



A Complimentary Virtual Event for Finance Professionals

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Building Financial Intelligence: Buy vs Lease

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August 26th, 2026



Agenda

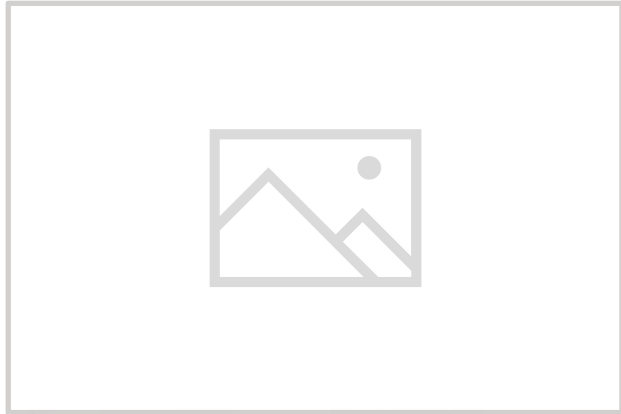
- **Introductions**
- **Case Setup**
- **Example 1 (Copilot) – Prompt Only**
- **Prompting Strategies**
- **Example 2 – Best Practice Prompting**
- **Context Engineering**
- **Example 3 – With Context**
- **Key Takeaways**



Paul Barnhurst (The FP&A Guy)



Mario Vasquez, FPAC



Sr. Director, Finance



Board of Directors



Founder and CEO



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Lease vs. Buy

LEASE

Pay for use (operating or finance lease depending on accounting). Often a lower near-term cash requirement.

Pros

- Lower initial cash required; preserves bank lines and working capital
- Off-balance-sheet (operating lease) may improve apparent leverage and ROE depending on accounting
- Easier lifecycle upgrades and vendor-managed maintenance options
- Faster deployment and simpler procurement in many cases

Cons

- Potentially higher total cost over the long term
- Less control; contractual constraints and return conditions
- Ongoing expense exposure to contract terms and escalators
- Since 2019, ASC 842 and IFRS 16 put leases over one year on the balance sheet as a right-of-use asset and lease liability and might hurt leverage calculations

BUY

Purchase the asset outright (capex). Recognize the asset on the balance sheet and depreciate it over its useful life.

