AI Prompt Library – User Guide

Pre-Design Architecture Sanity Check | Leadership Questions | Cost vs Value Justification

Audience: Delivery Leaders, Architects, Directors, Client-facing Engineering Managers
Goal: Provide reusable prompts and usage guidance to improve architecture decisions, leadership readiness, and investment justification.

How to Use This Guide

1. Pick the task you need (Architecture / Leadership questions / Financial justification).
2. Copy the **Prompt Template** section into ChatGPT (or your AI tool).
3. Fill the **Inputs** fields with your real content.
4. If the prompt asks clarifying questions, answer them and re-run.
5. Copy the final output into your design doc / email / PPT.

Common Standards (Apply to All 3 Prompts)

Quality Rules

- Keep tone **neutral, factual, and solution-oriented**
- Prefer **business impact and risk language** over technical jargon
- Use **structured Markdown output** for easy copy/paste

Clarification Rule (Ask Before Answering)

If any essential information is missing, the AI must ask questions first—do not guess.

Diagram Rule (When requested)

- Use **simple boxes + arrows**
- Flow direction: **Left → Right**
- Show: entry points, core services, data stores, integrations, and failure points
- Keep it **leadership and PPT-friendly**, not implementation-heavy

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1) Pre-Design Architecture Sanity Check

Purpose

Identify architecture risks and gaps **before** implementation—so you can prevent performance issues, reliability failures, and late rework.

When to Use

- Before architecture freeze / design sign-off
- Before client/leadership design reviews
- When introducing new flows (new service, major feature, new integration)

What You Get

- “Architecture as understood” summary
- Strengths
- Risk and gap table (scalability, security, reliability, operability)
- Assumptions
- Recommendations (before build + post MVP)
- Diagram-ready architecture flow

Prompt Template (Copy-Paste)

TASK

Perform a **pre-design architecture sanity check** to identify risks, gaps, and improvement areas before implementation.

CONTEXT

- Audience: Architecture reviewers, delivery leaders, senior stakeholders
- Domain: Enterprise web / API / cloud systems
- Goal: Catch scalability, security, reliability, and operability risks early

RULES

1. Focus on architectural soundness, not code-level details
2. Evaluate scalability, security, reliability, and operability
3. Explicitly call out assumptions and hidden dependencies
4. Be constructive and solution-oriented
5. Avoid blame language

CLARIFICATION RULE

Ask before proceeding if unclear:

- Expected scale (users / transactions / peak load)
- Deployment model (cloud / hybrid / on-prem)
- Compliance constraints (HIPAA/HiTrust/SOC2/etc.)

INPUTS

Proposed Architecture Description:
<PASTE HERE>

REQUIRED OUTPUT FORMAT

Architecture Overview (As Understood)

Strengths

Risks & Gaps

| Area | Observation | Risk Level | Notes |

Key Assumptions

Recommendations

- Immediate (Before Build)
- Near-term (Post MVP)

DIAGRAM REQUIREMENT

Include a **high-level architecture flow diagram** that shows:

- Entry points
- Core components
- External integrations
- Data stores
- Failure/retry points

Use this structure:
Diagram Nodes: Node → Responsibility
Connections: From → To : Purpose
Callouts: latency/failure points, assumptions

SELF-REVIEW CHECK

- Would this prevent rework later?
- Are risks realistic and actionable?
- Is this suitable for leadership review?

Return output in Markdown.

Example Use Case (Realistic)

Scenario: Provision Preview API before CCR execution

- UI triggers preview
- API aggregates Product/Benefit/Pricing data
- Rule engine generates text
- Stores preview temporarily
- Returns preview to UI

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2) What Questions Will Leadership Ask?

Purpose

Anticipate leadership questions before steering committee / client reviews, so you walk in prepared.

When to Use

- Before leadership status reviews
- Before roadmap/budget approvals
- Before escalation calls
- Before presenting architecture or delivery plan

What You Get

- High-probability leadership questions grouped by category
- Why leaders ask each question
- What answer pattern they expect (risk/impact/plan/ownership)

Prompt Template (Copy-Paste)

TASK

Generate the **most likely leadership questions** for the proposal/update below, and explain what leaders expect to hear.

