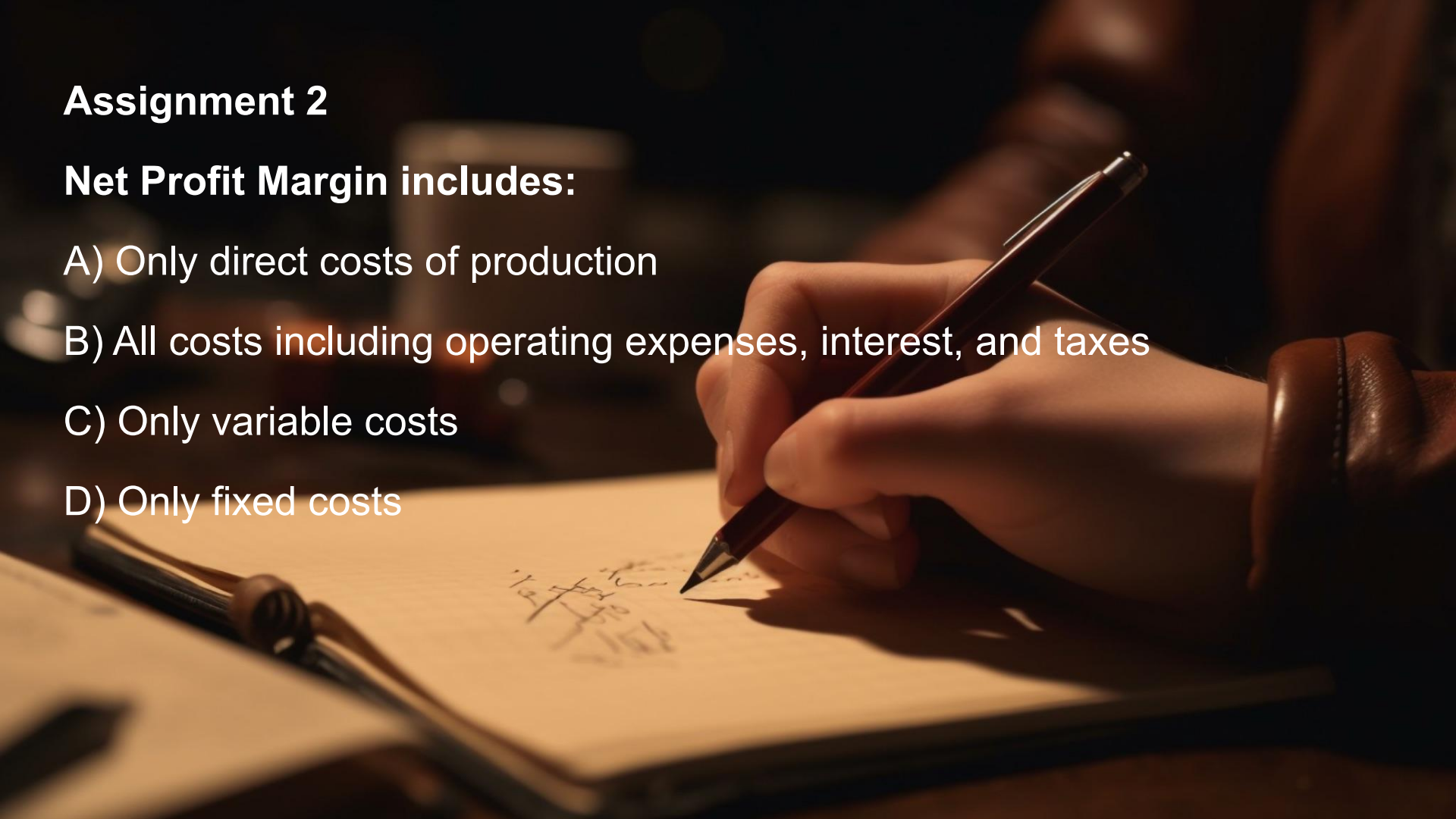




## Assignment 2

**Net Profit Margin includes:**

- A) Only direct costs of production
- B) All costs including operating expenses, interest, and taxes
- C) Only variable costs
- D) Only fixed costs



## Assignment 3

**Return on Investment (ROI) measures:**

- A) The total revenue generated by the company
- B) The profit generated from investments
- C) The company's asset turnover
- D) The company's debt levels

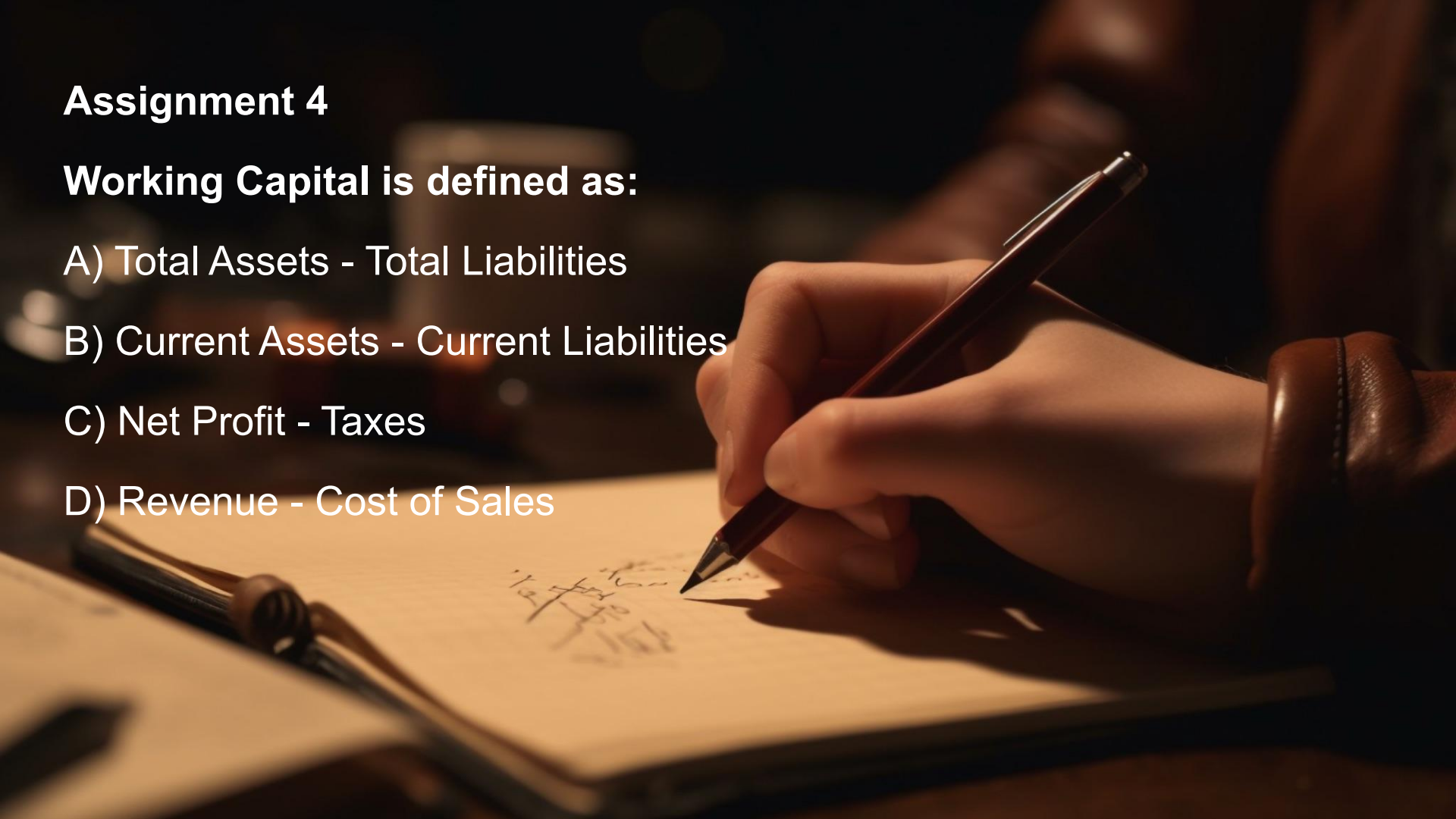




## Assignment 4

**Working Capital is defined as:**

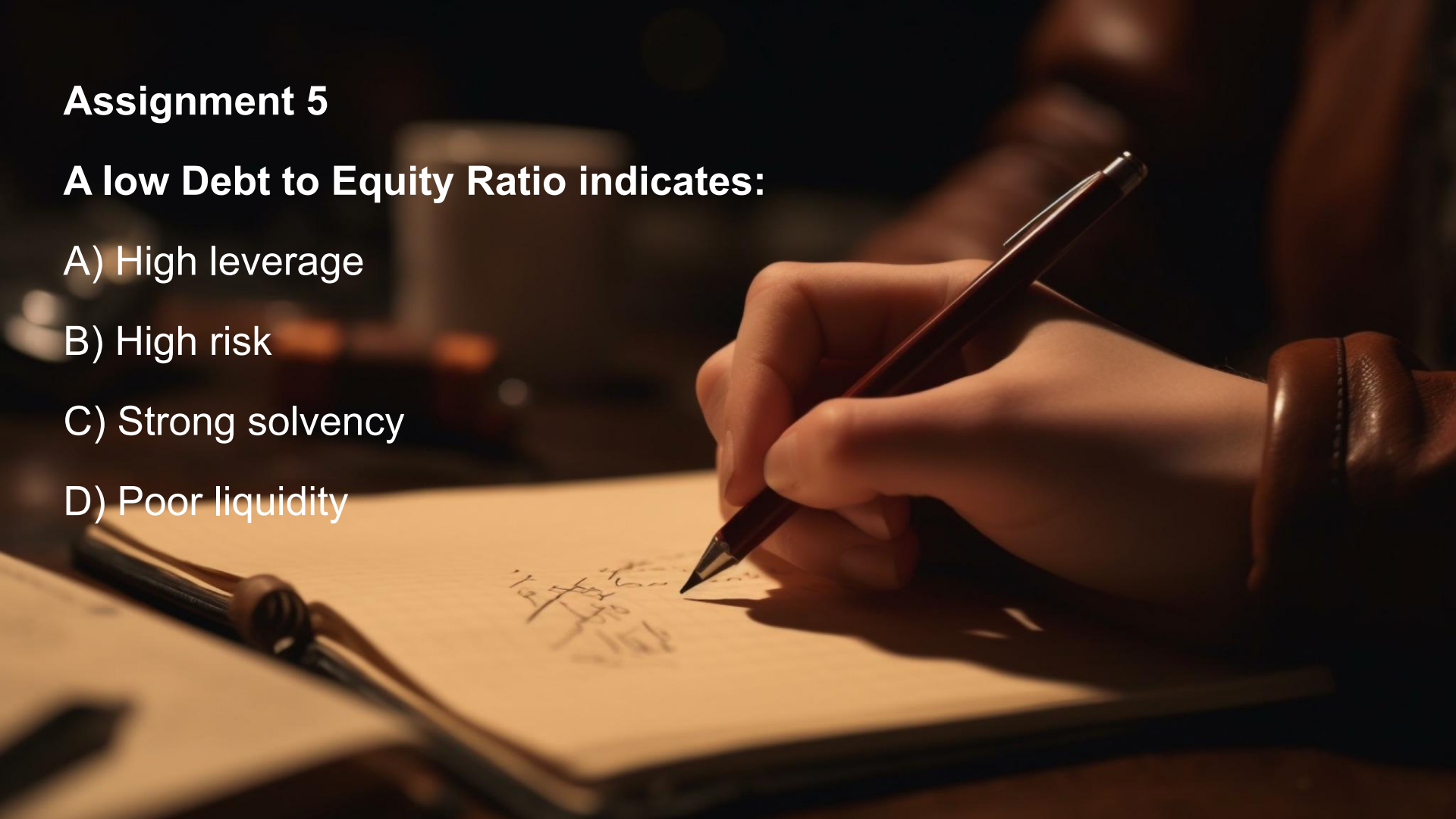
- A) Total Assets - Total Liabilities
- B) Current Assets - Current Liabilities
- C) Net Profit - Taxes
- D) Revenue - Cost of Sales



