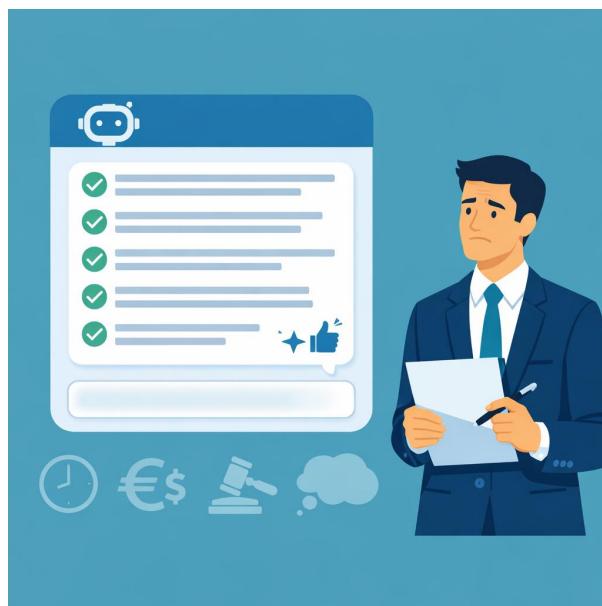


Lab 1 — Observing Hallucination from Vague Prompts

Purpose of the Exercise

- Experience how AI behaves when instructions are unclear
- Observe confident but **unreliable** outputs
- Understand why finance requires **structured prompting**
- Reduce blind trust in AI-generated answers



Setup

- Participants may use any AI chat tool (ChatGPT, Copilot, Gemini, etc.)
- No preparation required
- Individual or paired activity

Step-by-Step Instructions

Step 1 — Ask a Vague Finance Question

Ask the AI **without giving context, role, or constraints.**

Example prompts (choose ONE):

- “Is this a good financial decision?”
- “What should a company do to improve its finances?”
- “Analyze this investment risk.”
- “What is the best budgeting strategy?”

Do **not** provide numbers, timeframe, country, or assumptions.

Step 2 — Observe the Response Carefully

Ask participants to notice:

- How confident does the answer sound?
- Are assumptions made without being stated?
- Is advice generic or overly broad?
- Are facts, rules, or regulations referenced without sources?

Step 3 — Reflect (Do Not Correct Yet)

Participants should **not** fix the prompt yet.

Reflect:

- Would you act on this answer in a real finance role?
- What information is missing?
- What risks would this create in a real organization?

Group Discussion

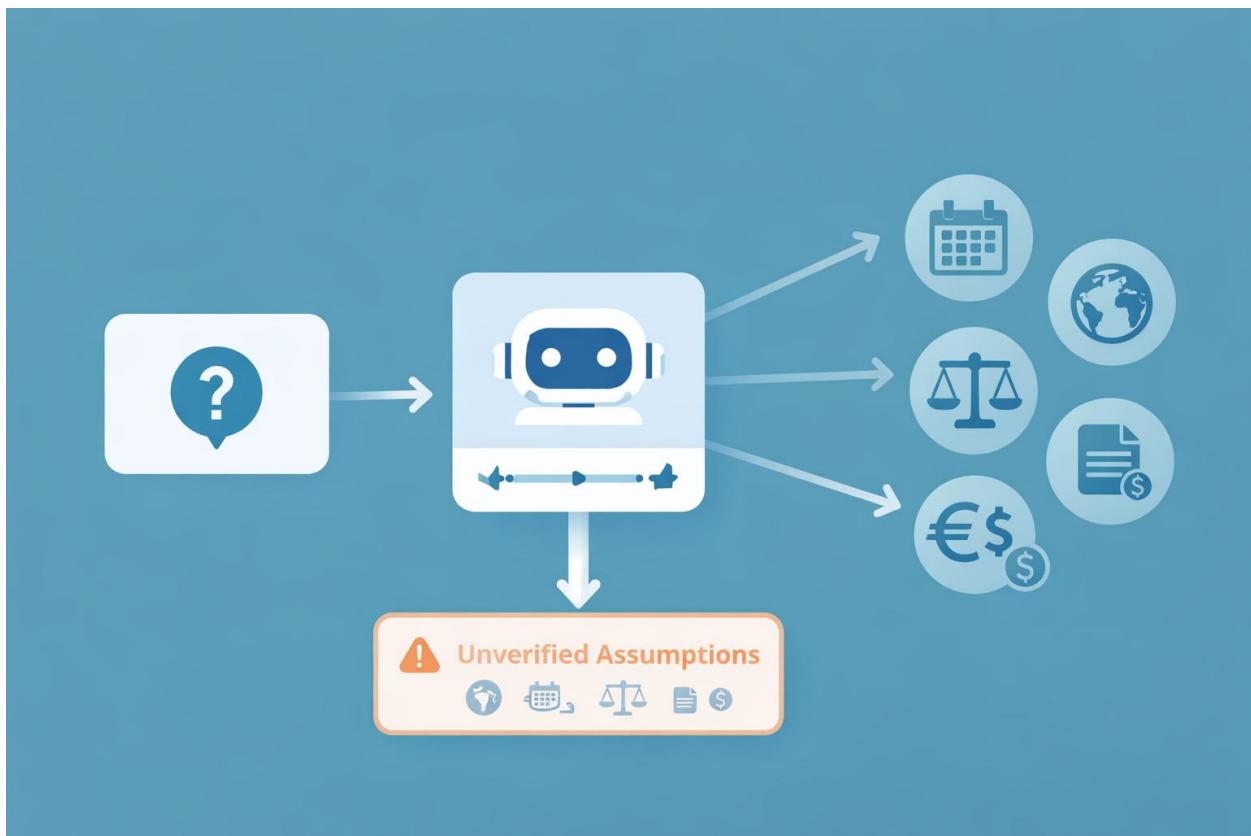
Discussion Questions

- Did different people get different answers?
- Did the AI sound confident even when unclear?
- What assumptions did the AI invent?
- Why is this dangerous in finance, audit, or compliance contexts?

Key Learning Outcome

AI does not ask for clarification by default.

When prompts are vague, AI fills gaps with **assumptions**, not facts.



In the next exercise, we'll repeat this task—but with structure—and compare the difference.

This naturally leads into **Role–Context–Task–Constraint prompting**.

Lab 2: Comparing Prompt Techniques Using the Same Dataset

Lab Objective

By the end of this lab, participants will:

- Observe how AI responds to **different prompting techniques**
- Understand how structure affects **clarity, accuracy, and risk**
- Learn why unstructured prompting is dangerous in finance
- Build disciplined prompting habits aligned with governance

Lab Setup

Dataset

All participants will use the **same dataset**, for example:

- A short financial policy excerpt
- A small reconciliation table
- A budget vs actual summary

