

Stage	Suggested Approach	Why This is Optimal	AI Agent Prompt (if needed)
1. Scenario Loader & Validator	Rule-based logic + ML Assist	Use traditional parsing to validate scenario fields, types, targets. ML can flag near-matches or duplicates.	<i>No Agent</i>
2. Budget Scenario Applier	Rule-based logic	This is deterministic logic: apply percentage/fixed/delay deltas to numeric budget rows.	<i>No AI needed.</i> Only risks introducing errors or hallucinated mappings.
3. Constraint & Goal Checker	Rule-based logic	Funding constraints (e.g. "no deficit allowed") and strategic goals (e.g. "boost STEM") are best handled with scoring or boolean evaluation.	<i>No agent.</i> But log constraint violations and potential trade-offs for downstream agents.
4. Cost Forecaster	Traditional ML (Prophet)	Time-series forecasting is well-handled by traditional models like Prophet.	<i>No agent.</i> Plug in the forecast as structured output for next stages.
5. Insight Generator	AI Agent	Insight synthesis from forecast deltas, trade-offs, and priorities is qualitative.	<b>Prompt:</b> "Explain key trends and implications from this forecast. Highlight strategic goals that are impacted, and call out any budget sustainability concerns."
6. Offset Advisor	Hybrid: AI Agent + Rules	Use rules to filter feasible offsets (cuttable, deferrable, non-core), then AI to rank.	<b>Prompt:</b> "Given this budget gap and the constraint that no core services be affected, suggest reallocation or deferral strategies, with justification and estimated impact."

<b>7. Strategic Trade-Off Evaluator</b>	<b>AI Agent</b>	This is high-value agentic work: evaluating scenarios in terms of strategic tension (e.g., growth vs. equity).	<b>Prompt:</b> “Compare these two adjusted budget snapshots. Which better aligns with the strategic goal of ‘Equity in Access’ and why?”
<b>8. Narrative Summary Generator</b>	<b>AI Agent</b>	AI can create engaging, human-readable summaries for board/presentations.	<b>Prompt:</b> “Write an executive summary of how this proposed budget scenario affects long-term priorities, highlights gains/losses, and supports or violates key goals.”
<b>9. Report Formatter / Exporter</b>	<b>Rule-based logic</b>	CSV/JSON/Markdown/PDF exporting is deterministic.	<i>No agent.</i> Simple I/O.