## Assignment 5

**A low Debt to Equity Ratio indicates:**

- A) High leverage
- B) High risk
- C) Strong solvency
- D) Poor liquidity



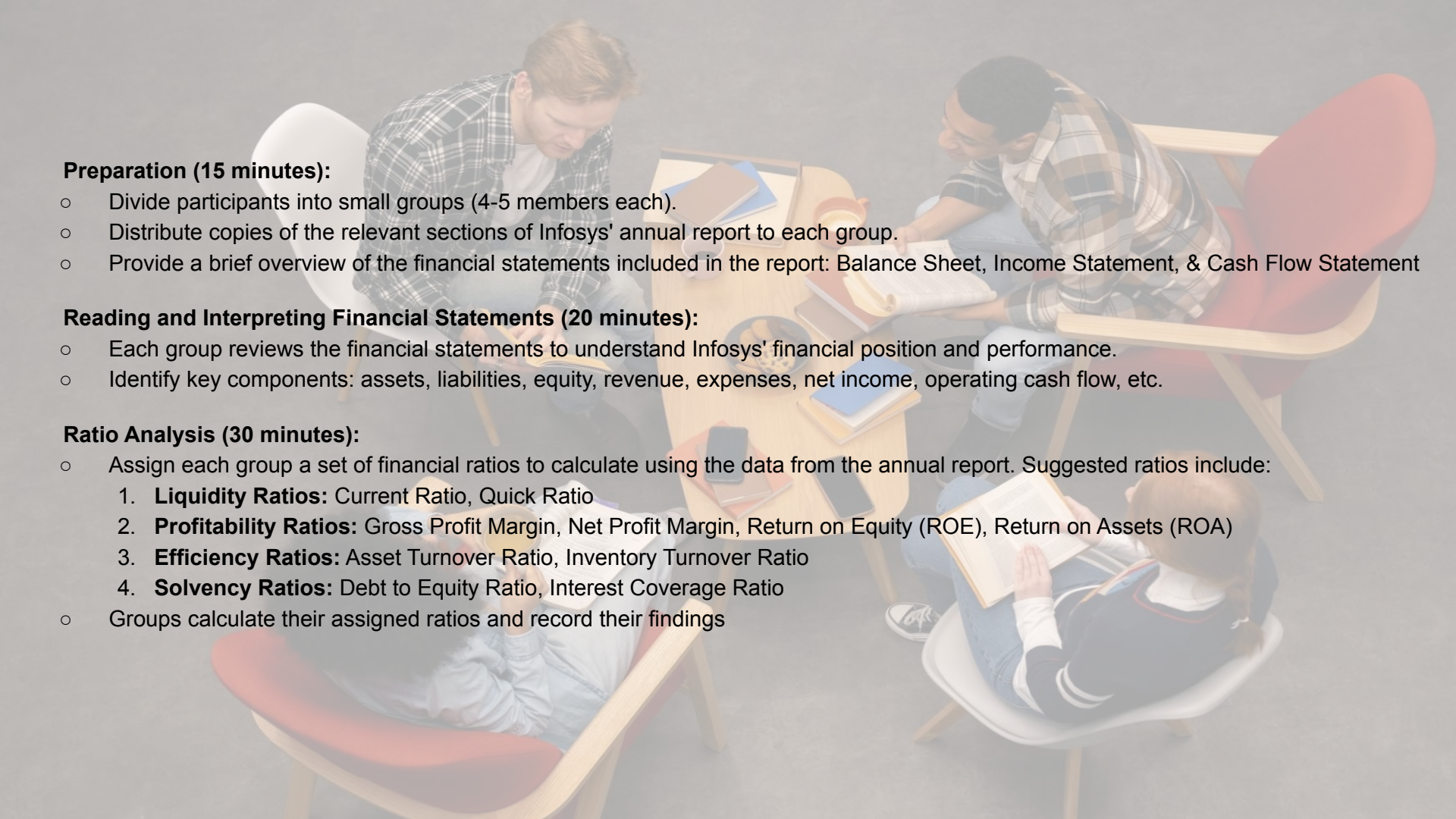
# Case Study

## Infosys' financial transparency & Investor Relations

- Introduction to Infosys' practices in financial transparency and investor relations
- Example: Infosys' communication with shareholders and financial analysts
- Lessons learned: Building trust through transparent financial reporting

Infosys Annual report [https://drive.google.com/file/d/1OE1DyQFskulc\\_ho9xucIquCHRYzjPXMt/view?usp=sharing](https://drive.google.com/file/d/1OE1DyQFskulc_ho9xucIquCHRYzjPXMt/view?usp=sharing)



A high-angle, slightly faded photograph of four people (three men and one woman) sitting around a light-colored wooden table. They are all looking down at documents or books on the table, appearing to be in a collaborative study or work session. The table is cluttered with various items including books, papers, a smartphone, and a small bowl of snacks. The background is a plain, light-colored wall.

### **Preparation (15 minutes):**

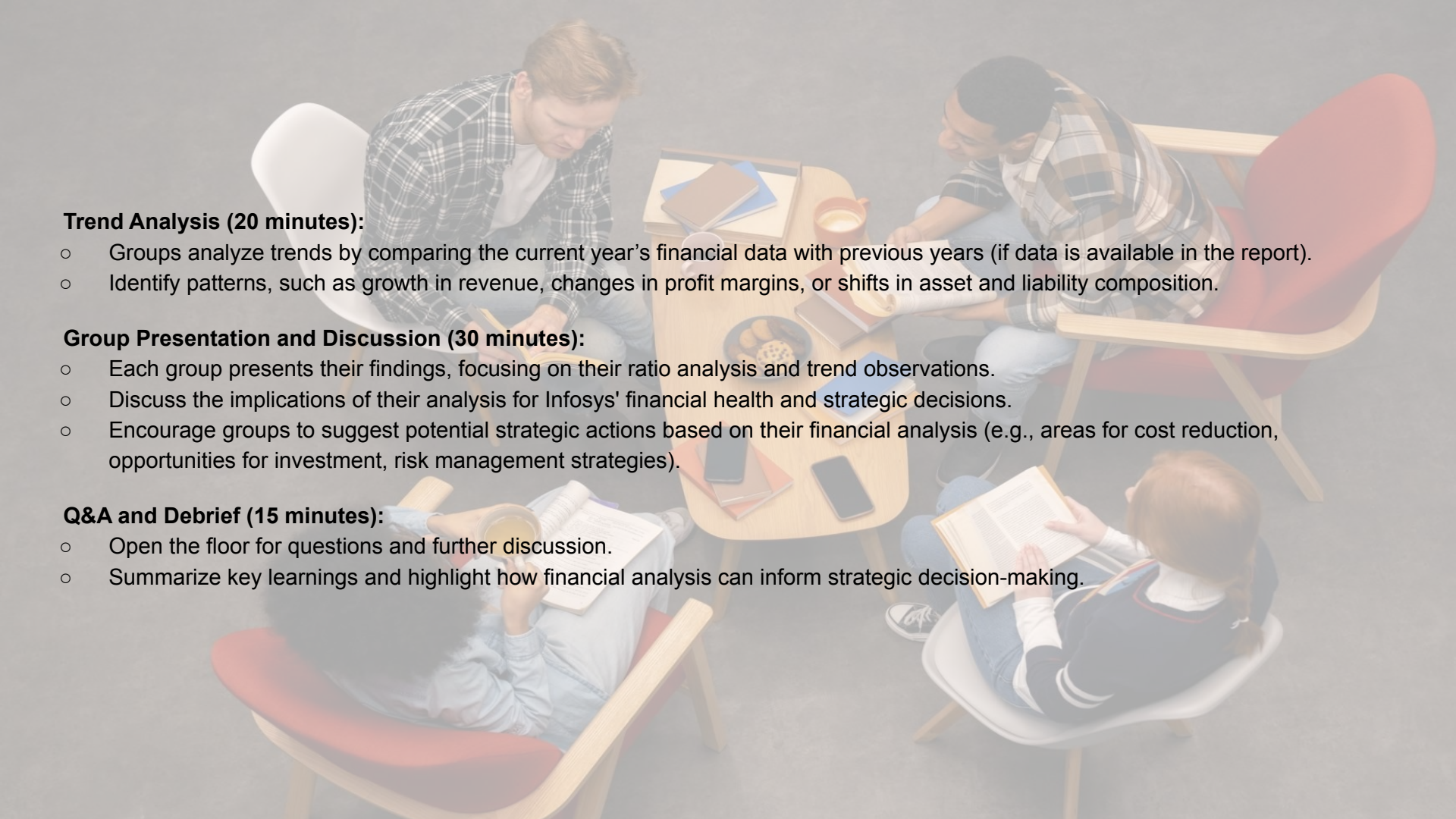
- Divide participants into small groups (4-5 members each).
- Distribute copies of the relevant sections of Infosys' annual report to each group.
- Provide a brief overview of the financial statements included in the report: Balance Sheet, Income Statement, & Cash Flow Statement

### **Reading and Interpreting Financial Statements (20 minutes):**

- Each group reviews the financial statements to understand Infosys' financial position and performance.
- Identify key components: assets, liabilities, equity, revenue, expenses, net income, operating cash flow, etc.

### **Ratio Analysis (30 minutes):**

- Assign each group a set of financial ratios to calculate using the data from the annual report. Suggested ratios include:
  1. **Liquidity Ratios:** Current Ratio, Quick Ratio
  2. **Profitability Ratios:** Gross Profit Margin, Net Profit Margin, Return on Equity (ROE), Return on Assets (ROA)
  3. **Efficiency Ratios:** Asset Turnover Ratio, Inventory Turnover Ratio
  4. **Solvency Ratios:** Debt to Equity Ratio, Interest Coverage Ratio
- Groups calculate their assigned ratios and record their findings



### **Trend Analysis (20 minutes):**

- Groups analyze trends by comparing the current year's financial data with previous years (if data is available in the report).
- Identify patterns, such as growth in revenue, changes in profit margins, or shifts in asset and liability composition.

### **Group Presentation and Discussion (30 minutes):**

- Each group presents their findings, focusing on their ratio analysis and trend observations.
- Discuss the implications of their analysis for Infosys' financial health and strategic decisions.
- Encourage groups to suggest potential strategic actions based on their financial analysis (e.g., areas for cost reduction, opportunities for investment, risk management strategies).

### **Q&A and Debrief (15 minutes):**

- Open the floor for questions and further discussion.
- Summarize key learnings and highlight how financial analysis can inform strategic decision-making.



# Interactive Group Exercise - Financial Statement Analysis

Scenario-based activity: Participants analyze financial statements of a hypothetical IT company and draw conclusions about its financial health



# Assignment questions

- Calculate and interpret key financial ratios (e.g., profitability, liquidity) for a given set of financial statements
- Analyze the financial performance of a competitor IT company and identify areas of competitive advantage and weakness
- Develop a financial dashboard highlighting key performance indicators for monitoring the financial health of a department or project