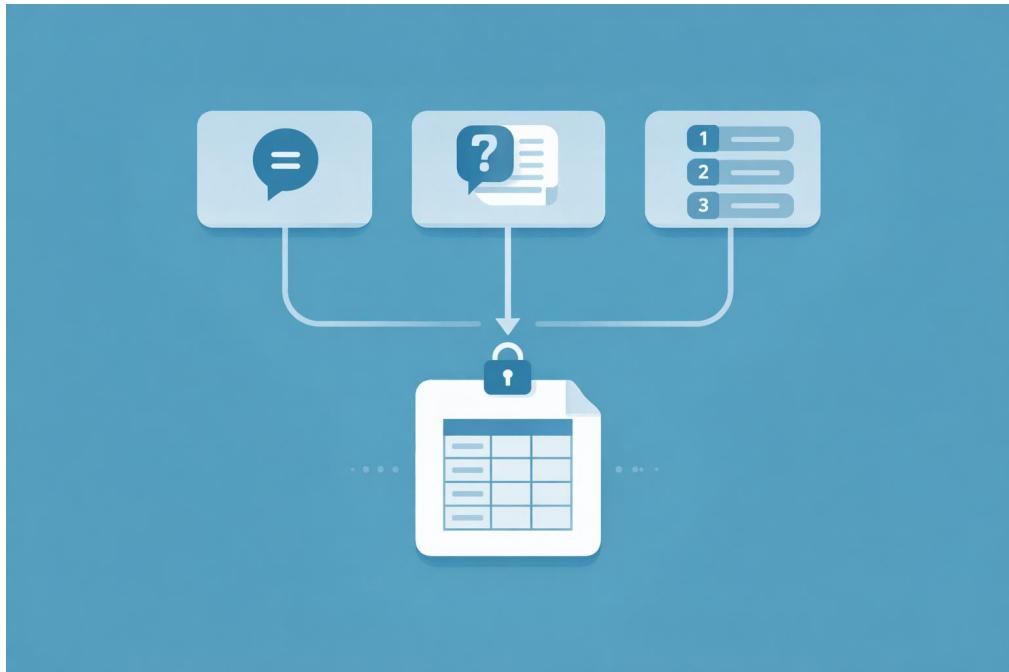
, Participants **must not modify the dataset**.

Instructions Overview

Participants will:

1. Use **the same dataset**
2. Apply **three different prompt techniques**
3. Compare results based on:

- Clarity
- Accuracy
- Risk



Step-by-Step Instructions

Step 1 — Review the Dataset (No Prompting Yet)

- Read the dataset carefully
- Identify:
 - What the data is about
 - What is unclear
 - What decisions *could* be affected by this data
- Do **not** ask the AI anything yet

Step 2 — Technique 1: Zero-Shot Prompting

Instruction

Ask the AI to perform a task **without examples or structure**.

Example Prompt

“Summarize this financial information.”

Observe

- Is the summary clear?
- Are assumptions made?
- Is anything oversimplified or missing?

Step 3 — Technique 2: One-Shot or Question-Based Prompting

(Trainer selects one depending on dataset type)

Option A — One-Shot (Pattern Learning)

Example Prompt

“Here is an example of a clean financial summary:
[Trainer-provided example]
Now summarize the dataset in the same format.”

Option B — Question-Based (Exploration)

Example Prompt

“What potential issues or risks can you identify in this dataset?”

Observe

- Does structure improve?
- Does the AI focus better?
- Are findings clearer than zero-shot?

Step 4 — Technique 3: Step-Based or Iterative Prompting

(Required for all groups)

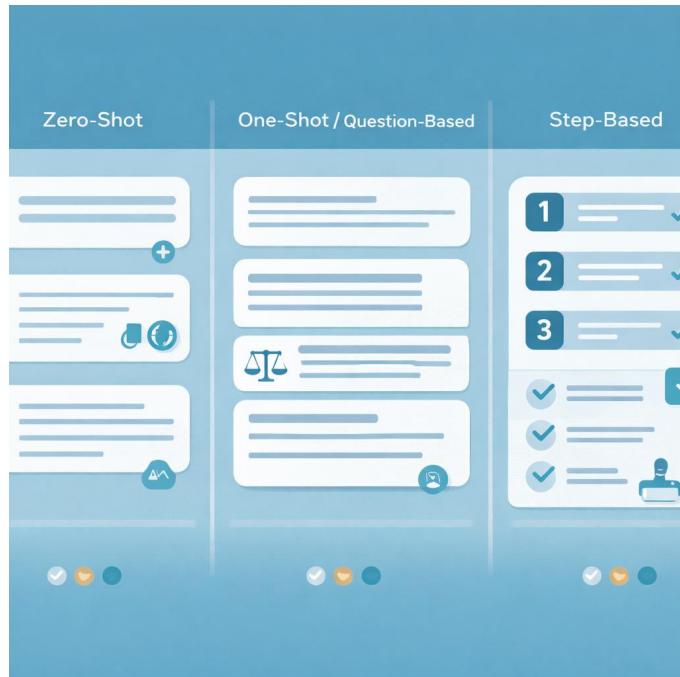
Example Prompt

“Explain your analysis step by step, focusing only on the data provided.”

, Do NOT ask for hidden reasoning or internal thoughts

Observe

- Is the logic easier to follow?
- Is the output more reviewable?
- Would this be acceptable in a finance review or audit?



Step 5 — Comparison Table (Individual or Group)

Participants complete the following table:

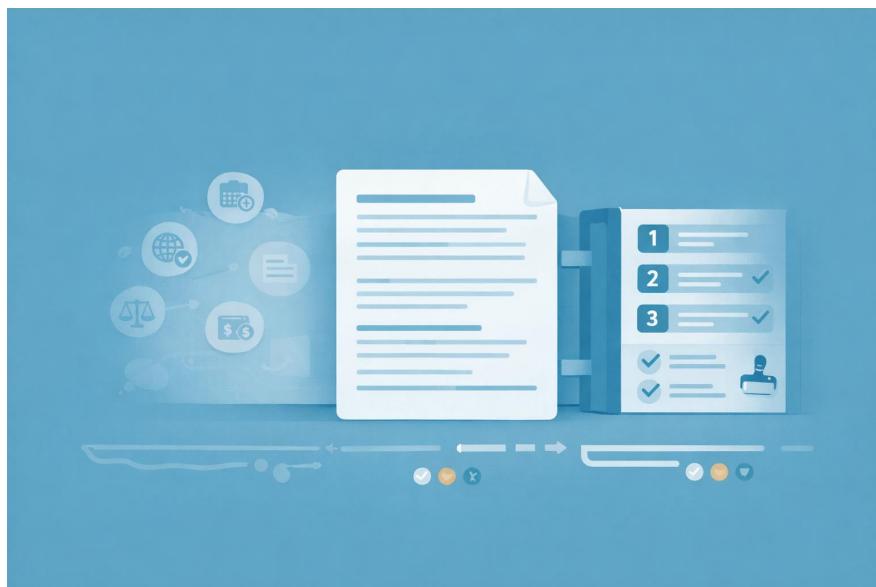
Technique Used	Clarity	Accuracy	Risk Level	Notes
Zero-Shot	Low / Medium / High	Low / Medium / High	Low / Medium / High	
One-Shot / Question	Low / Medium / High	Low / Medium / High	Low / Medium / High	
Step-Based / Iterative	Low / Medium / High	Low / Medium / High	Low / Medium / High	

Group Discussion

Discussion Questions

- Which technique produced the most reliable output?
- Which technique felt the riskiest?
- Did confidence increase or decrease with structure?
- Which output would you trust in a real finance role?

Key Learning Points



- Same data ≠ same result
- Prompt technique shapes output behaviour
- Structure reduces hallucination and ambiguity
- Step-based explanations improve reviewability
- Prompting is a **risk control**, not convenience

„Critical Reminder

Always ask for **step-based explanations**,
Never ask for hidden or internal reasoning.

This aligns with governance, auditability, and professional accountability.

Optional Extension (If Time Allows)

- Repeat the exercise using the **wrong technique on purpose**
- Discuss how misuse could lead to:
 - Compliance issues
 - Financial misstatements
 - Poor decision-making

Lab 3: Finance Mapping Exercise

Prompt Type & AI Mode Selection Lab

Lab Objective

By the end of this exercise, participants will be able to:

- Correctly map **finance tasks** to the appropriate **prompt type**
- Select the correct **AI interaction mode** for each task
- Identify and avoid **prompt misuse** (e.g. agentic prompts for analysis)
- Treat prompt selection as a **governance decision**



Lab Setup

Grouping

- Individual or groups of **2–3 participants**
- One worksheet per group

Tools

- Any AI chat tool (for reference only; no execution required)
- Printed or digital mapping worksheet

, This is a **thinking and design exercise**, not an execution lab.