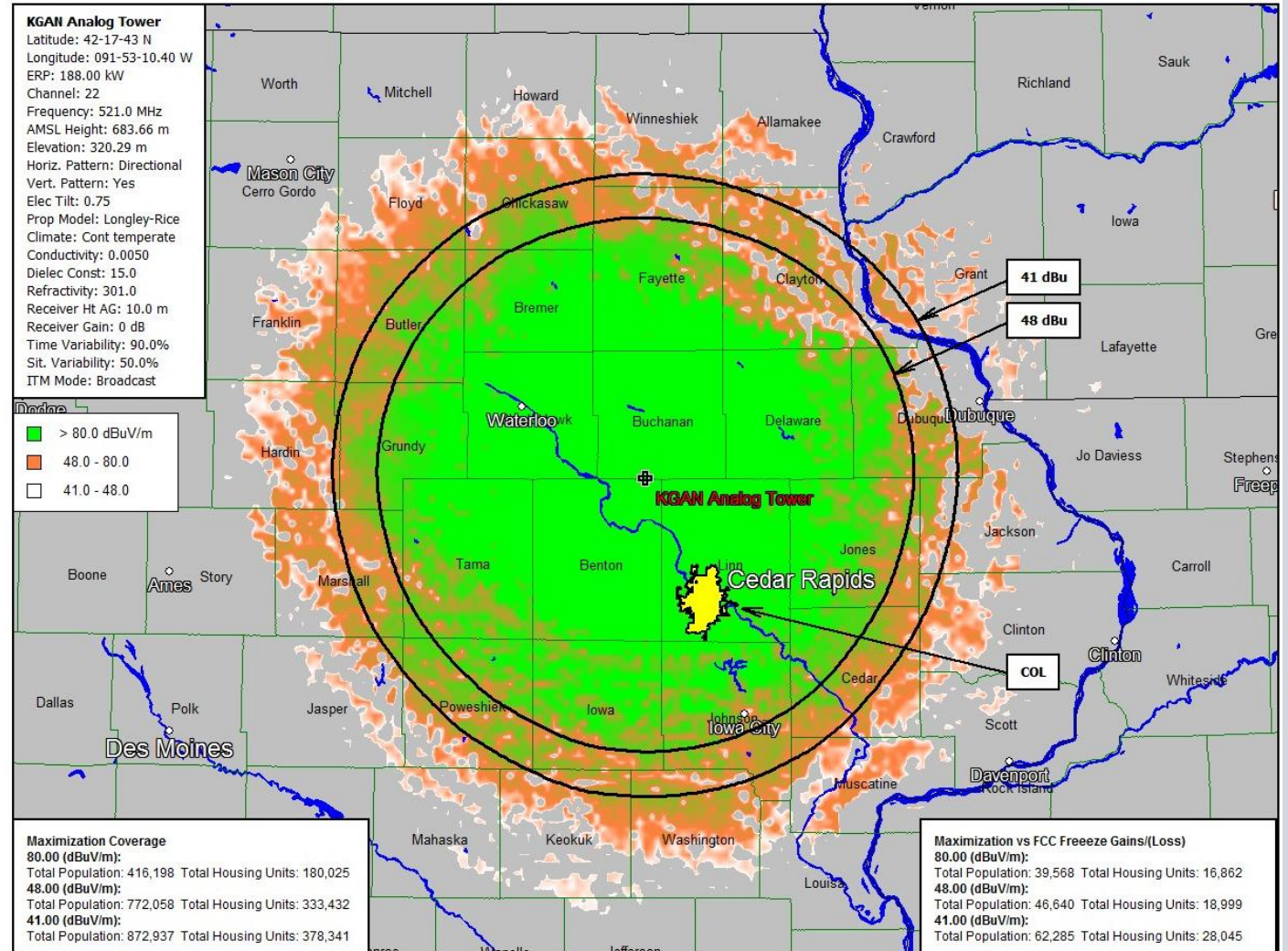
Pros

- Potentially lower long-term total cost if asset life and residual value are favorable
- Ownership gives control and the optionality to sell or repurpose
- Depreciation and interest can provide tax benefits
- No recurring lease escalation after payoff

Cons

- Large up-front cash outlay or increased debt
- Higher balance-sheet leverage; may affect covenant headroom and ratios
- Risk of obsolescence and disposal costs
- All ownership risks: maintenance costs, obsolescence and market value fluctuations

Broadcast Towers



Poll Question 1



Which do you trust AI most in this type of analysis?

- a) Fast scenario generation and number-crunching
- b) Running sensitivity/Monte Carlo analyses
- c) Proposing assumptions and forecasts
- d) Drafting results, narratives, and presentation-ready summaries
- e) I don't (yet) trust AI for financial analysis

Exercise Assumptions

- **Time value of money not considered**
- **AI did not analyze tower specs**
- **Instructions sheet included all cost estimates**
- **Recurring costs did not include an inflation assumption**
- **Used Co-pilot in Excel (paid license)**

Example 1 – Prompt Only (Excel)

Prompt:

I have the following instructions in a text sheet on the sheet labeled instructions and I need your help building me a model using the instructions to guide you. Can you build me a model for each of the three scenarios mentioned in the instructions and a summary comparing the three and tell me what I should do.

Try 1 – Prompt Only



+

CEDAR RAPIDS TOWER DECISION

10-year financial comparison | October 2018–September 2028 | Financial decision only

STORY IN BRIEF

Option 2 is the lowest-cost financial choice at \$7.76 million over ten years, saving \$1.15 million versus continuing the current lease. Its trade-off is modeled coverage: 34,754 fewer households at 48 dBu than Option 1. Option 3 costs only \$123,613 more than Option 2 over ten years while reaching 38,527 more households, so it is the stronger fallback if management will not accept Option 2’s coverage reduction. Confirm engineering feasibility, structural condition, FCC compliance, and final coverage before committing.