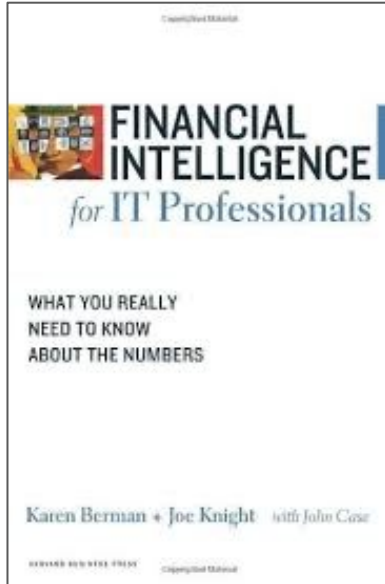
# **Q&A**

## **Feedback**

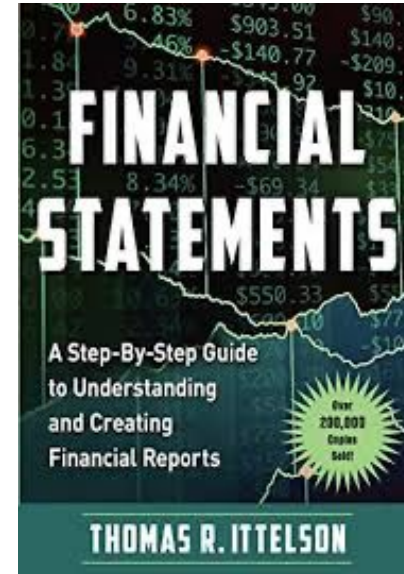




# Recommended Books



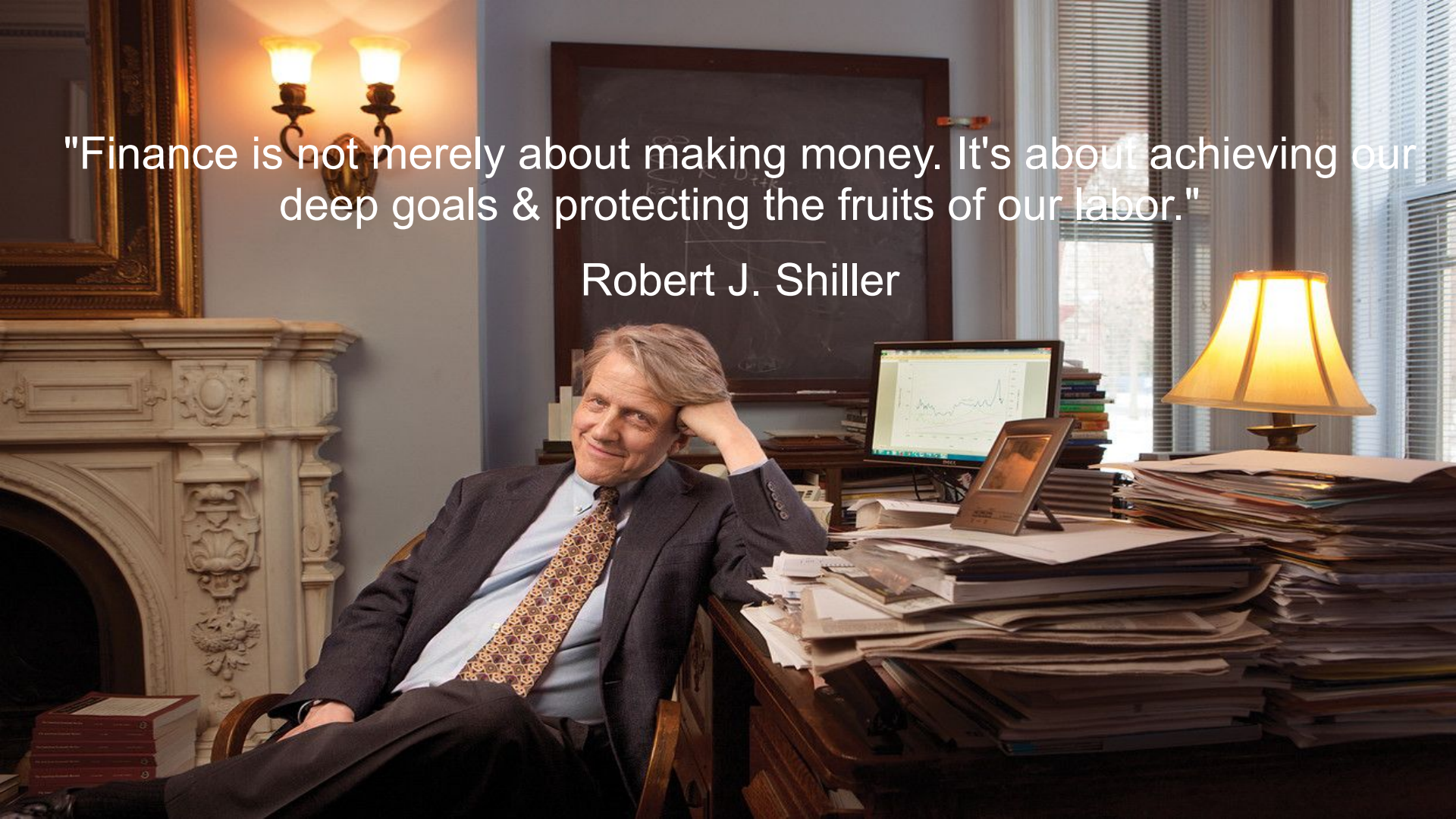
["Financial Intelligence for IT Professionals: What You Really Need to Know About the Numbers" by Karen Berman and Joe Knight](#)



["Financial Statements: A Step-by-Step Guide to Understanding and Creating Financial Reports" by Thomas R. Ittelson](#)

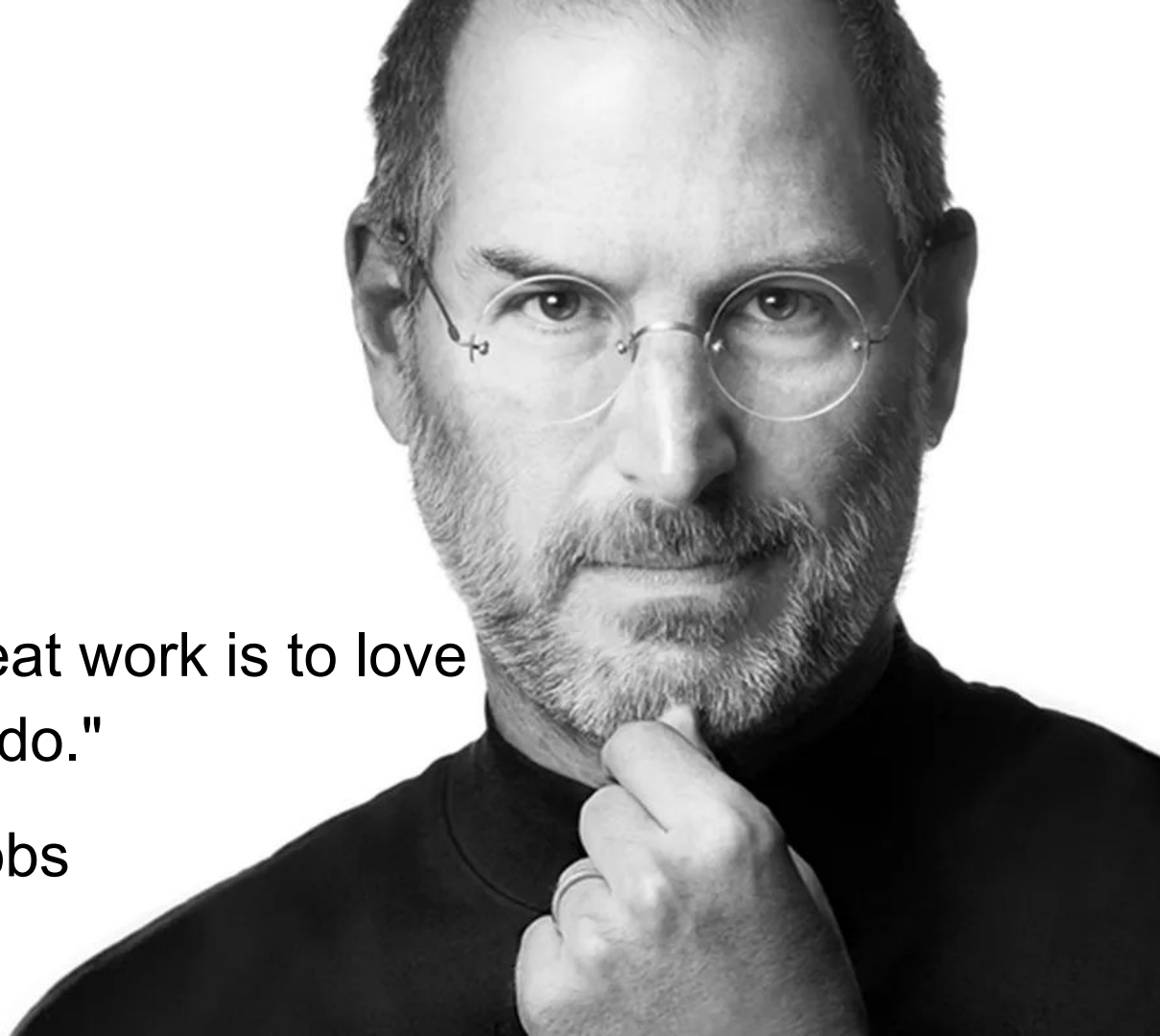
"Finance is not merely about making money. It's about achieving our deep goals & protecting the fruits of our labor."

Robert J. Shiller



"The only way to do great work is to love  
what you do."

Steve Jobs



## **Session 2:**

# **Commercials of a project: Budgeting & Financial Planning**

# Session 2: Commercial - Budgeting & Financial Planning

## Learning Objectives

- Resource allocation and Cost estimation
- Preparing budget and Monitoring progress
- Financial forecasting techniques

## Application of concepts

- Examples: Google's Revenue Streams and Cost Management, Amazon's Approach to Financial Innovation, Reliance's Capital Expenditure Decisions, Wipro's Approach to Working Capital Management, Tata Group's Diversification Strategy
- Case Study: Infosys' Financial Transparency and Investor Relations
- Interactive Exercise - Budgeting and Resource allocation projection in spreadsheet

**Case Study:** Infosys drivers of valuation <https://drive.google.com/file/d/1VNfLo657TdpvOPQ0mxM3BFfCyd6osGER/view?usp=sharing>

# Pre read for the session

1. Infosys drivers of valuation <https://drive.google.com/file/d/1VNfLo657TdpvOPQ0mxM3BFfCyd6osGER/view?usp=sharing>

## **Learning Objective 2.1:**

### **Resource allocation and Cost estimation**

**Skill Sets to acquire:** Budget Preparation, Resource Management, Financial Planning

# Session 2: Commercial - Budgeting & Financial Planning

## **Learning Objective:**

Equip with the essential knowledge and skills required to forecast project success and assess what value will be returned - allocate, forecast, and optimize costs to project areas effectively

## **Learning Outcomes:**

- Understand the fundamentals of budgeting and financial forecasting
- Differentiate between various types of budgets and their applications
- Use monitoring techniques like the Earned Value Method to track project progress and financial performance



# **Session Duration: 4 hours + Guest + Q&A**

## **2:30 pm to 4 pm**

Presentation and Case Study (60 minutes)

Interactive Exercise (30 minutes)

Break

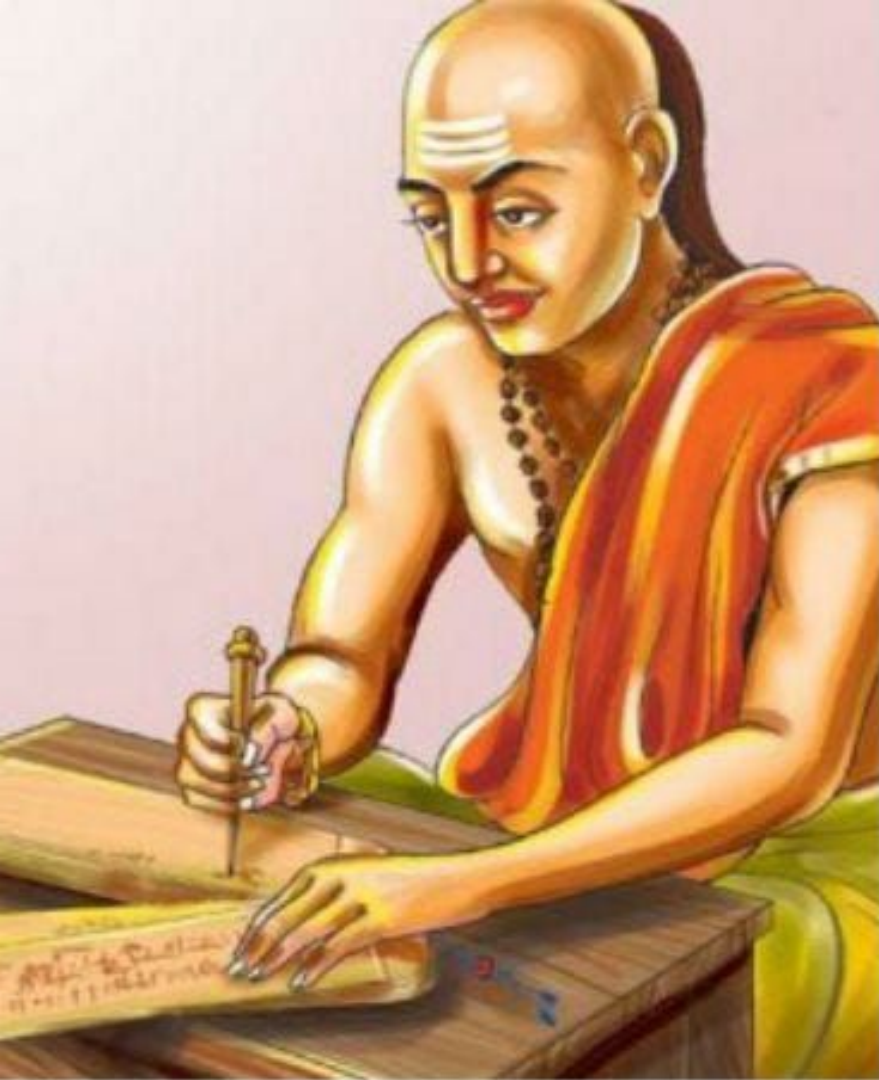
## **4:15 pm to 6:30 pm**

Presentation and Group discussion (75 minutes)

Interactive Exercise (30 minutes)

Guest speaker / Panel Discussion (30 minutes)

Open floor: Q&A and further engagement



"योजनायां सुसंस्थिते कार्यं नियतफलम्"

A well-planned work produces good results, even in adverse conditions

## Chanakya's Arthashastra

Book 14, Chapter 8

# Introduction to Budgeting and Financial Planning

Budget is for a **specific goal** which organization wants to achieve. Each team member plays a specific role to reach that goal.

Budgeting is the process of preparing and overseeing a financial plan that estimates income and expenses over a defined period. It ensures a team or department has resources to achieve its goals. It is a tool to

- Communicating expectations and goals to stakeholders
- Mobilizing teams and departments around organizational objectives
- Assessing group and individual performance
- Sharing with vendors to determine how much to credit the company in supplies
- Gaining insight into an organization's financial health
- Allocating resources strategically and appropriately

Generally **created for an year**. Anything beyond three years is taken with a pinch of salt.