Instructions Overview

Participants will:

1. Review common finance tasks
2. Decide the **correct prompt type**
3. Choose the **appropriate AI mode**
4. Justify their choices

Step-by-Step Instructions

Step 1 — Review Finance Tasks

Refer to the following list of finance-related tasks:

1. Summarize a new finance policy
2. Explain a variance between budget and actuals

3. Create a formatted monthly financial report
4. Identify potential risks in a budget proposal
5. Automate a recurring reconciliation process
6. Review regulatory changes and their impact

Participants **must not modify the tasks.**

Step 2 — Map Prompt Type

For each task:

- Select **one** prompt type only:
 - Analysis
 - Design
 - Agentic
 - Deep Research

Rule

Choose based on *intent*, not convenience.



Step 3 — Select AI Interaction Mode

For each mapped prompt type, select the **most appropriate AI mode**:

- Chat
- Analyse
- Deep Research
- Agent / Automation

Participants should consider:

- Risk level
- Need for traceability
- Execution vs reasoning

Step 4 — Justify the Mapping

For each task, briefly explain:

- Why this prompt type fits the task

- Why other prompt types would be risky or inappropriate
- Why the selected AI mode is the safest choice

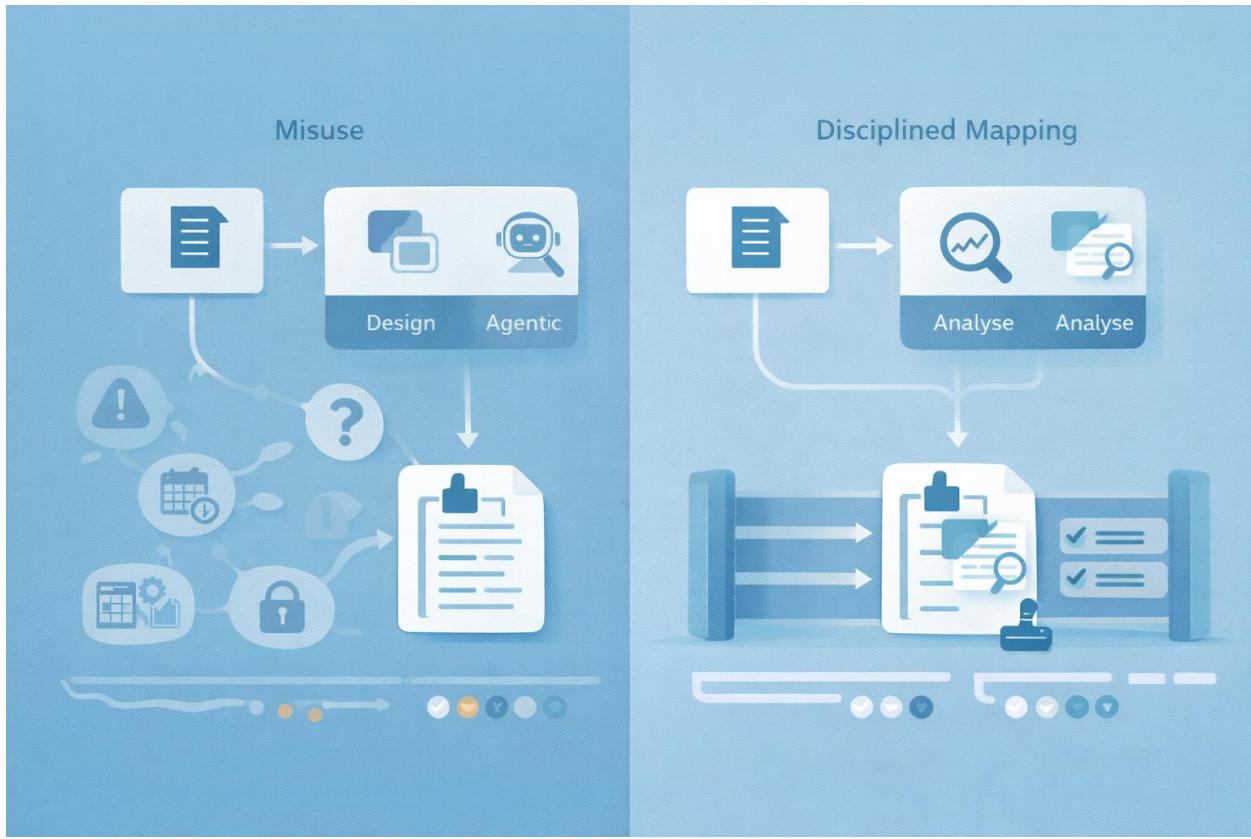
Mapping Worksheet (Template)

Finance Task	Prompt Type	AI Mode	Why This Is Correct
Policy summary			
Variance explanation			
Monthly report layout			
Reconciliation automation			
Regulatory impact review			

Group Discussion (Facilitated)

Discussion Questions

- Which tasks were easiest to map?
- Where did disagreements occur?
- What risks arise from choosing the wrong prompt type?
- How does this mapping reduce operational risk?



Key Learning Outcomes

- Prompt type defines **intent**
- AI mode defines **behaviour**
- Misuse leads to false confidence
- Finance tasks require discipline, not speed
- Prompting is part of governance and accountability

Common Mistakes

- Using **agentic prompts** for analysis or explanation

- Using **design prompts** to make decisions
- Using **chat mode** for compliance or policy work
- Skipping justification

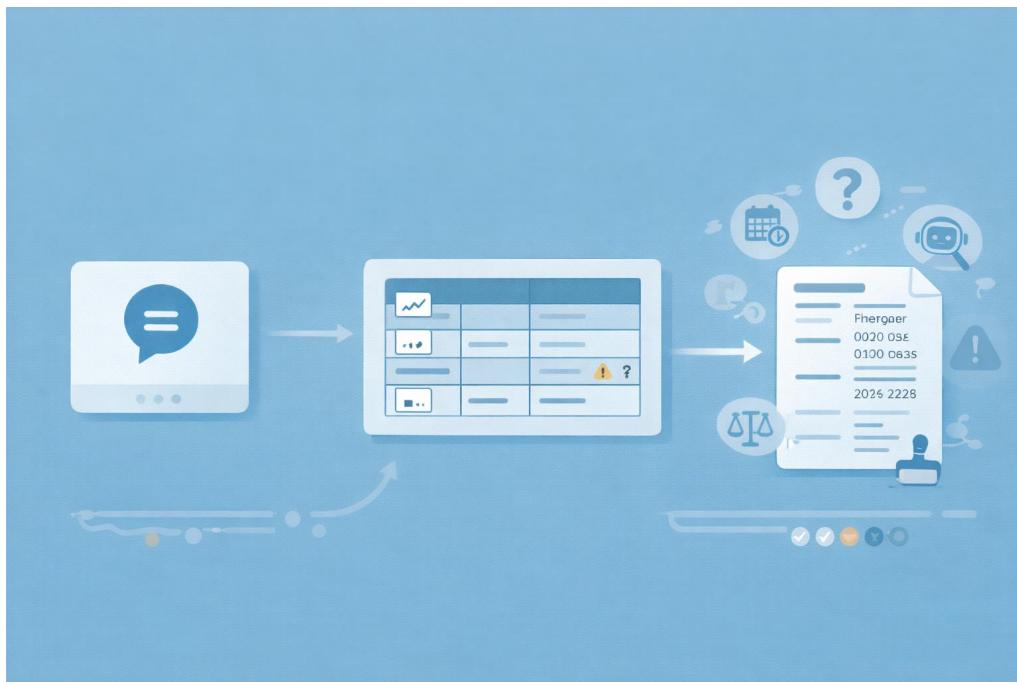
Lab 4 Practical Lab — Use Case 1

Database Clean-Up & Management (Using RCTC)

Lab Objective

By the end of this lab, participants will:

- Experience how weak prompts lead to unreliable outputs
- Apply the **Role–Context–Task–Constraint (RCTC)** framework
- Observe measurable improvement in clarity and accuracy
- Produce **reusable RCTC prompt templates** for finance work



Lab Setup

Dataset (Provided by Trainer)

A **vendor dataset**, for example:

- Vendor ID

- Vendor name
- Duplicate records
- Missing fields
- Inconsistent formatting

, All participants must use the **same dataset**.