Scenario	10-Year Cost	Savings vs Option 1	Coverage @ 48 dBu	Coverage Variance
Option 1 — Continue Lease	\$8,911,264	\$0	329,659	0
Option 2 — Alternative Lease	\$7,757,467	\$1,153,797	294,905	-34,754
Option 3 — Buy Tower	\$7,881,080	\$1,030,184	333,432	3,773

RECOMMENDATION
Preferred Option
Option 2 — Alternative Lease
Lowest 10-Year Cost
\$7,757,467
Savings vs Continue Lease
\$1,153,797

Decision Factor	Option 1	Option 2	Option 3	Interpretation
Financial rank	3	1	2	Lower is better
@ 48 dBu households	329,659	294,905	333,432	Option 2 reduces modeled coverage; Option 3 slightly improves it
Ownership	Lease	Lease	Own	Option 3 replaces lease exposure with owned infrastructure
Management gate	Confirm	Confirm	Confirm	Engineering, FCC, structural, and coverage validation required

Try 2 – Prompt Only

STORY IN BRIEF

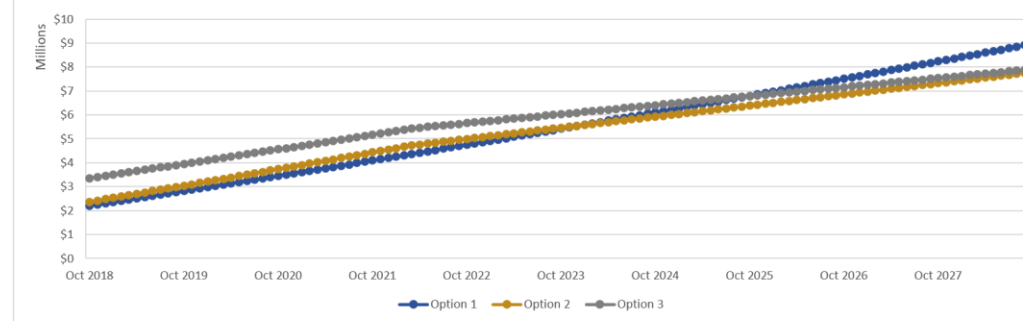
Option 2 has the lowest 10-year cash cost at \$7,757,467. Option 3 costs only \$123,613 more over 10 years (1.6%) while improving household coverage at all three thresholds versus the current tower; Option 2 reduces coverage. Recommendation: pursue Option 3 as the strongest overall value, subject to structural, regulatory, transaction, and engineering due diligence.

FINANCIAL COMPARISON

Scenario	10-Year Total	Savings vs Opti	Average Annua	80 dBu HH	48 dBu HH	41 dBu HH
Option 1 – Current Lease	\$8,911,264	-	\$891,126	175,887	329,659	365,259
Option 2 – Alternative Lease	\$7,757,467	\$1,153,797	\$775,747	125,337	294,905	340,588
Option 3 – Purchase Tower	\$7,881,080	\$1,030,184	\$788,108	180,025	333,432	378,341

CUMULATIVE COST BY MONTH

10-Year Cumulative Cash Cost



RECOMMENDATION

Proceed toward Option 3 (purchase). It saves \$1,030,184 versus renewing the current lease and costs only \$123,613 more than Option 2 over 10 years, while delivering the best modeled coverage. If leadership's sole objective is minimum cash cost and it accepts the coverage reduction, select Option 2 instead.

Basic Prompt

- Each attempt had widely different layouts
- Made different assumptions on key elements for cover sheet
- Formatting and look and feel very different
- Dates were in rows and categories in columns
- Final numbers tied in both examples

Structured Prompting Method

- **Role** – Give it role and audience
- **Context** – The raw material to do the work
- **Task** – Describe the task it is to complete
- **Format** – Give it the format it should use
- **Constraints** – Provide all necessary constraints
- **Examples** – Provide example of the work you want

Chain of Thought

- Ask the tool to provide its reasoning before asking it to answer the question. Allows you to work through the reasoning at each step of the process.

Few-shot Prompting

- Paste several prior examples and just describe what you want.

Prompt Chaining

- Prompt chaining involves breaking a task down into multiple steps. For example in model building. You could start with assumptions, then scenario 1 and work through each one at a time.

Try 1 - Best Practice Prompt

Cedar Rapids Tower Decision Summary

Undiscounted nominal-dollar comparison | October 2018–September 2028 | Financial factors only