**Purpose** of budget - Planning and control

# Resource allocation and Cost estimation

Understanding the commercial aspects of a project is crucial

## Planning

1. **Cost Estimation:** Accurately estimate current costs of hardware, software, personnel & overhead costs (finance help)
2. **Budgeting:** Allocating funds to different tasks and activities, within overall budget
3. **Procurement and Purchasing:** Understand procurement process, identifying requirements, selecting vendors & managing contracts for procuring hardware, software, and other resources

# Resource allocation and Cost estimation (cont...)

Understanding the commercial aspects of a project is crucial

## Execution

1. **Vendor Management:** Negotiate contracts, manage vendor / service providers relationships, and ensure that deliverables meet quality standards within budget constraints
2. **Billing and Invoicing:** Includes tracking project expenses, generating invoices, and ensuring timely payments

# Resource allocation and Cost estimation (cont...)

Understanding the commercial aspects of a project is crucial

## Monitoring

1. **Resource Management:** Review & allocate personnel, equipment etc. to maximizes productivity and minimizes waste
2. **Risk Management:** Conducting risk assessments, developing risk mitigation strategies, and monitoring risks throughout the duration of the program

# Example - Amazon's approach to Financial Innovation

Amazon started as an online bookstore. From the outset, Jeff Bezos, the founder, emphasized a long-term strategy focusing on growth over immediate profitability. This approach involved reinvesting profits into expanding the business rather than declaring dividends. The rationale was to gain market share and achieve scale, which would later translate into leveraging efficiencies and dominating various sectors

- **1990s onwards:** Amazon began using data analytics to drive many of its financial decisions. This ranged from dynamic pricing models to inventory management, which allowed Amazon to keep costs low and manage operational efficiencies effectively. Leveraging big data and machine learning enabled Amazon to understand consumer behavior better, optimize logistics, and outpace competitors in retail and later in cloud computing.
- **Use of Convertible Bonds:** Amazon has creatively used financial instruments such as convertible bonds to raise capital without immediately diluting shareholder value. Convertible bonds are particularly attractive during times when stock prices are high, as they can be converted into stock at a later date.
- **Strategic Use of Debt:** Amazon has maintained a relatively conservative leverage ratio compared to its cash flow generation capabilities. This prudent use of debt has allowed it to invest in technology, acquisitions, and global expansion while keeping the cost of capital low.

# Common follow-up questions

1. "What are the key factors to consider when allocating resources for a new project?"
2. "How do accurate cost estimations impact the overall budgeting process?"
3. "Can you explain the difference between direct and indirect costs in resource allocation?"
4. "What methods can be used to improve the accuracy of cost estimation?"





# Assessment



## Assignment 1

**Which cost estimation technique uses historical data from similar projects?**

- A) Bottom-Up Estimating
- B) Parametric Estimating
- C) Analogous Estimating
- D) Three-Point Estimating



## Assignment 2

**What is the primary purpose of a 'contingency reserve' in cost estimation?**

- A) To cover unknown risks
- B) To increase project profits
- C) To reduce overall project costs
- D) To manage project scope changes

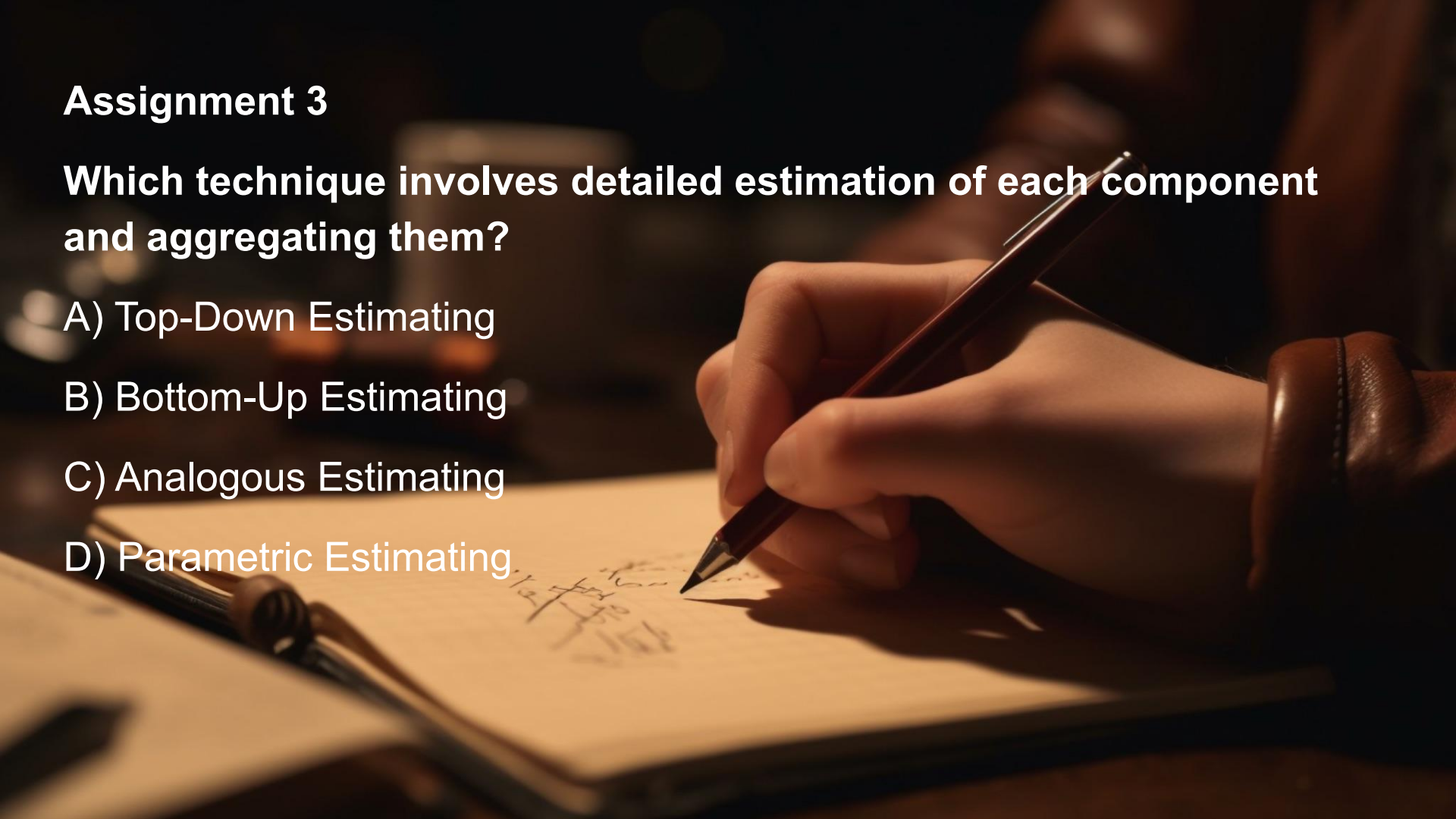




## Assignment 3

**Which technique involves detailed estimation of each component and aggregating them?**

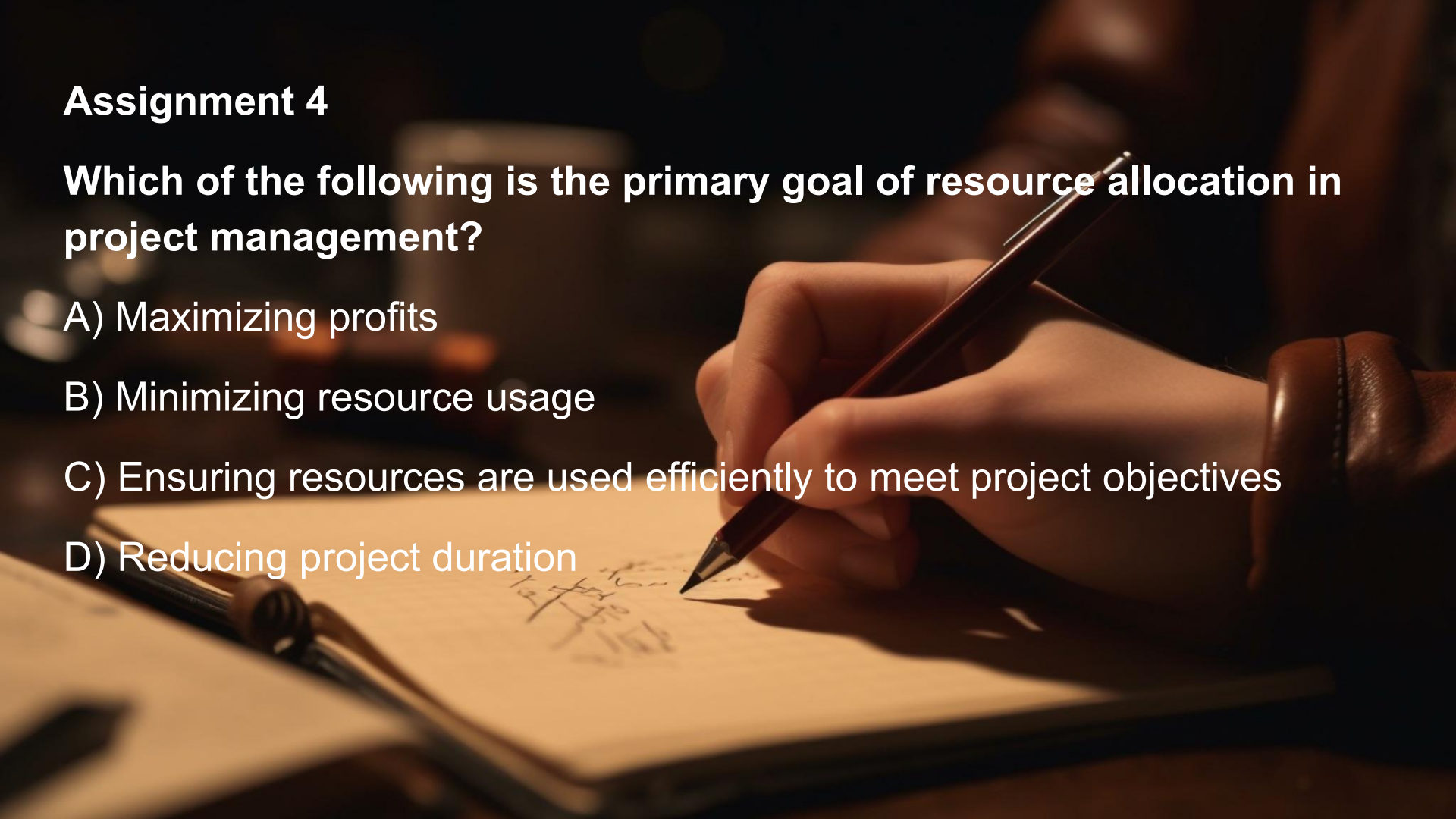
- A) Top-Down Estimating
- B) Bottom-Up Estimating
- C) Analogous Estimating
- D) Parametric Estimating



## Assignment 4

**Which of the following is the primary goal of resource allocation in project management?**

- A) Maximizing profits
- B) Minimizing resource usage
- C) Ensuring resources are used efficiently to meet project objectives
- D) Reducing project duration



## Assignment 5

**What does 'resource leveling' aim to achieve in project management?**

- A) Minimizing resource usage
- B) Balancing resource demand with available supply
- C) Increasing project scope
- D) Reducing project costs



## **Learning Objective 2.2: Preparing budget and Monitoring progress**

**Skill Sets to acquire:** Budget Monitoring, Earned Value Method, Variance Analysis

# Types of Budgets

## Operating Budget

- Focus on day-to-day operations & cover revenue and expenses related to ongoing activities e.g., sales budget, production budget, marketing budget etc.

## Capital Budget

- Deal with feasibility and long-term investments in assets such as machinery, equipment, or infrastructure e.g. investment in new technology

## Cash flow Budget

- Predict cash inflows and outflows over a specific period to manage liquidity, ensuring sufficient cash to meet its obligations e.g.

*30 days to finish work + 60 days payout terms = 90 days **typical cash cycle***



# Example - Google's Cost Mgmt. strategies

Google Search, YouTube, and Google Display Network, allows Google leadership (\$209B revenue in 2021 vs \$115B by Meta) in digital advertising market.

- **Ecosystem Synergy:** Google integrates its advertising services across its product ecosystem, including Android, Chrome, and Google Maps, that drives higher engagement and, subsequently, more ad revenue. This integration **reduces the marginal cost** of ad sales by leveraging existing infrastructure & users. Google's cost per impression (CPI) and cost per click (CPC) tend to be lower due to its larger scale and more efficient ad placement algorithms. Google has managed to decrease the average CPC by approximately 4% YoY.

"Google's ability to drive down cost-per-click, while simultaneously increasing click-through rates, demonstrates their unmatched efficiency in ad load and targeting capabilities." says **Mark Mahaney (Top Analyst at Evercore ISI)** often highlighting investment in AI and machine learning.

- **Investment in ML technology and Automation:** For optimized ad placement and pricing, reducing need for manual intervention, lowers operational costs, and increases the effectiveness of ads. Google's use of real-time bidding (RTB) in its advertising platforms allows for **dynamic pricing**, which maximizes ad revenue while keeping **administrative costs low**.

Google's R&D budget, which often exceeds \$30 billion annually, is partially directed towards developing better ad targeting & delivery algorithms

- **Data Utilization:** Offer data driven, highly targeted advertising solutions, which are more efficient as it **minimizes wastage of ad inventory**. Higher ad quality and relevance lead to better user engagement, which translates to higher ROI for advertisers and allows Google to charge premium pricing. High intent translates into high ARPU ie. Google USA ARPU is 2x of Meta USA, depending on quarter & market conditions.

In 2021, Google's spending on tangible assets, including data centers and cloud infra, totaled over \$25 billion

# Example - Reliance's Capital Expenditure Decisions

Each company allocated investable funds to different long term assets. These effect long term growth and profitability of the company for a long time. CapEx decision at RIL is strongly aligned with the company's long-term strategic goals, such as diversification, entering new markets, enhancing competitive edge, or upgrading technology and infrastructure.