Instructions Overview

Participants will:

1. Use a weak, unstructured prompt - (clean up the attached data)
2. Rewrite it using **RCTC**
3. Compare outputs
4. Produce a reusable finance-grade prompt template

Step-by-Step Instructions

Step 1 — Review the Vendor Dataset (No Prompting Yet)

Participants should:

- Scan the dataset
- Identify common issues:
 - Duplicates
 - Inconsistent naming
 - Missing values
- Consider what “clean” means in a finance context

Step 2 — Start with a Weak Prompt

Instruction

Ask the AI to clean the dataset **without structure**.

Example Weak Prompt

“Clean this vendor data.”

Participants should **not** add any further instructions.

Step 3 — Observe the Weak Output

Participants note:

- What assumptions did the AI make?
- Was the output consistent?
- Were rules clearly followed?
- Would this be acceptable in a finance system?

, Do **not** correct the prompt yet.

Step 4 — Rewrite the Prompt Using RCTC

Participants now rewrite the prompt using **all four RCTC elements**.

Guidance

- **ROLE:** Define finance-relevant expertise
- **CONTEXT:** Anchor to the provided dataset
- **TASK:** Specify the clean-up action
- **CONSTRAINT:** Define rules, limits, and format

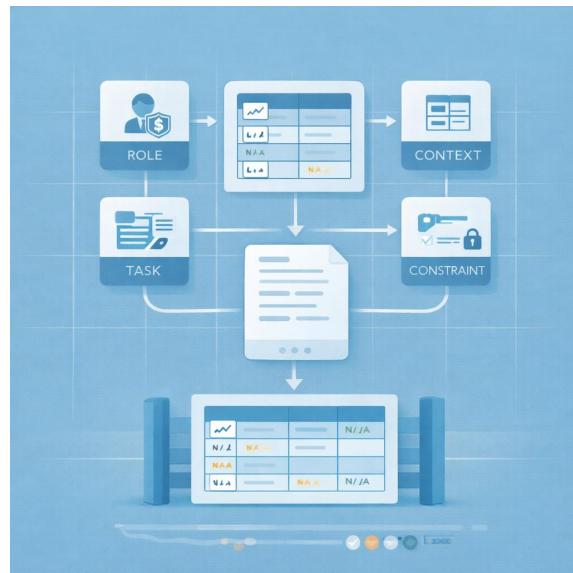
Example RCTC Prompt (Illustrative)

Role: Act as a finance data analyst responsible for master data quality.

Context: You are given a vendor dataset containing duplicates and missing fields.

Task: Identify duplicate vendor records and propose a cleaned version of the dataset.

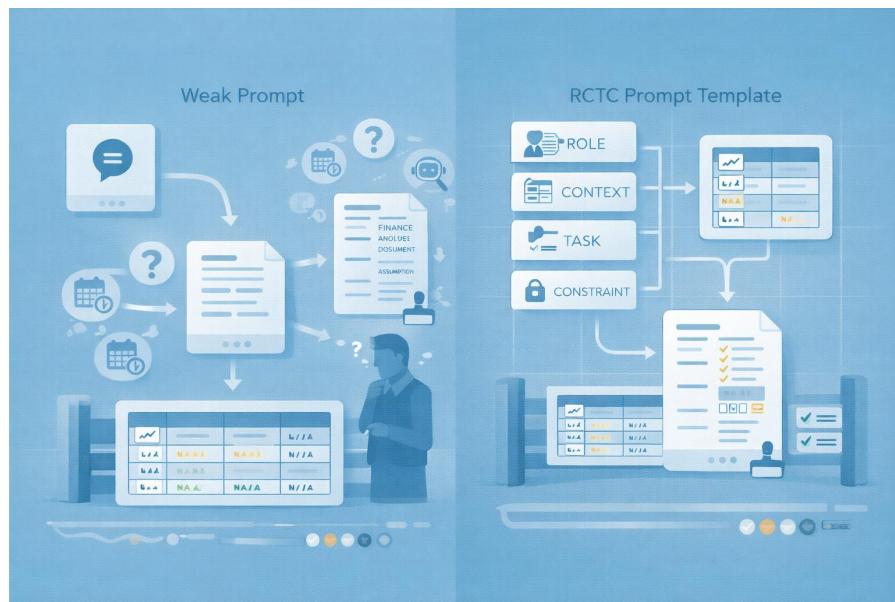
Constraint: Do not invent data, flag missing values explicitly, and present results in a table.



Step 5 — Compare Outputs

Participants compare:

- Weak prompt output vs RCTC output
- Differences in:
 - Clarity
 - Accuracy
 - Assumptions
 - Reviewability



Comparison Checklist

Participants answer:

- Which output is easier to review?
- Which output is safer for finance use?
- Which output reduces hallucination risk?
- Which output could be reused by a team?

Deliverable — Reusable RCTC Prompt Template

Each participant or group produces **one reusable prompt template**:

Template Structure

ROLE:
CONTEXT:
TASK:
CONSTRAINT:

Requirement

- Must be generic enough to reuse
- Must be finance-safe
- Must not allow data invention

Group Discussion

Discussion Questions

- Which RCTC element had the biggest impact?
- What risks did the weak prompt introduce?
- How does structure change AI behaviour?
- How could this template be shared across teams?

Key Learning Outcomes

Structure controls AI behaviour

- RCTC reduces hallucination risk
- Weak prompts create hidden assumptions
- Reusable prompts improve governance
- Prompt templates are finance assets