CONTEXT

- Audience: Executives, Directors, Clients
- Goal: Prepare for decisions, approvals, and risk discussions
- Focus: impact, timelines, risk, dependencies, accountability, cost/value

RULES

1. Think like a skeptical but reasonable leader
2. Prioritize business impact over technical depth
3. Group questions by theme
4. Provide the "expected answer shape" (not full answers unless asked)

CLARIFICATION RULE

Ask before proceeding if unclear:

- Audience type (internal / client)
- Meeting type (approval / review / escalation)
- What decision is required (if any)

INPUTS

Proposal / Update Summary:
<PASTE HERE>

REQUIRED OUTPUT FORMAT

High-Probability Leadership Questions

A) Delivery & Timeline

For each question:

- Q:
- Why they ask:
- What they expect to hear:

B) Risks & Mitigation

- Q:

- Why they ask:
- What they expect to hear:

C) Cost & Value

- Q:
- Why they ask:
- What they expect to hear:

D) Dependencies & Stakeholders

- Q:
- Why they ask:
- What they expect to hear:

E) Ownership & Accountability

- Q:
- Why they ask:
- What they expect to hear:

OPTIONAL VISUAL AID

If helpful, include a **simple decision/risk map**:

- Decision points
- Cost vs risk trade-offs
- Timeline dependencies

SELF-REVIEW CHECK

- Would these questions be asked in a real steering committee?
- Are they decision-oriented and outcome-focused?
- Do they reveal gaps in the proposal?

Return output in Markdown.

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3) Cost vs Value Justification Builder

Purpose

Create a leadership-ready justification for funding/headcount/tools—focused on outcomes, value, and risk of inaction.

When to Use

- Budget approvals
- Headcount requests
- Vendor/tool investment proposals
- Scope expansion discussions

What You Get

- Executive summary
- Cost overview (one-time + recurring if possible)
- Value/benefit narrative
- Risks of not investing (cost of delay / quality risk / compliance risk)
- Recommendation
- Simple visual guidance for PPT

Prompt Template (Copy-Paste)

TASK

Create a **leadership-ready cost vs value justification** for an initiative or investment.

CONTEXT

- Audience: Executives, Finance, Client stakeholders
- Goal: Support a decision quickly (approve / defer / reject)
- Style: Business-first, risk-aware, concise

RULES

1. Frame value in outcomes, not features
2. Include “cost of inaction” and “cost of delay”
3. Avoid exaggerated ROI claims
4. Keep it concise and decision-ready

CLARIFICATION RULE

Ask before proceeding if unclear:

- Approval context (budget/headcount/vendor/tooling)
- Time horizon (quarter/annual)
- Any constraints (capex/opex, budget ceiling, compliance urgency)

INPUTS

Initiative / Ask:
<PASTE HERE>

Estimated Cost:
<PASTE HERE>

Expected Benefits (quant + qual):
<PASTE HERE>

REQUIRED OUTPUT FORMAT

Executive Summary

Cost Overview

- One-time costs:
- Recurring costs:
- Resourcing impact:

Value & Benefits

- Business outcomes:
- Delivery outcomes:
- Risk reduction outcomes:

Risks of Not Investing

- What happens if delayed 1 quarter?
- What happens if not funded this year?

Recommendation

- Recommended option and why
- Key trade-offs

DIAGRAM REQUIREMENT (PPT-FRIENDLY)

Provide 1 simple visual concept:
Option A: Cost Stack vs Benefit Outcomes
Option B: Timeline (Investment → Payoff → Risk reduction)
Option C: Risk exposure chart (if delayed)

Output in:

- Diagram Nodes
- Connections
- Callouts

SELF-REVIEW CHECK

- Can an executive decide in 2 minutes?
- Is value stronger than cost and clearly expressed?
- Are assumptions explicit?