Year	2019	2020	2021	2022	2023
Capex (INR Billion)	963	765	1058	1002	1410

- **Building Jio** (2010-2016): Invested \$30 B in Jio to set up a nationwide 4G broadband network, which gave it a share in the Indian telecommunications market, influencing broadband pricing & internet adoption rates across the country.
- **Jio fundraise & Reliance Retail** (2020): Raised \$22 B by selling 33% stakes in Jio & Reliance Retail to global investors like Meta, Google etc. This capital was partly used to further enhance their digital & physical retail capabilities.
- **Renewables play** (2021): \$10 B investment over 3 years to build four 'Giga Factories' to manufacture and integrate critical components of the renewable energy ecosystem - solar cells, battery storage, hydrogen and fuel cell technologies.

[These decisions and their financial payoffs can be found in detail in RIL's financial statements](#). The final authority to approve capital expenditure decision rests with Board of Directors.

# Example - Wipro's approach to Working Capital Mgmt.

## Key considerations

- **Client Payment Terms:** Structure payment terms that are mutually beneficial. This may include milestone-based payments for large projects, which help in regular cash inflows. Its is measured by DSO (Days Sales Outstanding).
- **Project Delivery Timelines:** Uses advanced project management tools & methods to monitor project progress & performance, ensuring that deliverables are met promptly, which aids in quicker invoicing
- **Cost Management:** Strict cost control measures & regular audits ensure that project costs are kept within budget, which helps controlling operating cost, have good margins & maintain +ve working capital cycle

## Unique practices

- **Technology-Driven Efficiency:** Automation and AI in invoice processing & receivables management minimizes delays and errors, speeds up the collection process, and reduces the days sales outstanding (DSO)
- **Dynamic Cash Flow Forecasting models:** Using historical data & predictive analytics to forecast future cash flow scenarios under different conditions. This helps in making informed decisions about investments, expenses & cash management.
- **Vendor Financing and Relationships:** To extend payment terms aligned with its cash inflows, manage payables more effectively without straining vendor relationships

Ability to seize new business opportunities without relying heavily on external financing, or getting favourable credit terms with lenders if need be.

# Monitoring Progress - Identify risk early, take corrective action

**Project Monitoring** for deliverables, deadlines, and financials

- Tracking a project's scope, timelines, budget, progress, and critical success metrics

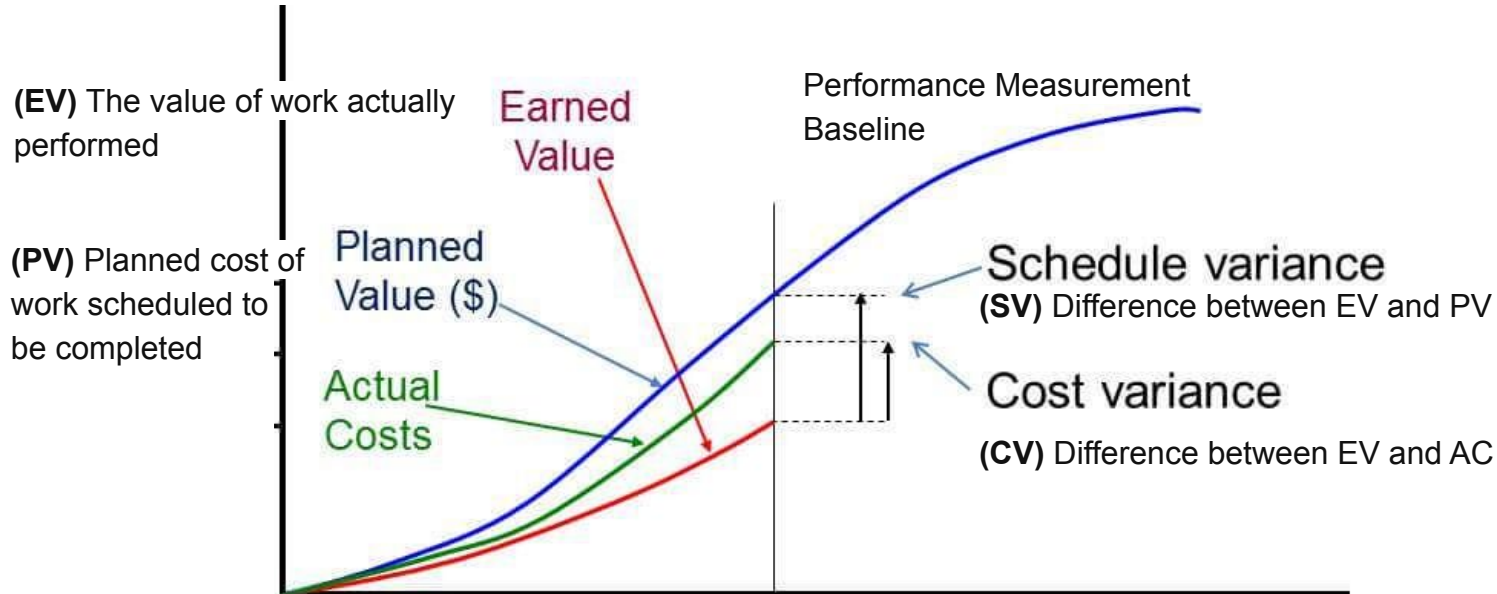
## **Progress Monitoring**

- **Resource Management:** Review & allocate personnel, equipment etc. to maximizes productivity and minimizes waste
- **Risk Management:** Conducting risk assessments, developing risk mitigation strategies, and monitoring risks throughout the duration of the program

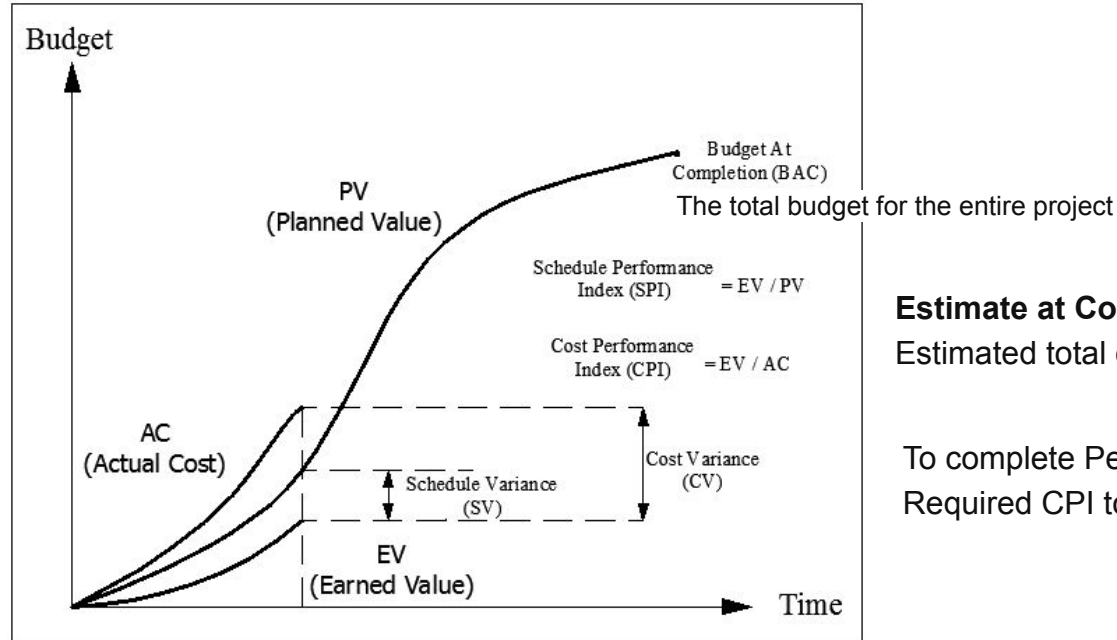
When things go wrong, Take proactive action, Retrospective actions

# Earned Value Method & tracking performance

EVM is a powerful technique for monitoring and controlling project costs, schedule, and scope



# Earned Value Method & tracking performance



## Implementation:

- EVM requires a solid project plan, including a Scope Statement and a Work Breakdown Structure (WBS)
- The WBS breaks down project activities into manageable elements for tracking
- EVM can be applied at different levels (e.g. work packages or control accounts) and for the entire project

# Common follow-up questions

1. "What steps are involved in preparing a comprehensive budget for a company?"
2. "How can variance analysis be used to monitor budget performance?"
3. "What are some common challenges faced during the budgeting process, and how can they be mitigated?"
4. "How does continuous monitoring and adjustment of the budget contribute to financial stability?"



# Assessment





## Assignment 1

**A 'baseline budget' is used for:**

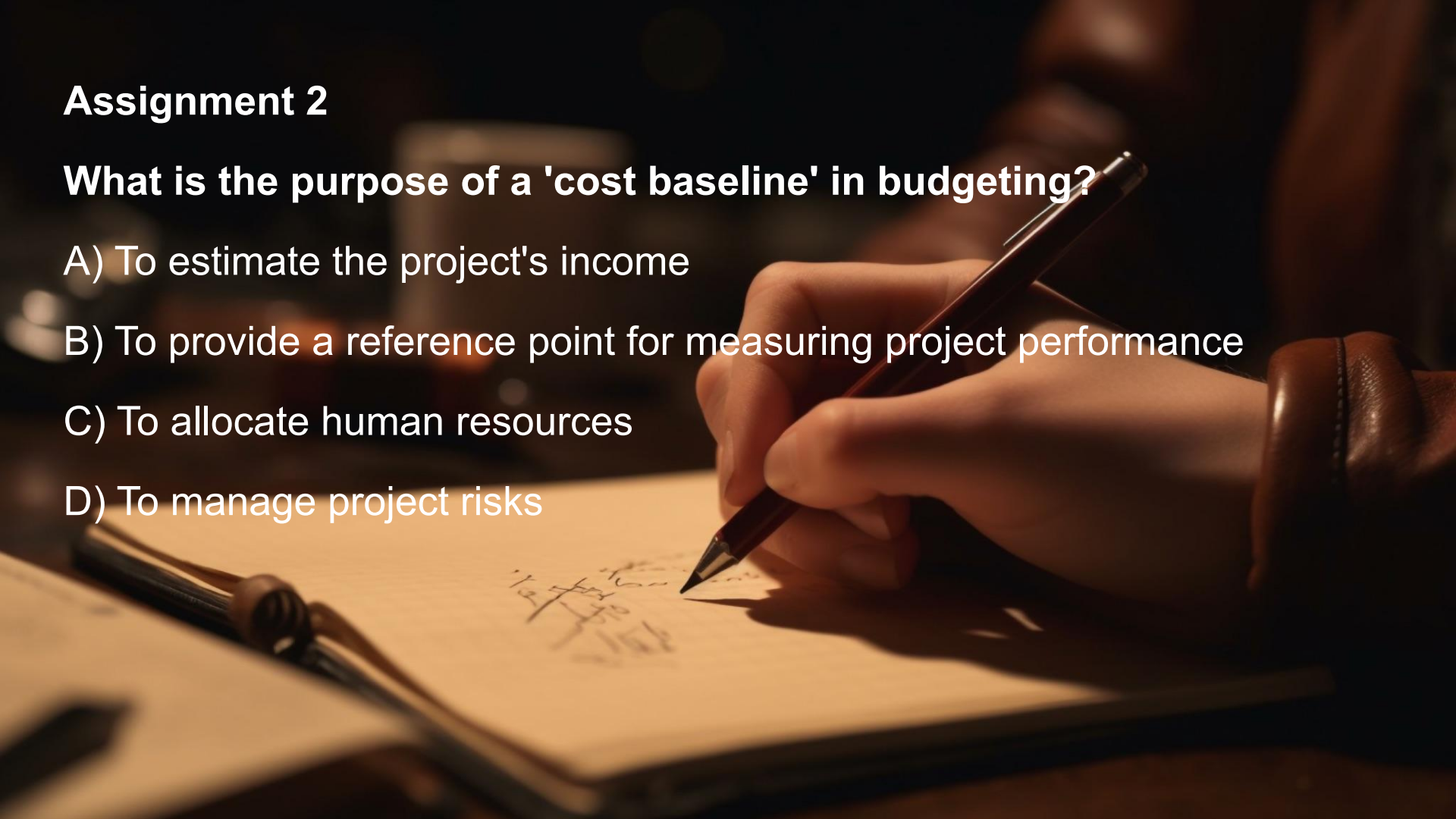
- A) Estimating future costs
- B) Comparing actual expenditures against planned expenditures
- C) Allocating resources
- D) Risk management