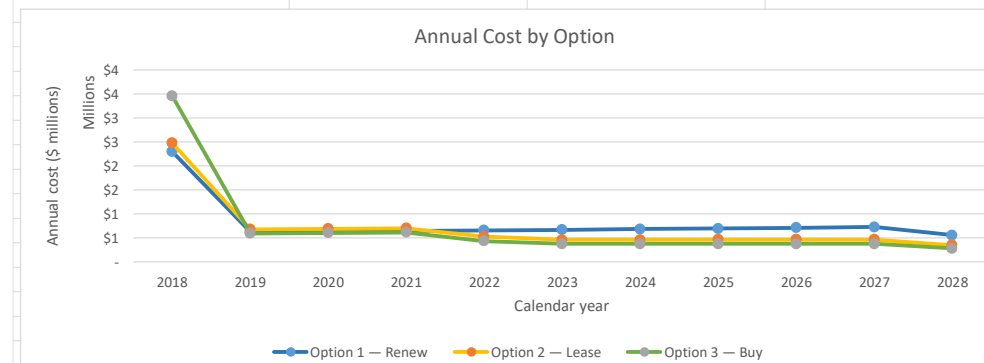
DECISION AT A GLANCE

Lowest-Cost Option	10-Year Cost	Gap to Next Best	Next-Best Option
Option 2 — Lease	\$7.8M	\$0.1M	Option 3 — Buy

STORY IN BRIEF

Option 2 — Lease is the lowest-cost financial option at \$7,757,467 over the approved 120-month window. It is \$123,613 below Option 3 — Buy. The result includes overlapping current-site rent and CAM through March 2022 for move options, while Option 3

ANNUAL COST TREND



10-YEAR COST COMPARISON

Option	Total Cost	Rank	Gap to Winner
Option 1 — Renew	\$8,911,264	3	\$1,153,797
Option 2 — Lease	\$7,757,467	1	-
Option 3 — Buy	\$7,881,080	2	\$123,613

Try 2 - Best Practice Prompt



Tower Cost Comparison						
Leadership view of undiscounted nominal costs over October 2018–September 2028; engineering specifications and coverage are excluded.						
RECOMMENDATION						
Lowest-Cost Option		Option 2	10-Year Cost		\$7,757,467	
Gap to Next-Best Option		\$123,613 Model Window			Oct 2018–Sep 2028	
10-YEAR OPTION COMPARISON						
Option	Description	10-Year Cost	Rank	Gap vs Lowest	Relative Cost	
Option 1	Renew current tower lease	\$8,911,264	3	\$1,153,797	14.9%	
Option 2	Lease small-owner tower	\$7,757,467	1	\$0	0.0%	
Option 3	Buy competitor tower	\$7,881,080	2	\$123,613	1.6%	
ANNUAL COST PROFILE						
Model Year	Period	Option 1	Option 2	Option 3		
	1 Oct 2018 – Sep 2019	\$2,764,384	\$2,984,584	\$3,902,568		
	2 Oct 2019 – Sep 2020	\$631,669	\$687,973	\$604,430		
	3 Oct 2020 – Sep 2021	\$643,064	\$700,494	\$615,825		
	4 Oct 2021 – Sep 2022	\$655,029	\$584,912	\$499,095		
	5 Oct 2022 – Sep 2023	\$667,592	\$463,516	\$376,527		
	6 Oct 2023 – Sep 2024	\$680,783	\$464,711	\$376,527		
	7 Oct 2024 – Sep 2025	\$694,634	\$465,930	\$376,527		
	8 Oct 2025 – Sep 2026	\$709,178	\$467,173	\$376,527		
	9 Oct 2026 – Sep 2027	\$724,448	\$468,441	\$376,527		
	10 Oct 2027 – Sep 2028	\$740,482	\$469,735	\$376,527		
KEY FINDINGS						
Option 2 is the lowest-cost financial choice at \$7,757,467 over ten years, a \$123,613 advantage over the next-best option. The result includes the unavoidable current-site rent and CAM through March 2022 in every option. Option 3 removes office rent beginning in October 2018, while Options 1 and 2 retain it. This recommendation is financial only; leadership should assess tower specifications, engineering feasibility, and coverage separately.						

Best Practice Prompt



- **Included years for model, cover sheet as requested in prompt**
- **Two tries still had a lot of variation**
- **Model build was better but only slightly better than simple prompt**

Prompt Engineering

- Relies on the written prompt to do most of the work
- A good prompt will yield better results than a poorly worded prompt
- Today an LLM can write a better prompt when asked them most humans

Context Engineering

- Provides a prompt along with additional information the model needs
- A mediocre prompt with proper context (Documents) will yield better results than an outstanding prompt
- Create processes with Skills/instruction folders, scripts, and resources that AI can automatically load when performing tasks

Going Beyond Prompting



- **Instructions/Personalization** – Many models allow you to add personal instructions they can use when answering questions.
- **Projects** – Folders with their own instructions and knowledge base
- **Skills/Custom GPTs** – Skills are instruction files written as markdown (.md) files that are called by the LLM when a task triggers then to be called.
- **Plugins** – Bundles of skills, instructions and connectors distributed together
- **Connectors and MCP** – Used to connect external data
- **Spreadsheet Agent** – All Major LLMs have a spreadsheet agent you can use to enhance your work.

