Hands-On Learning Activity: Case Study Application in Financial Modeling

Hands-On Learning activity will walk you through scenario and sensitivity analysis using a simplified hotel budget case. You'll simulate risks, compare assumptions, and explore different model types to understand financial outcomes.

Objective

To perform a case-based financial analysis using scenario and sensitivity modeling and compare different financial model types for strategic planning.

Instructions:

Use Excel or Google Sheets for calculations and document your responses to reflective prompts in a Word file.

Step 1: Review the Hotel Budget Model

Use the following base assumptions:

Monthly Revenue: $500,000

Monthly Expenses: $350,000

Net Income: $150,000

Assume fixed costs are $250,000 and variable costs are 20% of revenue.

Step 2: Conduct Scenario Analysis

Create two alternative scenarios:

Scenario A: Revenue drops by 15% due to off-season

Scenario B: Expenses increase by 10% due to energy costs

Calculate new Net Income in each case and compare with the base model.

Step 3: Conduct Sensitivity Analysis

▸ Test how sensitive Net Income is to a 5% change in either:

Room Pricing (impacting Revenue)

Maintenance Costs (part of Expenses)

▸ Recalculate and observe the change in Net Income for each adjustment.

Step 4: Compare Financial Model Types

▸ Use AI or your own notes to define these models:

Forecasting Model

Budget Model

Valuation Model

▸ Write a short comparison: What is each model used for, and how do they differ in inputs, structure, and outputs?

Step 5: Reflect on Strategic Insights

▸ Write 6–8 sentences on:

Which scenario created the biggest risk to profitability?

What did sensitivity analysis reveal about model priorities?

When would you use each model type in a real organization?