, Common Mistakes to Highlight

- Missing constraints
- Vague task definitions

- Allowing AI to invent missing data
- Overloading multiple tasks in one prompt

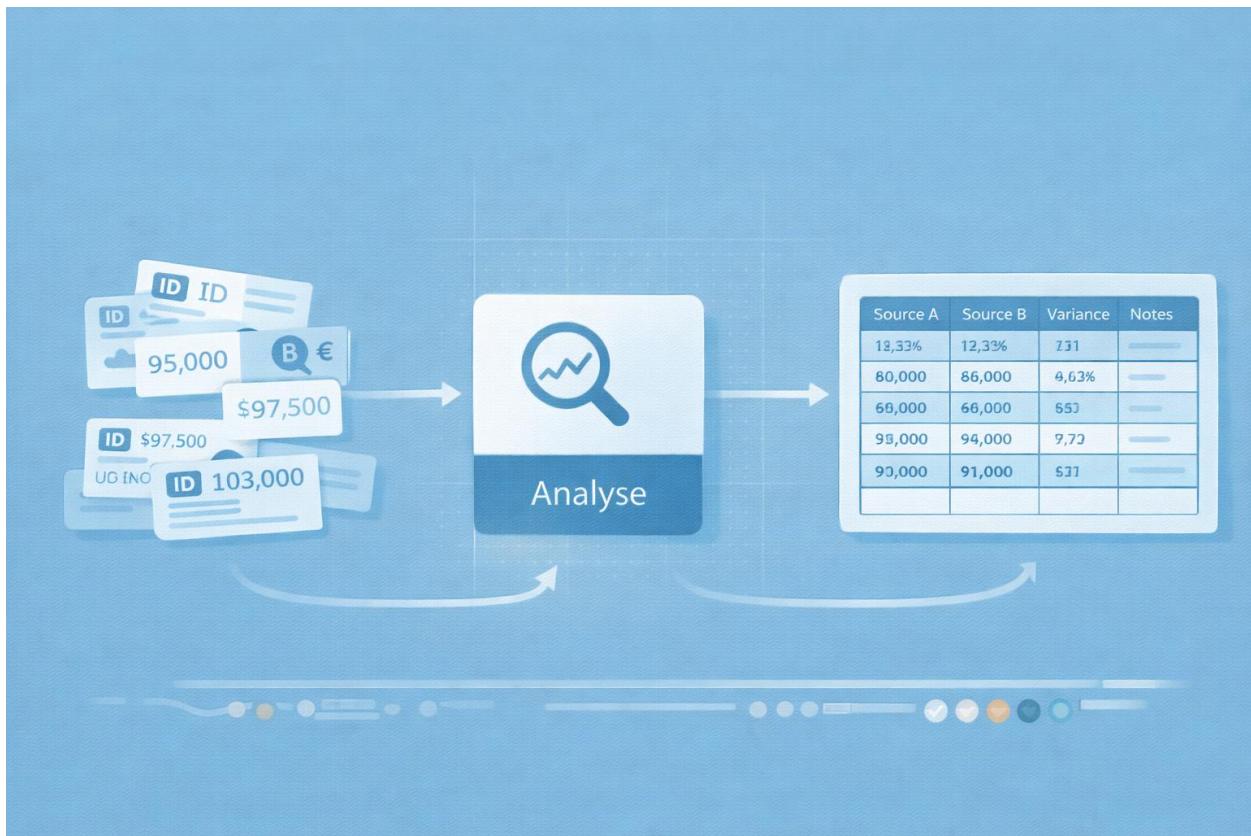
Lab 5 : Practical Lab — Use Case 2

Investment Data Reconciliation (Analyse Mode)

Lab Objective

By the end of this lab, participants will:

- Use **Analyse mode** to support financial reconciliation
- Convert raw investment data into a **structured, reviewable table**
- Identify and explain mismatches and variances
- Practice **step-based explanations** without delegating decisions
- Produce a reconciliation explanation suitable for human approval



Lab Setup

Dataset (Provided by Trainer)

A **raw investment dataset**, for example:

- Investment name / ID
- Reported value (Source A)
- Recorded value (Source B)
- Dates / periods
- Currency

, All participants must use the **same dataset**.

Instructions Overview

Participants will:

1. Structure raw data
2. Identify mismatches
3. Ask AI (Analyse mode) to explain variances
4. Prepare a reconciliation explanation sheet
5. Identify where **human approval** is required

Step-by-Step Instructions

Step 1 — Review Raw Investment Data (No AI Yet)

Participants should:

- Scan the raw dataset

- Identify:
 - Which values should reconcile
 - Which sources should match
- Note any obvious issues:
 - Missing data
 - Different periods
 - Currency differences

Step 2 — Convert Raw Data into a Structured Table

Instruction

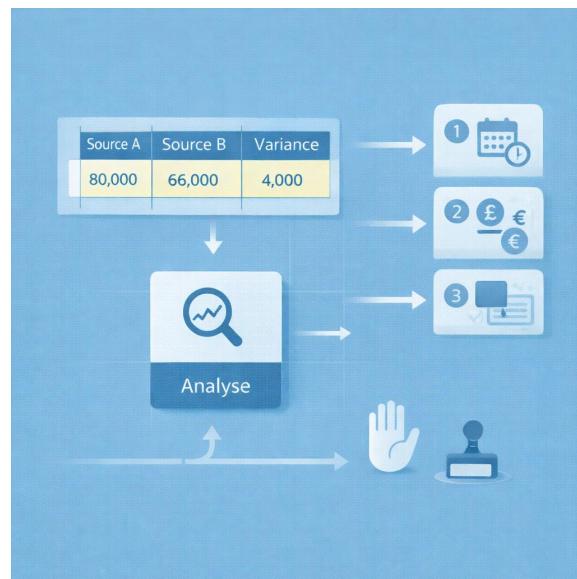
Use AI to convert the raw dataset into a **clean reconciliation table**.

Example Prompt (Analyse Mode)

“Convert this investment data into a table with columns for Source A value, Source B value, variance, and notes.”

Checkpoint

- Table must be readable
- No assumptions or invented values



Step 3 — Identify Mismatches

Participants review the table and:

- Highlight rows with variances
- Note size and direction of differences
- Flag unclear or incomplete data

, Do **not** ask AI to correct or adjust values.

Step 4 — Ask AI to Explain Variances (Analyse Mode)

Instruction

Ask AI to **explain**, not decide.

Example Prompt

“Using analyse mode, explain the possible reasons for each variance step by step, based only on the data provided.
Do not recommend posting adjustments.”

, Do **not** request hidden reasoning or approvals

Step 5 — Review AI Explanation

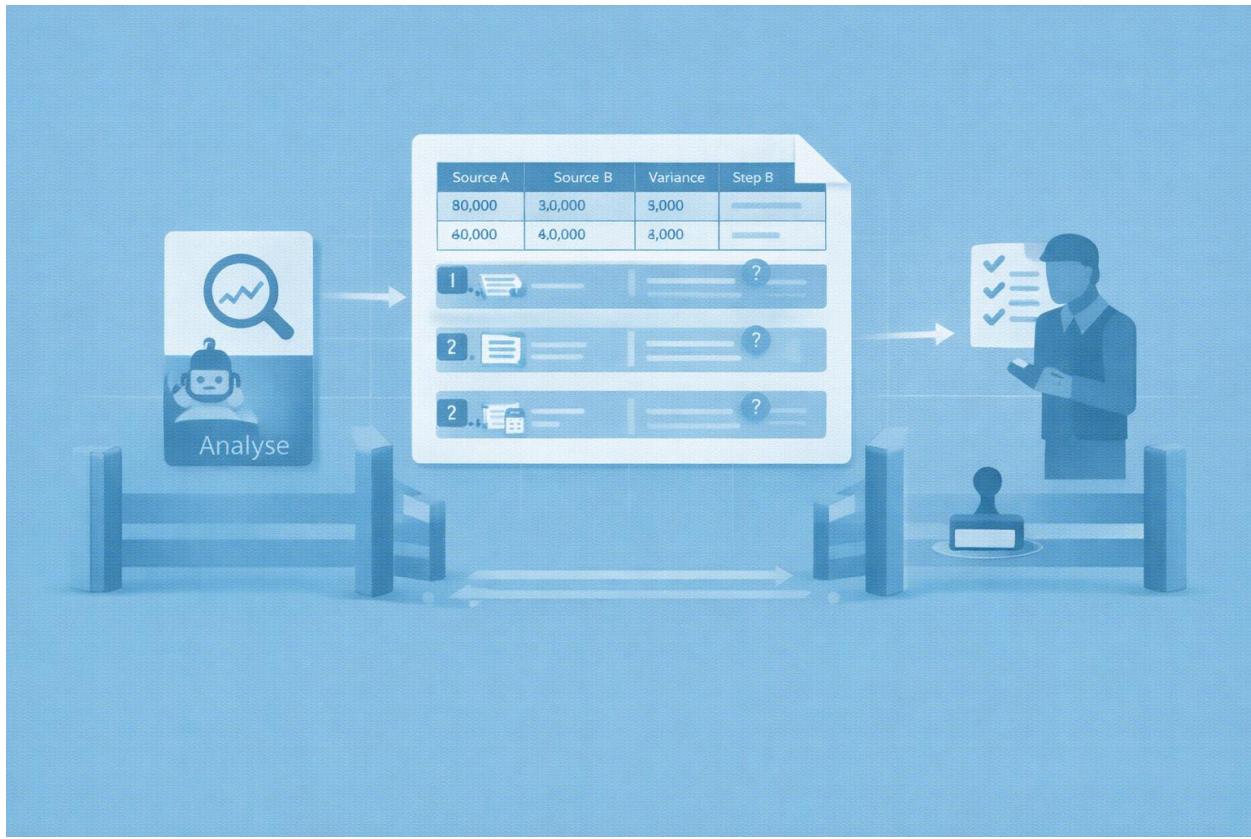
Participants evaluate:

- Are explanations logical and clear?
- Are assumptions explicitly stated?
- Does the AI stop short of making decisions?
- Would this explanation support human review?