## Assignment 2

**What is the purpose of a 'cost baseline' in budgeting?**

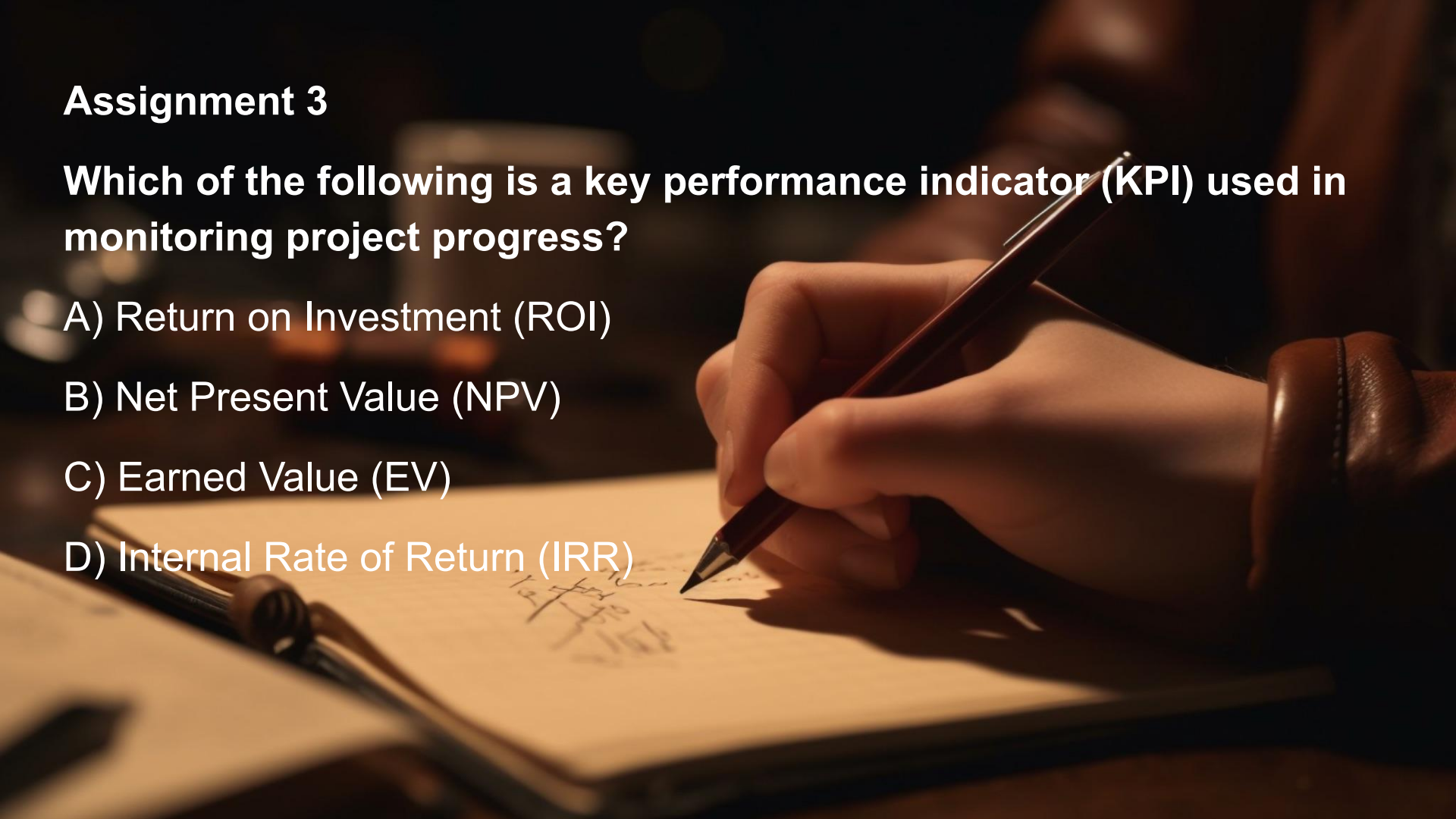
- A) To estimate the project's income
- B) To provide a reference point for measuring project performance
- C) To allocate human resources
- D) To manage project risks



## Assignment 3

**Which of the following is a key performance indicator (KPI) used in monitoring project progress?**

- A) Return on Investment (ROI)
- B) Net Present Value (NPV)
- C) Earned Value (EV)
- D) Internal Rate of Return (IRR)



## Assignment 4

**A 'Gantt Chart' is primarily used for:**

- A) Estimating project costs
- B) Monitoring project timelines and progress
- C) Managing project risks
- D) Allocating project resources

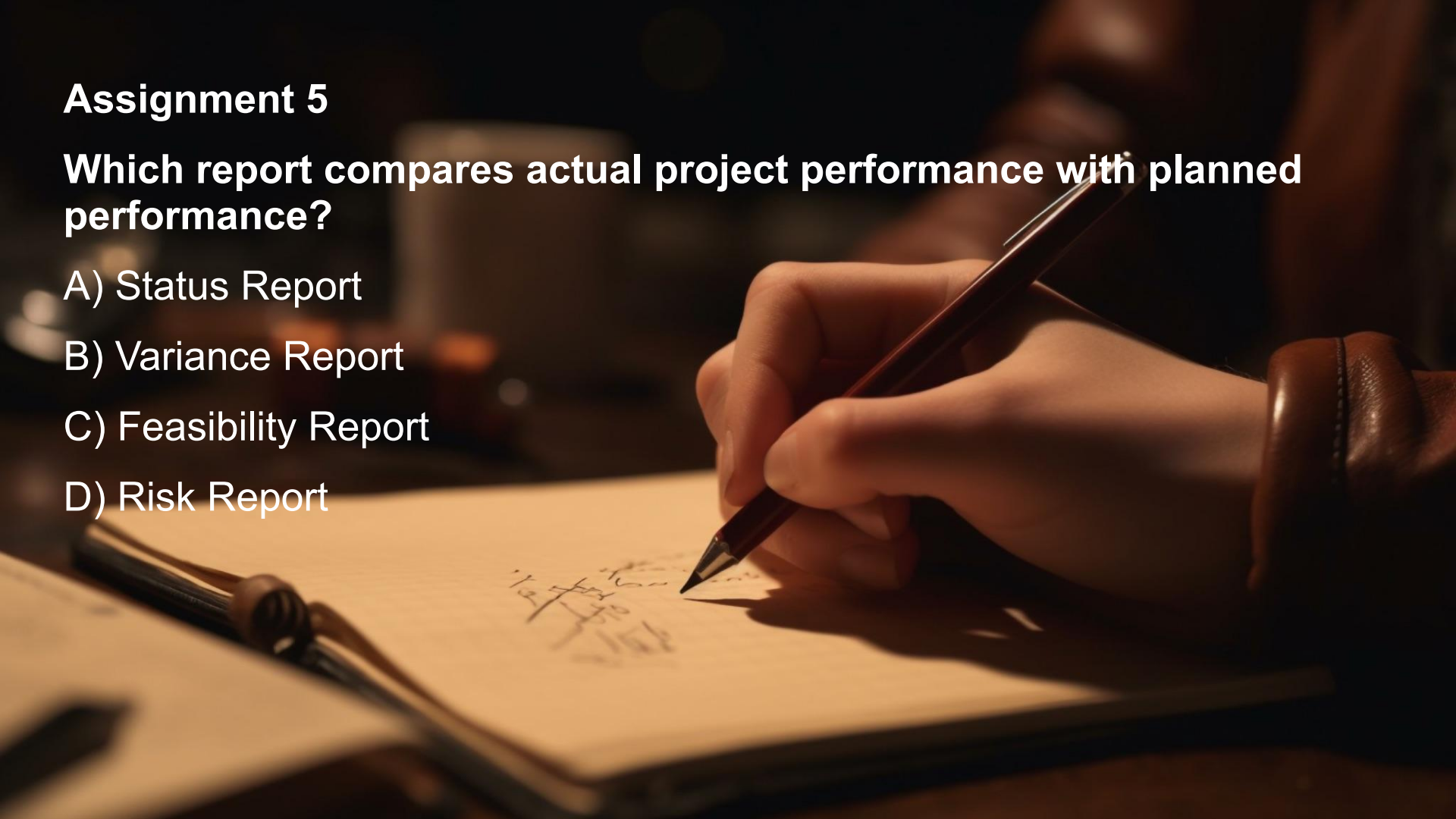




## Assignment 5

**Which report compares actual project performance with planned performance?**

- A) Status Report
- B) Variance Report
- C) Feasibility Report
- D) Risk Report



## **Learning Objective 2.3:**

### **Financial forecasting techniques**

**Skill Sets to acquire:** Forecasting, Scenario Planning, Cash Flow Management

# Financial Forecasting Techniques

**Top-down** - Used as a starting point more by larger, established businesses or early-stage companies with less data

1. Broader market size
2. Industry trends
3. Market share goals
4. Company specific revenue & goals

**Bottom-up** Detailed customer level, product and market level forecast, time and labour intensive involving various departments

1. Likely new customers which might sign in or new geography which might get opened
2. Likely expansion of product offerings to existing customers
3. Product level and business unit level aggregation to arrive at business forecast



# Financial Forecasting Techniques

- Identify the sources of revenue or cost specific to your program. For instance, for revenue consider software sales, subscription fees, consulting services, or licensing
- Use historical data or industry benchmarks to predict future growth
  - **First-Principles Approach:** Model revenues with high detail and precision with industry benchmarks. For example, forecast expansion rates, income per square meter (for retail), or market size (for telecommunications) or regression analysis
  - **Quick and Dirty Approach:** Predict growth based on historical figures and trends
    - Simple but less accurate
- SG&A costs are often expressed as % of revenues - may be fixed in the short term, they become more variable over longer periods

Cash flow financial forecasting is more accurate over a short term

# Scenario Analysis and Sensitivity Analysis

**Financial scenarios** (best case, base case and worst case)

Futuristic projections can be dependent on client choosing project as per political situation, technological developments

- What are the different possible outcomes?
- How would key input variables change for different outcomes?

## **Sensitivity Analysis**

Controlling input variables and various combinations help us optimize resources & reach goals

- Identify key variables
- Assess the impact on key variables due to different scenarios

# Excel for financial forecasting

## Formatting

1. Use consistent formatting for numbers, dates, and text.
2. Use cell formatting (e.g., background colors) to distinguish between input cells and calculated cells.
3. Format financial data properly using currency and percentage formats.

## Build in Flexibility

- Create a key assumption sheet, where all assumptions are linked to in various tabs
- Processing sheet and output section to be kept separate from input sheet
- Use data tables or scenario manager to analyze different scenarios (e.g., best, worst case)

## Documentation

- A column to list down sources of data and documentation of why a number was chosen
- Maintain version history - Date in file name
-

# Excel formulas & functions for financial forecasting

## Preparing data for use in excel

- Arrange data in tables, use “clean” and “trim” function to clean data
- Use relative & absolute cell references (A1 vs. \$A\$1) to ensure formulas update correctly when copied
- Use “iferror” function to convert character into number

## Basic function and Formula

- Basic functions: Sum, average, min and max
- Logical Functions: IF, AND, OR to build conditional logic into your models
- Financial Functions: NPV, IRR, PMT for more complex financial

## Data analysis functions

- Lookup and Reference: vlookup, hlookup, index and match
- Date and time Functions: EDATE, EOMONTH, YEAR, MONTH, DATE
- Growth functions: forecast.linear, trend, growth

# Common follow-up questions

1. "What are the main financial forecasting techniques, and how do they differ?"
2. "How can scenario analysis be used in financial forecasting to plan for uncertainties?"
3. "What is the role of historical data in developing accurate financial forecasts?"
4. "Can you provide an example of how financial forecasting can influence strategic business decisions?"



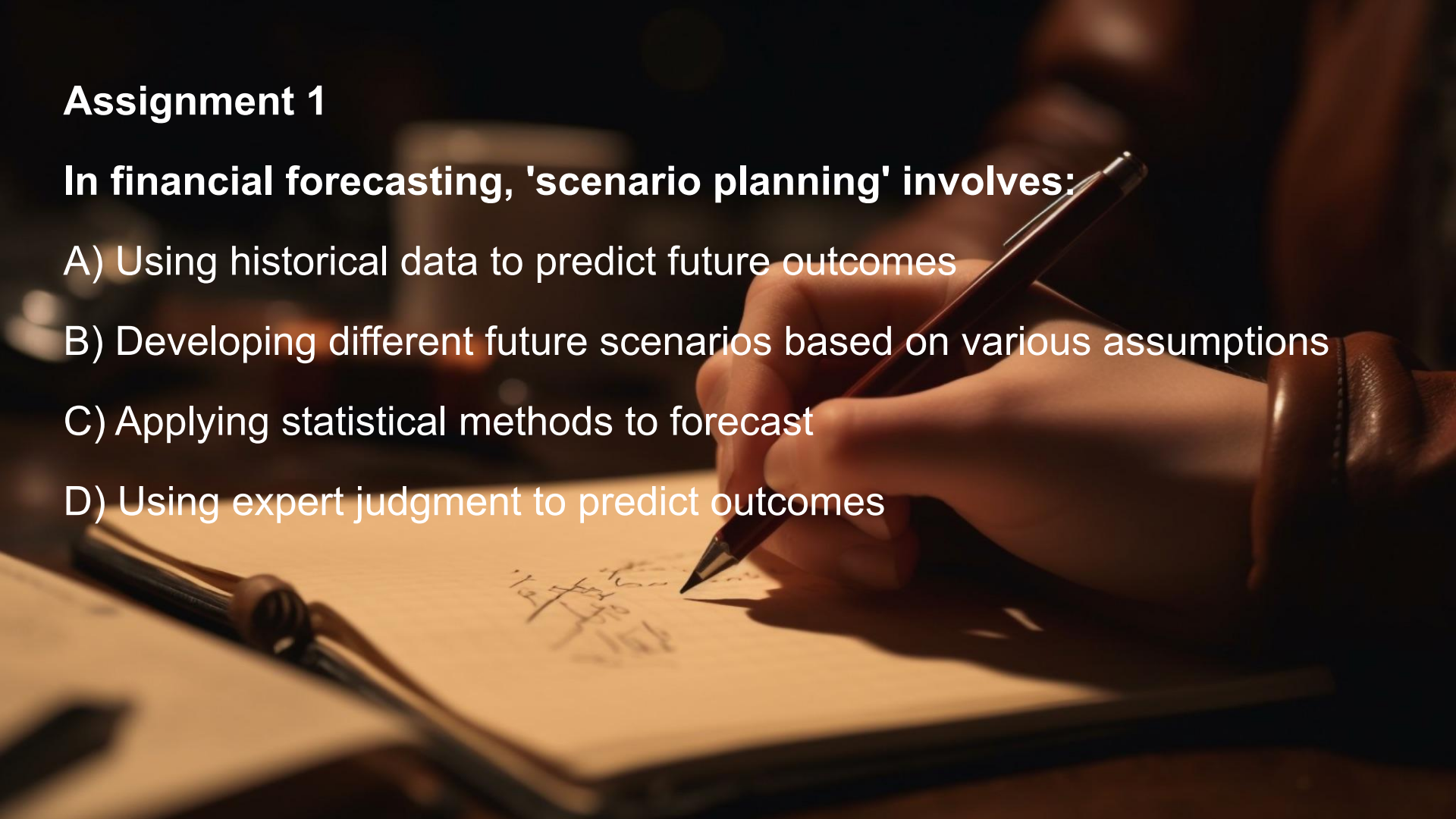
# Assessment



## Assignment 1

In financial forecasting, 'scenario planning' involves:

- A) Using historical data to predict future outcomes
- B) Developing different future scenarios based on various assumptions
- C) Applying statistical methods to forecast
- D) Using expert judgment to predict outcomes

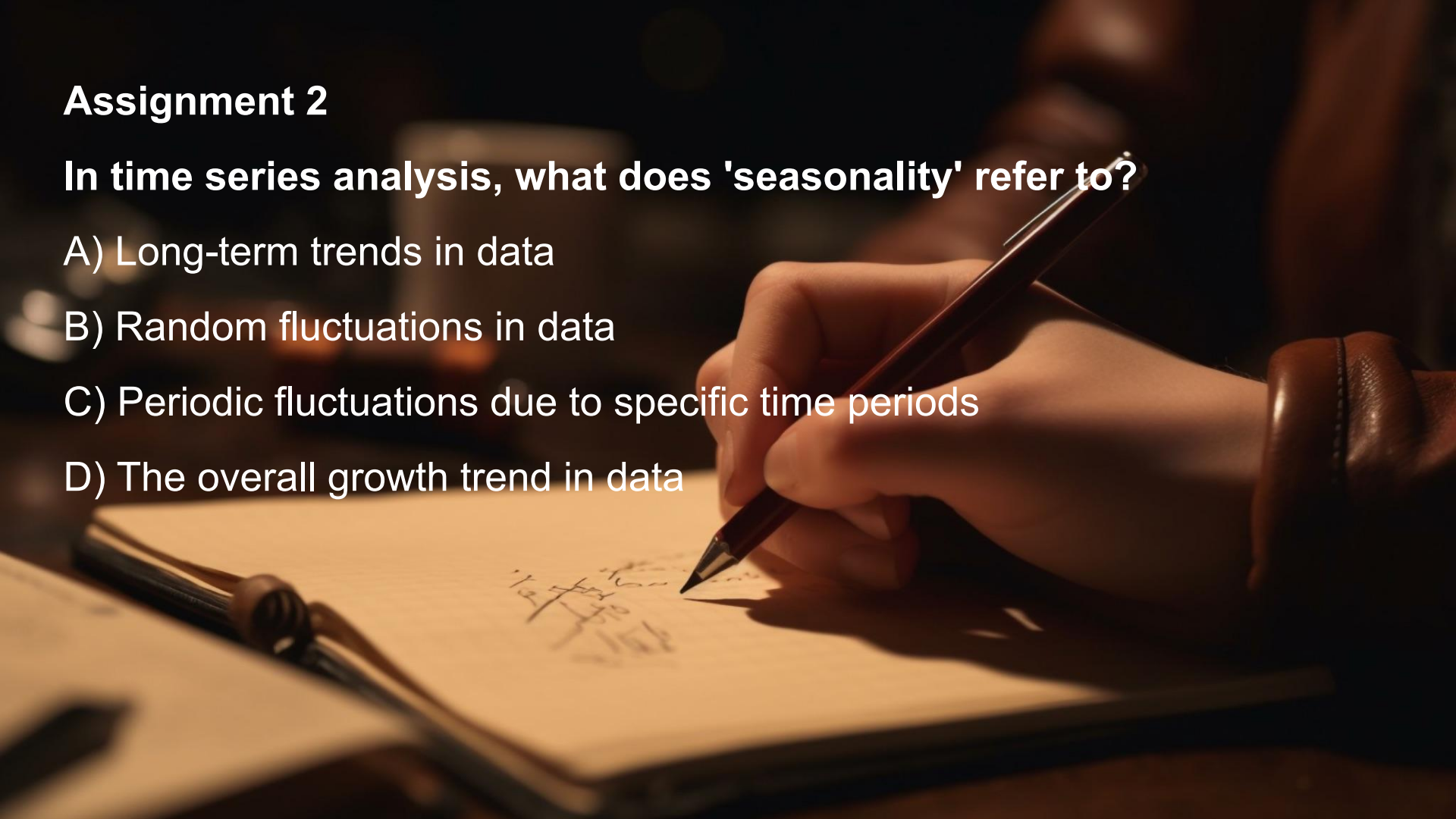




## Assignment 2

**In time series analysis, what does 'seasonality' refer to?**

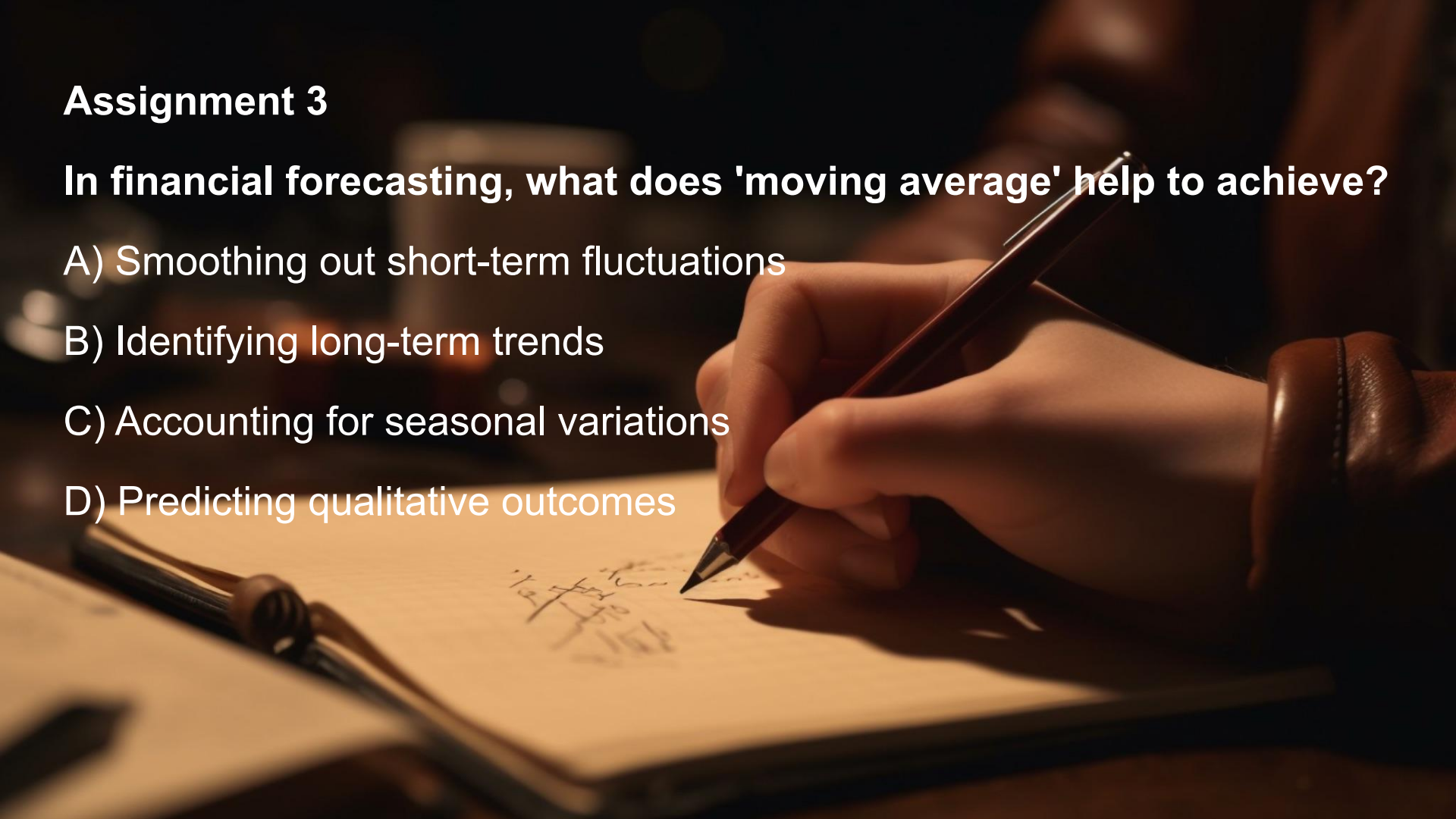
- A) Long-term trends in data
- B) Random fluctuations in data
- C) Periodic fluctuations due to specific time periods
- D) The overall growth trend in data



## Assignment 3

**In financial forecasting, what does 'moving average' help to achieve?**

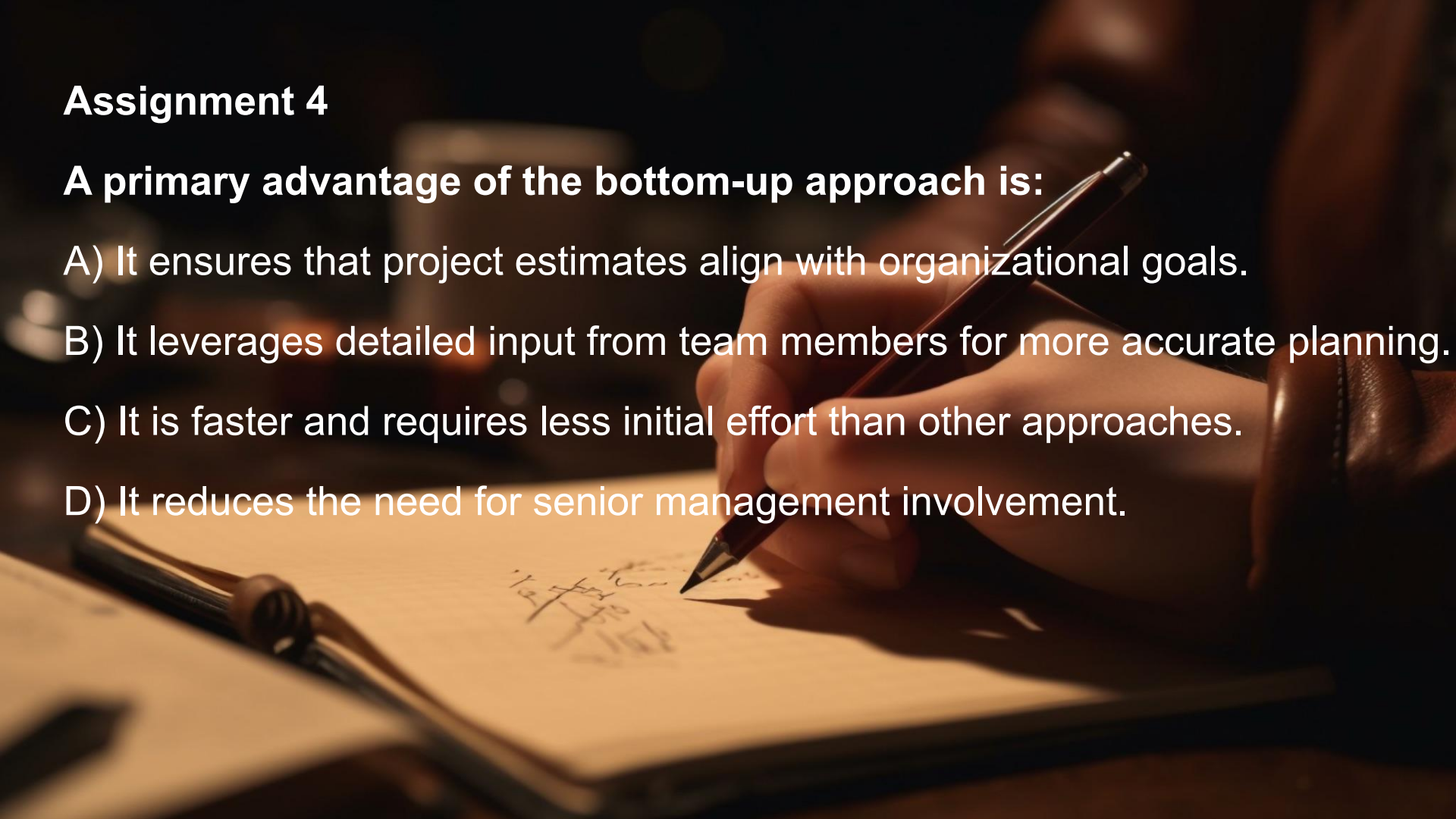
- A) Smoothing out short-term fluctuations
- B) Identifying long-term trends
- C) Accounting for seasonal variations
- D) Predicting qualitative outcomes



