



Hands-On Learning Activity: Assumption Building in Financial Modeling



Hands-On Learning activity guides you through the process of identifying, researching, and validating assumptions for financial modeling using Generative AI tools. You'll focus on creating realistic revenue and expense assumptions for a hotel business.

Objective



To use Generative AI to develop key financial assumptions and input variables for a hospitality budget model.



Instructions:



- ▶ Use a combination of structured prompts, web research (real or simulated), and spreadsheet setup to complete the following steps.

Step 1: Identify Key Assumptions



- ▶ Imagine you are preparing a 12-month financial model for a mid-sized hotel in New York City.
- ▶ List key revenue and expense assumptions needed to build this model.



▶ Group them into:

- Macro (e.g., tourism trends, inflation)
- Micro (e.g., occupancy rates, ADR)
- Strategic (e.g., marketing plans, new services)

Step 2: Use Generative AI to Conduct Market Research



▶ Use a prompt like:

▶ 'What are the current travel and tourism trends affecting hotel occupancy in New York City for the next 12 months?'



- ▶ Summarize 3–5 macro assumptions using AI or simulated output.
- ▶ Repeat with a second prompt for competition, pricing, or customer demand.

Step 3: Develop Monthly Revenue Assumptions



- ▶ Create a table with:
 - Monthly Occupancy Rates (%)
 - Average Daily Rate (ADR in \$)
 - Monthly Revenue = Occupancy Rate × ADR × 30 days × 100 rooms



- ▶ Base your inputs on assumptions from Steps 1 and 2.

Step 4: Estimate Monthly Expenses



- ▶ List major expense categories: Labor, Maintenance, Utilities, Marketing.
- ▶ Estimate % of revenue for each based on industry norms or AI guidance.
- ▶ Calculate expense totals and projected net income for one sample month.

Step 5: Reflect on Assumption Validity



▶ Write 6–8 sentences on:

- Which assumptions are most uncertain or likely to change?
- How would you monitor and update these over time?
- How did Generative AI help — or fall short — in guiding assumption design?