Deliverable — Reconciliation Explanation Sheet

Each participant or group produces a **one-page explanation sheet** including:

- Reconciliation table
- Identified variances
- Step-based explanations
- Open questions or data gaps
- **Human approval points** clearly marked



Example Structure (Template)

Investment Reconciliation Summary

Item	Variance	Explanation (Step-Based)	Requires Human Review
Fund A	+2.5%	Timing difference between reporting periods	Yes
Fund B	-1.2%	Currency conversion rate mismatch	Yes

Group Discussion

Discussion Questions

- Where did AI add the most value?
- Where should AI stop?

- What risks remain even with Analyse mode?
- How does step-based explanation improve auditability?

Key Learning Outcomes

- Analyse mode supports explanation, not authority
- Step-based reasoning improves transparency
- AI highlights patterns but does not approve actions
- Human approval points are mandatory
- Reconciliation quality depends on structure + controls

, Common Risks to Highlight

- Asking AI to decide or approve adjustments
- Missing data leading to overconfident explanations
- Ignoring timing and currency differences
- Treating AI output as final truth

Optional Extension (If Time Allows)

- Remove one data column and observe how explanations degrade
- Compare explanations from vague vs step-based prompts
- Add a compliance reviewer role to test governance flow

Lab 5B — AI-Powered Filtering & Reporting

Scholarship Shortlisting (Explain, Don't Decide)

Lab Objective

By the end of this lab, participants will be able to:

- Use AI to **filter and shortlist candidates based on explicit criteria**
- Generate a **draft screening report** suitable for human review
- Apply **prompt structure, constraints, and explainability**
- Identify **bias, fairness, and governance risks**
- Clearly separate **AI assistance from human decision-making**

, This lab simulates **screening support**, not final selection or approval.

Lab Setup

Dataset (Provided by Trainer)

A scholarship applicant dataset, for example:

- Applicant ID (anonymised)
- Household income range
- Academic score / GPA
- Field of study
- Region / location
- Supporting notes (free text)

, All participants must use the **same dataset**.

, Participants must **not modify or add records**.

AI Mode & Prompt Type

- **AI Mode:** Analyse
- **Prompt Type:** Analysis (screening + explanation)

Instructions Overview

Participants will:

1. Review screening criteria
2. Ask AI to filter candidates (no approvals)
3. Ask AI to explain inclusion / exclusion
4. Generate a **draft screening report**
5. Identify risks and human approval points

Step-by-Step Instructions

Step 1 — Review the Dataset (No AI Yet)

Participants should:

- Scan all fields
- Identify:
 - Which criteria are **objective** (income, score)
 - Which are **subjective** (notes, region)
- Discuss:
 - What would be unfair or risky to automate?

, Do not use AI yet.

Step 2 — Define Explicit Screening Criteria

Trainer provides **fixed criteria**, for example:

- Household income: below MYR 3000
- Academic score: above 3.0
- Field of study: eligible programs only

Participants must **not change criteria**.

Step 3 — Filter Candidates (Analyse Mode)

Instruction

Ask AI to filter candidates based **only on the provided criteria**.

Example Prompt

You are assisting a scholarship screening process.

Role:

Act as a finance and administration analyst supporting candidate screening.

Context:

You are given an anonymised applicant dataset with income, academic score, field of study, region, and notes.

Task:

Identify applicants who meet the screening criteria provided.

Constraints:

- Use only the explicit criteria given
- Do not make value judgments
- Do not approve or reject candidates
- Present results as a shortlist with reasons for inclusion
- Treat output as a draft for human review

Step 4 — Explain Inclusion and Exclusion

Instruction

Ask AI to explain **why** each shortlisted applicant meets the criteria.

Example Prompt

Using analyse mode, explain step by step why each shortlisted applicant meets the screening criteria.

Base explanations only on the dataset provided.

Do not recommend final selection.

Step 5 — Generate a Draft Screening Report (AI-Assisted, No Decisions)

Instruction

Ask AI to prepare a **draft screening report** based on:

- The reviewed dataset
- Visualisations already created (charts, counts, summaries)
- Agreed screening criteria

„ This step supports **communication**, not approval or decision-making.

Prompt — Draft Screening Report Agent

ROLE:

You are a Screening Analysis Support Agent.

CONTEXT:

You are preparing a draft screening report for review.

The screening is based on predefined criteria and anonymised data.

Final decisions are not within your scope.

TASK:

Prepare a neutral, review-ready screening report that includes:

1. Screening criteria used
2. Number of applicants reviewed
3. Number of applicants shortlisted
4. High-level statistical summary (counts, percentages)
5. Visual summary references (charts or graphs)
6. Summary of common reasons for shortlisting (descriptive only)
7. Explicit statement that final decisions require human approval

TONE:

Neutral, factual, professional

CONSTRAINTS:

- Do NOT recommend or approve applicants
- Do NOT rank individuals
- Do NOT justify final decisions
- Do NOT include personal or identifiable data
- Do NOT imply fairness, merit, or outcome guarantees

OUTPUT FORMAT:

Section 1: Purpose of Screening

Section 2: Screening Criteria (As Provided)

Section 3: Screening Statistics

Section 4: Visual Summary (Graphs Referenced)

Section 5: Observed Patterns (Descriptive Only)

Section 6: What This Report Does NOT Decide

Section 7: Governance Statement

STOP RULE:

If asked to approve, reject, or decide outcomes, stop and state that human review is required.

Step 6 — Create Management Slides with Graphs & Statistics (AI Draft, Human-Owned)

Instruction

Use AI to draft slide content **only**.

Graphs must be **based on existing charts**, not newly inferred data.

Prompt — Slide Drafting Agent

ROLE:

You are a Management Slide Drafting Agent.

CONTEXT:

You are preparing slides to support a management review discussion.

All data is anonymised and screening-based.

Slides are for awareness and review only.