## Assignment 4

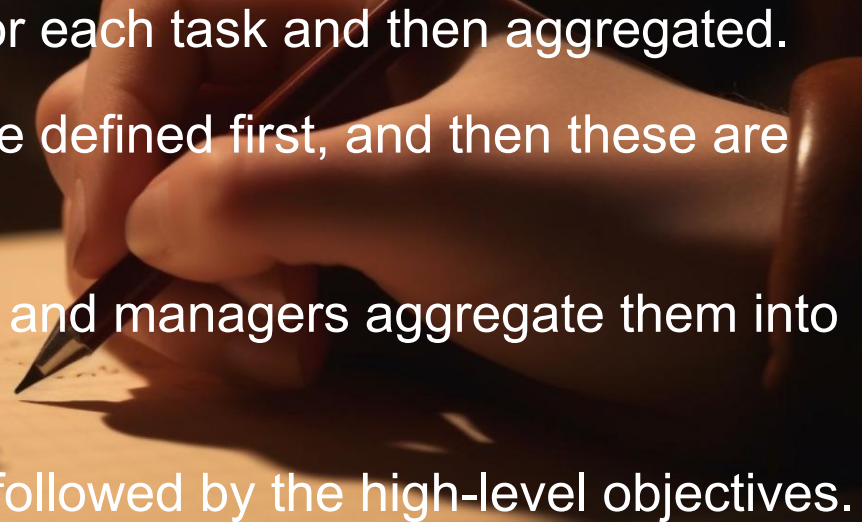
**A primary advantage of the bottom-up approach is:**

- A) It ensures that project estimates align with organizational goals.
- B) It leverages detailed input from team members for more accurate planning.
- C) It is faster and requires less initial effort than other approaches.
- D) It reduces the need for senior management involvement.



## Assignment 5

**Which of the following best describes the top-down approach in project management?**

- A) Detailed estimates are made for each task and then aggregated.
  - B) High-level project objectives are defined first, and then these are broken down into tasks.
  - C) Team members suggest tasks, and managers aggregate them into project objectives.
  - D) Project tasks are defined first, followed by the high-level objectives.
- 
- A close-up, warm-toned photograph of a person's hand holding a dark pen, writing on a notepad. The notepad has some faint, handwritten notes and a small diagram. The background is blurred, showing what appears to be a desk with other papers and a lamp.

Budgeting and Financial Planning  
**Presentation and Group Discussion**

# Example - Tata Group's Diversification Strategy

Diversification strategy has been central to Tata's financial stability and growth. It maintaining a balance between mature industries and growth sectors ensures steady cash flows and risk mitigation. Tata's global strategy not only diversifies market risk but also capitalizes on growth opportunities in emerging and developed markets.

**Extensive Portfolio Diversification:** Tata Group operates in over 100 countries across six continents, with more than 30 publicly listed Tata enterprises as of 2021, including Tata Steel, Tata Motors, TCS, and Tata Consumer Products. This diversification allows Tata to mitigate risks associated with market volatility in any single sector. For example, while Tata Motors and Tata Steel might experience downturns due to cyclical industry demands, TCS can continue to provide stable revenues due to the steady growth in IT services.

Mahindra's strategy is more rural India-centric, whereas Tata has a more global outlook. Reliance focuses on digital and retail sectors, alongside its traditional petrochemical businesses and not as diversified as Tata.

**Strategic Acquisitions:** In 2008, Tata Motors acquired JLR \$2.3 billion. This acquisition has been pivotal in transforming Tata's global footprint in the automotive sector. In 2007, Tata Steel acquired Corus, which greatly expanded its capacity and made it one of the top global steel producers.

**Investment in Innovation and Sustainability:** Tata invests 2-3% of its revenue in R&D, focusing on innovations that support long-term sustainability. Tata Group has committed for carbon neutrality by 2050 or sooner.

In IT, Software and internet-focused companies spend 15% of their revenue on R&D (Google 14%, Meta 24%, Amazon 12%, Cisco 13% on network tech), while hardware-oriented firms spend 10%.




# Case Study: Infosys financial indicators for share price

Infosys drivers of valuation <https://drive.google.com/file/d/1VNfLo657TdpuOPQ0mxM3BFfCyd6osGER/view?usp=sharing>

Perform basis comparison of Infosys wrt other Indian IT firms (60 minutes)

- Analyse shareholding pattern of a listed company and study its effect on major decisions
- Comparison of Infosys wrt other big IT firms in India on financial parameters
- Free Cash Flow trend for last 5 years
- Sensitivity analysis of Infosys share price wrt financial metrics
- List down factors which affect share price of company



A background image showing four people (three men and one woman) sitting around a light-colored wooden table. They are all looking down at documents or laptops, appearing to be in a collaborative work session. The table has various items on it, including a white mug, a bowl of snacks, and some papers. The people are dressed in casual business attire. The overall scene is dimly lit, with the focus on the people and their work.

# **Group simulation**

## **Budgeting & Resource allocation**

Participants work in groups to create financial projection in spreadsheet

- Analyze market reports & industry trends to develop a high-level forecast for new product
- Create detailed forecast for an upcoming product using customer data & historical figures
- Create multiple scenarios & perform sensitivity analysis to identify critical variables

Simulation exercise: [Session 4 Group Exercise Financial model 3 statements.xlsx - Google Sheets](#)

# Discussion

## Financial decision making in uncertain times





# Recap and Key Takeaways



# Assignment questions

- Develop an operating budget for an IT project considering various cost elements and revenue projections
- Evaluate the feasibility of an investment project using capital budgeting techniques such as NPV and IRR
- Apply the Earned Value Method to monitor the progress of a software development project and identify any deviations from the planned budget

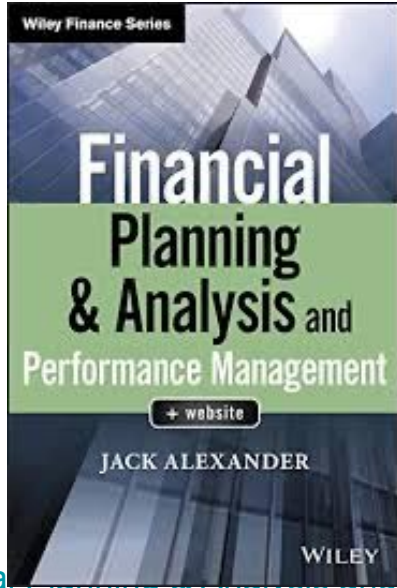
# **Q&A**

## **Feedback**





# Additional Resources



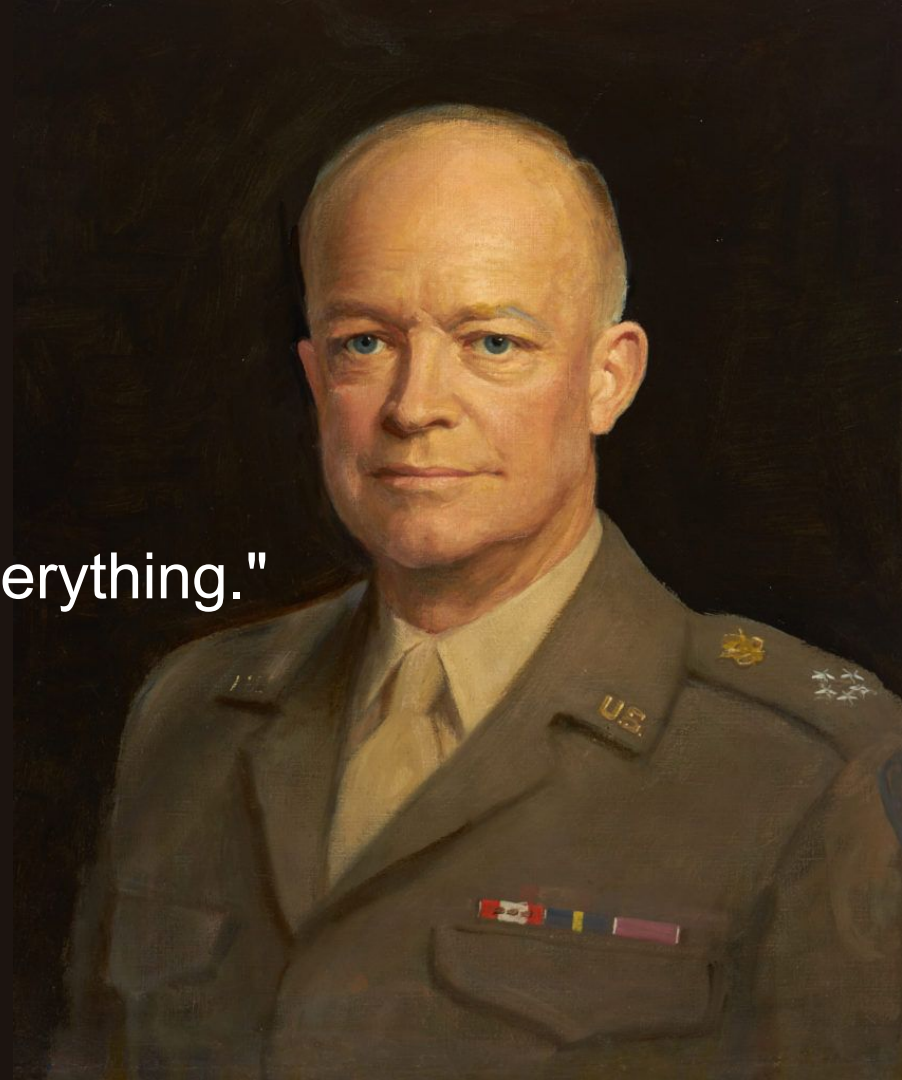
"Financial Planning & Analysis and Performance Management" Jack Alexander



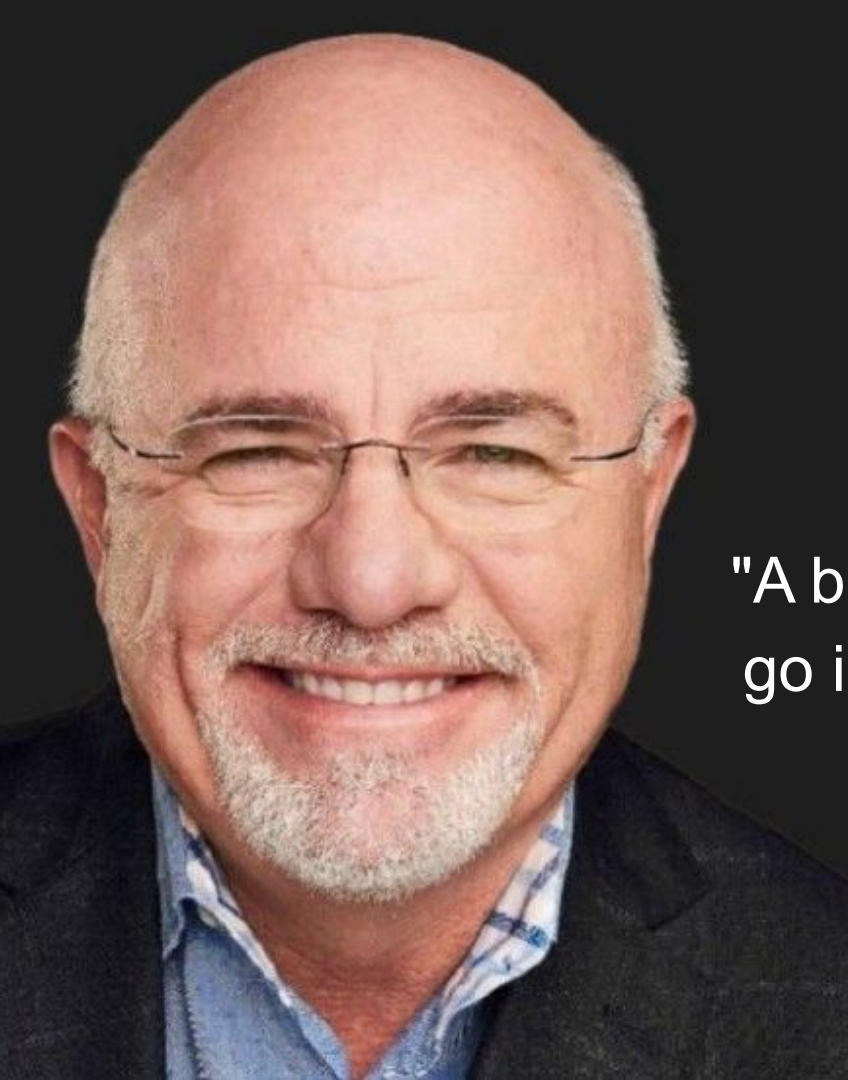
"Budgeting Basics and Beyond" Jae K. Shim and Joel G. Siegel

"Plans are nothing; planning is everything."

Dwight D. Eisenhower







"A budget is telling your money where to go instead of wondering where it went."

Dave Ramsey