Prompt with Context

- **Included personalization in Excel**
- **Included workbook rules to follow**
- **Included sample file**
- **Used the plan mode in Copilot so it would build a detailed plan**
- **Used Claude Opus 5 model**



Build Takeaways

- **Every model had issues**
- **Best results came with context**
- **The Excel Agent can produce the right calculations**
- **Most consistent results came from context**
- **Prompt engineering has given way to context & harness engineering**

Poll Question 2

Which financial metric would you prioritize when comparing buy and lease alternatives?

- a) Net Present Value (NPV)**
- b) Internal Rate of Return (IRR)**
- c) Impact on EBITDA / operating Income**
- d) Payback period/liquidity impact**
- e) Return on Invested Capital (ROIC)**

What we actually did

Purchased the Tower

- **Similar 10 Year Cost**
- **Better Household Reach**
- **Helps Negotiations with Big Tower Owner**
- **Huge Savings After Year 10**
- **Additional Revenue Stream (not in analysis)**



Appendix

Basic Prompt

I have the following instructions in a text sheet on the sheet labeled instructions and I need your help building me a model using the instructions to guide you. Can you build me a model for each of the three scenarios mentioned in the instructions and a summary comparing the three and tell me what I should do.

Best Practice Prompt



You are a senior FP&A analyst building a lease versus buy cost comparison in Excel for a broadcast station. Your work will be reviewed by a CFO and presented to leadership. **CONTEXT** It is 2017.

See the text box on the instructions sheet for details of the project which have been summarized here as well.

Our station in Cedar Rapids, IA must change broadcast channels under the FCC Repack. The change happens in October 2018 regardless of what we decide. We are using the timing of that change to also decide where we broadcast from.

Facts, all in nominal dollars:

Applies to every option:

- Channel equipment replacement: \$2,143,568, incurred October 2018
- Current tower lease: \$14,614 per month as of April 2017, escalating 5% every April. Lease runs through March 2022 and cannot be exited early, so it is payable under all three options through March 2022
- Common Area Maintenance: 15% of base rent, applies to any leased site. CAM on the current site is payable through March 2022 under all options
- Office: \$2,269.87 per month, no escalator - Headcount: \$193,829 per year, no escalator - Other station expenses: \$182,698 per year, no escalator
- Notice to avoid auto-renewal is due 365 days before expiration. Renewal continues the 5% annual escalator
- All three models should start in October 2018 and run for 10 years, 120 months.
- Assume all one time expenses occur in October 2018

Best Practice Prompt (Cont.)



Option 1: renew at the current site for ten years

Option 2: lease from a small tower owner starting October 2018 at \$4,000 per month with a 2% annual escalator that occurs every October, plus CAM. Equipment cost is the same as the current site. Requires a one-time ARO of \$165,000 to remove our equipment from the current site.

Option 3: buy a competitor's tower for \$725,000 plus \$496,325 of repairs, both incurred before October 2018. Equipment cost is \$220,903 lower because the site has a lower ERP. The office expense goes away from October 2018. Requires the same \$165,000 ARO

Exclusions

- Tower specifications and coverage maps are excluded.
- Do not apply time value of money. This is an undiscounted total cost comparison

Management will weigh those separately

TASK Build a annual cost model that compares the total cost of the three options over a defined window, and identify the lowest total cost option and the size of the gap.

Prior to building please validate all assumptions and build a plan for me to review and approve.

Context Prompt



You are a senior FP&A analyst building a lease versus buy cost comparison in Excel for a broadcast station. Your work will be reviewed by a CFO and presented to leadership. **CONTEXT** It is 2017.

Use the Scenario Example included in the workbook as a reference for how to build the model. You should follow the layout and styling of the Scenario Example worksheets where possible. These worksheets are the last 5 tabs in the workbook (Cover Sheet, Executive Summary, Assumptions, Scenario 1, Scenario 2.) If you have questions about the scenario sheet, please ask me for clarification before proceeding.