TASK:

Draft content for a 5-slide deck titled:

"Scholarship Screening Summary — Review Brief"

Slides:

1. Purpose & Scope of Screening

2. Screening Criteria Overview
3. Screening Statistics (Counts & Percentages)
4. Visual Summary (Graphs & Charts)
5. Governance & Decision Boundaries

SLIDE 4 REQUIREMENTS:

- Reference graphs such as:
 - Applicants reviewed vs shortlisted
 - Distribution by screening category (if available)
- Describe what each graph shows
- Do NOT interpret beyond the data

CONSTRAINTS:

- No recommendations or approvals
- No individual-level data
- No decision language
- Neutral, professional tone

MANDATORY GOVERNANCE SLIDE:

State clearly:

- AI assisted in drafting and visual structuring
- Final screening decisions require human approval
- Slides do not constitute approval or rejection

OUTPUT FORMAT:

Slide title + bullet points per slide

Review Checklist (Mandatory)

Before submission, participants must confirm:

- Graphs reflect existing data only
- Statistics are descriptive, not evaluative
- No slide implies approval or rejection
- Governance and human ownership are explicit

Key Learning Reinforced

- Charts and statistics **support understanding**, not decisions
- Slides amplify interpretation risk — governance must be visible
- AI can draft communication artefacts, not outcomes
- Human approval remains mandatory at every decision point

Final Reminder

, **A well-designed slide is not a decision.**

AI helps structure and visualise information — **accountability stays human.**

Optional Extension (If Time Allows)

- Add a new ambiguous applicant and observe explanation changes
- Remove a criterion and observe how risk increases
- Compare AI explanation vs human explanation

Lab 5C — Budget Forecasting with AI

Trend Analysis & Forecast Narrative (Explain, Don't Decide)

Lab Objective

By the end of this lab, participants will be able to:

- Use AI to **analyse historical budget data**
- Explain **trends and variances** clearly and conservatively
- Draft a **forward-looking forecast narrative** without inventing figures
- Apply **explicit constraints** to control assumptions
- Identify where **human judgement and approval** are mandatory

, This lab focuses on **forecast explanation**, not numerical forecasting or budget approval.

Lab Setup

Dataset (Provided by Trainer)

A budget dataset, for example:

- Department / Cost centre
- Month (12–24 months)
- Budget amount
- Actual amount
- Variance (calculated or blank)

, All participants must use the **same dataset**.

, Participants must **not change historical values**.

AI Mode & Prompt Type

- **AI Mode:** Analyse
- **Prompt Type:** Analysis + Design (for narrative formatting)

Instructions Overview

Participants will:

1. Review historical budget data
2. Ask AI to identify trends and recurring patterns
3. Ask AI to explain variances conservatively
4. Draft a **forecast narrative** (text only, no numbers invented)
5. Clearly mark **assumptions, limitations, and approval points**

Step-by-Step Instructions

Step 1 — Review Historical Budget Data (No AI Yet)

Participants should:

- Scan the dataset
- Identify:
 - Stable vs volatile departments
 - Repeated over- or under-spend
 - One-off anomalies
- Discuss:
 - What *cannot* be predicted from this data alone?

„ Do not use AI yet.

Step 2 — Identify Trends and Patterns (Analyse Mode)

Instruction

Ask AI to describe observable trends **without projecting numbers**.

Example Prompt

You are assisting a finance planning and analysis review.

Role:

Act as an FP&A analyst supporting internal budget review.

Context:

You are given historical budget vs actual data by department for the past 12 months.

Task:

Describe observable spending trends and recurring variance patterns by department.

Constraints:

- Base observations only on the provided data
- Do not forecast future values
- Do not recommend budget changes
- Use a neutral, factual tone
- Present observations in bullet points

Step 3 — Explain Variances Conservatively

Instruction

Ask AI to explain **possible reasons** for variances, step by step.

Example Prompt

Using analyse mode, explain possible reasons for significant variances observed.

Provide step-by-step explanations based only on the data patterns.

Explicitly flag uncertainty where causes cannot be determined.

Do not recommend actions or adjustments.

Step 4 — Draft a Forecast Narrative (Text Only)

„ This is **not** numeric forecasting.

Instruction

Ask AI to draft a **management-ready narrative** describing what the historical trends *may imply* for planning discussions.

Example Prompt

Prepare a draft budget planning narrative for management discussion.

The narrative should:

- Summarise historical trends and variability
- Highlight areas of stability vs volatility
- State assumptions and limitations clearly
- Avoid specific future numbers or targets

Constraints:

- Do not invent forecasts
- Do not suggest budget approvals or changes
- Treat this as a draft for human review and decision-making

Step 5 — Identify Human Approval Points

Participants must explicitly mark:

- Where human judgement is required
- Where AI insight must stop
- What additional data would be needed for real forecasting

Participants add a “Human Review Required” section to their narrative.

Deliverable — Forecast Explanation & Narrative Pack

Each participant or group produces:

1. **Trend summary** (bullet points)
2. **Variance explanation** (step-based)
3. **Draft forecast narrative** (1 page)
4. **Assumptions & limitations section**

5. Human approval checkpoints

Example Output Structure (Template)

Budget Forecast Discussion Summary

- Observed Trends:
 - Department A shows consistent underspend
 - Department B shows seasonal variability
- Variance Explanation:
 - Repeated monthly variances suggest timing effects
 - One-off spikes may indicate exceptional events (uncertain)
- Draft Forecast Narrative:

“Based on historical patterns, some departments show stable spending while others display variability. These observations may inform planning discussions but do not constitute a forecast.”

- Assumptions & Limitations:
 - No external factors considered
 - No operational changes assumed
- Human Review Required:
 - Confirmation of drivers
 - Validation of assumptions
 - Approval of any budget decisions

Group Discussion

Discussion Questions

- Where did AI add value?
- Where would numeric forecasting become risky?
- What assumptions were unavoidable?
- Why must finance keep control over forecasts?

Key Learning Outcomes

- Historical analysis ≠ forecast approval
- Analyse mode supports explanation, not prediction
- Narrative forecasts require conservative language
- Assumptions must be explicit
- Human judgement is mandatory

Common Risks to Highlight

- Asking AI for numeric forecasts
- Treating patterns as guarantees
- Overconfidence in narrative tone
- Missing assumptions or uncertainty flags

Optional Extension (If Time Allows)

- Compare AI narrative vs human-written narrative

- Add a sudden anomaly and observe explanation changes
- Ask AI to forecast numbers and critique why it is unsafe

Lab 6 : Image Prompting for Finance Communication

Lab Objective

By the end of this lab, participants will:

- Use **image prompting** to communicate finance insights clearly
- Decide when visuals are more effective than text
- Apply a **structured image prompt framework**
- Produce reusable, finance-safe image prompts
- Build an **Image Prompt Library** for future use

Lab Setup

Tools

- Any AI image generation tool (e.g. ChatGPT image, DALL·E, Midjourney, Canva AI)
- Prompt writing worksheet (digital or printed)

, This lab focuses on **prompt design**, not artistic creativity.

Instructions Overview

Participants will:

1. Identify when a visual is better than text
2. Apply structured image prompting
3. Generate two finance visuals
4. Refine prompts for clarity and reuse

5. Compile prompts into a reusable library

Step-by-Step Instructions

Step 1 — Decide When a Visual Is Better Than Text

Participants reflect on:

- Would a chart or diagram communicate faster than paragraphs?
- Is the goal understanding, comparison, or explanation?
- Is the audience non-technical or decision-focused?

Trainer Emphasis

Visuals support decisions — they do not replace analysis.

Step 2 — Review Image Prompt Structure

Participants must use **all five elements** in every prompt:

1. **Style**
(e.g. flat vector, corporate infographic, minimal, whiteboard)
2. **Subject**
(what the image shows)
3. **Composition**
(layout, flow, orientation)
4. **Tone**
(professional, neutral, executive)
5. **Constraints**
(no numbers invented, no branding, finance-safe)

Step 3 — Generate Visual 1: Budget Trend Infographic

Task

Create an image prompt for a **budget trend infographic**.

Prompt Guidance

Participants must specify:

- Time-based trend (e.g. monthly, quarterly)
- Clear upward/downward movement
- Neutral, professional tone
- No fictional or specific financial values

Example Prompt Structure

Style: Flat vector finance infographic

Subject: Budget trend over time

Composition: Line chart with clear trend arrows, minimal labels

Tone: Professional, executive-ready

Constraints: No currency values, no branding, neutral colors

Participants then generate the image and review:

- Is the trend immediately clear?
- Is it decision-friendly?
- Could an executive understand it in 5 seconds?