When building the workbook do not replace any existing sheets but build the new sheets at the front of the workbook and leave the example at the back of the workbook. It should start with cover sheet, executive summary, assumptions, scenarios and then any other sheets needed for the build.

See the text box on the instructions sheet for details of the project which have been summarized here as well.

Our station in Cedar Rapids, IA must change broadcast channels under the FCC Repack. The change happens in October 2018 regardless of what we decide.

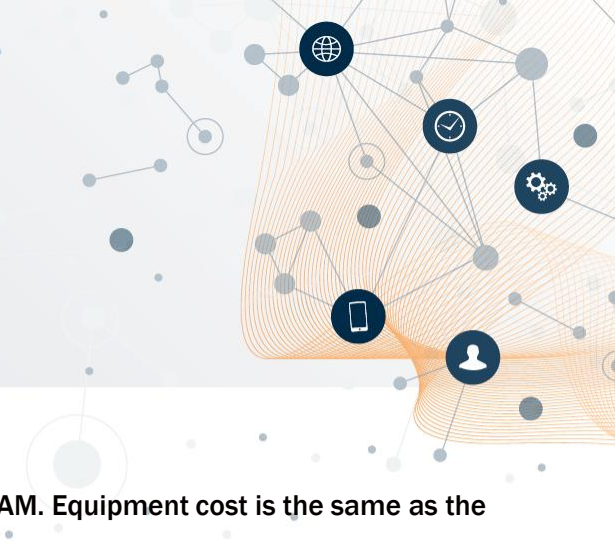
We are using the timing of that change to also decide where we broadcast from.

Key Facts below, all in nominal dollars:

Applies to every option

- Channel equipment replacement: \$2,143,568, incurred October 2018
- Current tower lease: \$14,614 per month as of April 2017, escalating 5% every April. Lease runs through March 2022 and cannot be exited early, so it is payable under all three options through March 2022
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Context Prompt (Cont.)



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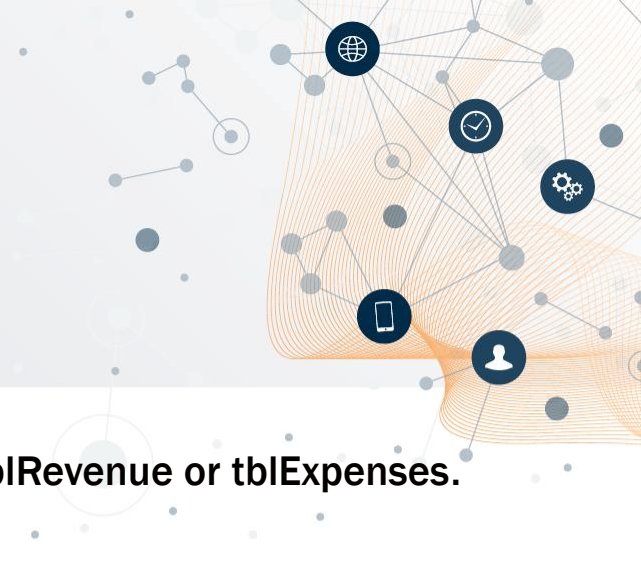
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Prior to building please validate all assumptions and build a plan for me to review and approve.

Copilot Personalization



All tables you create should contain short descriptive name and be prefixed with tbl. For example, tblRevenue or tblExpenses.

You should use tables to store raw data when possible.

Never merge cells! If you need to center a heading use center across selection instead.

Always turn off worksheet gridlines when creating or formatting Excel worksheets.

Start new worksheet layouts in B2 by default.

When building models, format input cells in blue font, output cells in black font, and linked reference cells in green font.

Workbook Rules



- Dates should be in columns
- Categories and account lines should be in rows
- The header section should be the first four rows and all four rows should have a dark blue background.
- All header sections at the top of the model should use white font and a dark blue background.
- All text for totals and subtotal sections should be black.
- No borders should be included for formatting in the workbook unless explicitly stated.
- Format numbers with commas and no decimals so 1000000 should be 1,000,000. Do not include dollar signs
- Use a white background for all cells unless explicitly stated otherwise
- Leave column A blank of data unless otherwise specified
- Never hardcode numbers in a formula any numbers should come from the assumptions sheet and be referenced
- Use Red for references to external workbooks, green for references to other worksheets, blue for inputs, and black for all formulas.