Step 4 — Generate Visual 2: Finance Workflow Diagram

Task

Create an image prompt for a **finance workflow diagram**.

Prompt Guidance

Participants must specify:

- Start-to-end flow (e.g. input → review → approval → reporting)
- Clear process steps
- Governance checkpoints
- Human approval points

Example Prompt Structure

Style: Clean enterprise workflow diagram

Subject: Finance reporting workflow

Composition: Left-to-right flow with labeled steps and approval gates

Tone: Compliance-ready, professional

Constraints: No system logos, no real company names

Participants generate the image and assess:

- Is the process easy to follow?
- Are controls visible?
- Does it support governance communication?

Step 5 — Refine Prompts (Iterative Improvement)

Participants refine both prompts by:

- Removing unnecessary detail
- Clarifying structure
- Tightening constraints
- Improving clarity for reuse

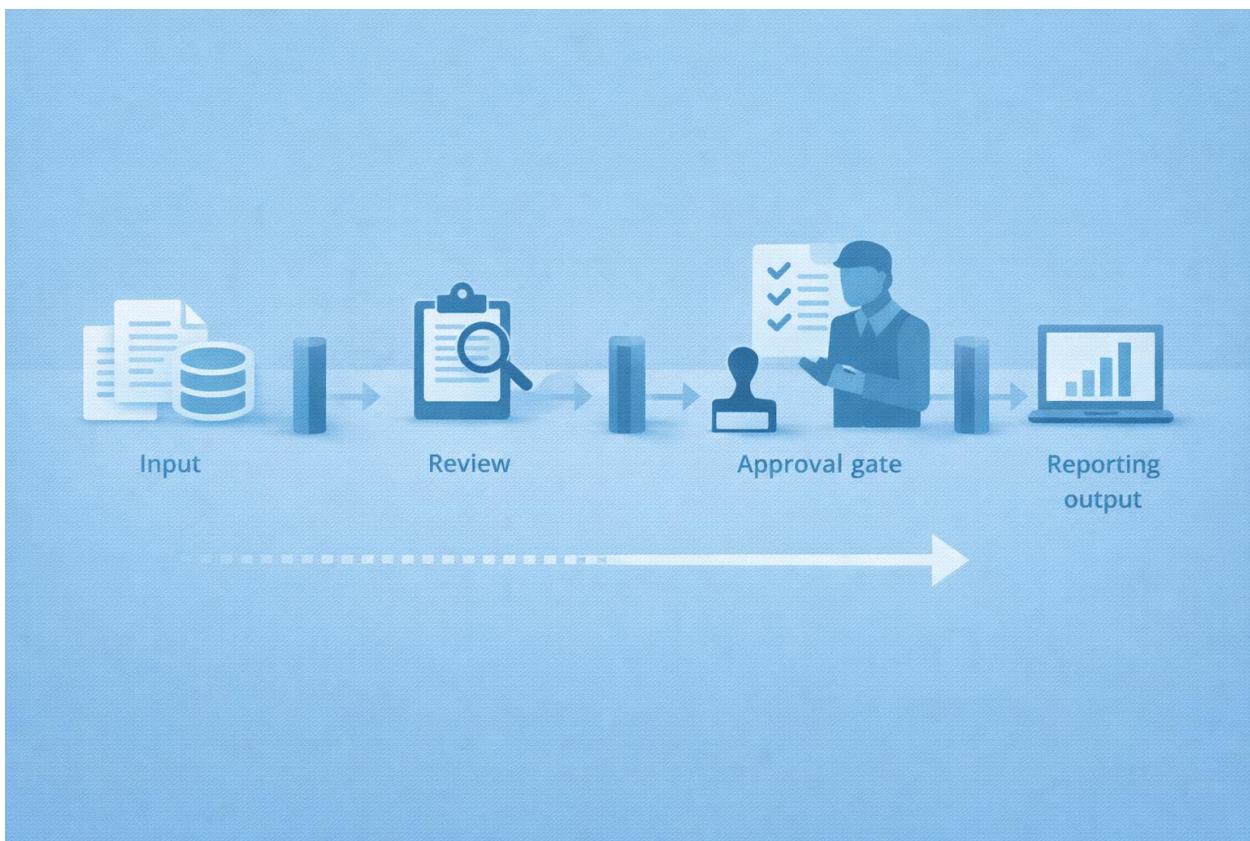
, Focus on **prompt quality**, not visual polish.

Deliverable — Image Prompt Library

Each participant or group produces an **Image Prompt Library** containing:

Required Entries

1. **Budget Trend Infographic Prompt**
2. **Finance Workflow Diagram Prompt**



Template

Use Case:
Prompt:
Style:
Subject:
Composition:
Tone:
Constraints:
Notes for Reuse:

Group Discussion

Discussion Questions

- Which visual communicated faster than text?
- What prompt element had the biggest impact?
- Where could visuals be dangerous or misleading?
- How could this library support finance teams?

Key Learning Outcomes

- Visuals support understanding, not decisions
- Structure matters more than creativity
- Finance visuals must be neutral and controlled
- Image prompts are reusable communication assets
- Good prompts reduce misinterpretation risk

Common Mistakes to Highlight

- Over-decorated visuals
- Missing constraints
- Using visuals to imply decisions
- Adding invented numbers or performance signals

Optional Extension (If Time Allows)

- Compare text explanation vs visual explanation
- Fix a **bad image prompt**
- Discuss how visuals can mislead if poorly designed

Lab 6B - Chart Visualization & Analysis

Lab Objective

By the end of this lab, you will be able to:

- Work safely with anonymised salary data
- Create basic data visualisations from raw data
- Observe how visualisations influence interpretation
- Use AI to **explain patterns**, not make decisions
- Apply step-based prompts aligned with finance governance

Dataset Provided

You are given an **Excel file** containing anonymised employee-level salary data with the following fields:

- Employee_ID (anonymised)
- Department
- Monthly Salary (MYR)

Important Rules

- Do **not** modify the dataset
- Do **not** add or remove records
- Do **not** attempt to identify individuals
- Do **not** make salary or increment decisions

This lab focuses on **pattern analysis**, not HR decisions.

Step 1 — Review the Raw Data (No AI, No Charts)

1. Open the Excel dataset.
2. Review the columns and sample values.
3. Individually reflect on the following questions:
 - What kind of data is this?
 - What information is included?
 - What important information is missing?
 - What decisions should **not** be made using this data alone?

, Do not ask the AI anything at this stage.

Step 2 — Create Data Visualisations (Excel Only)

Using Excel, create the following charts:

Chart 1 — Average Salary by Department

- Calculate the **average salary** for each department.
- Create a **bar or column chart** showing:
 - X-axis: Department
 - Y-axis: Average Monthly Salary

Chart 2 — Salary Distribution by Department

- Create a chart showing **individual salary points** by department.
- One point per employee.

Save both charts for reference.

Step 3 — Observe the Visualisations (No AI Yet)

Based on the charts, answer the following:

- Which departments appear higher or lower on average?
- Which departments show wider salary ranges?
- Do any departments overlap in salary?
- What could be misleading if you only look at averages?

Do not draw conclusions or recommendations.

Step 4 — Zero-Shot Prompting (AI Use Begins)

Use the same dataset and charts.

Prompt

Analyse the salary data and charts by department.

After reviewing the AI output, note:

- Is the explanation clear?
- Are assumptions made?
- Does the AI recommend actions?
- Are limitations mentioned?

Step 5 — Step-Based, Safe Prompting

Now apply a **structured, step-based prompt**.

Prompt

Analyse the salary data and visualisations step by step.

For each department:

- Describe the observed salary range
- Describe any overlap with other departments
- State what the visualisation shows
- Clearly state what cannot be concluded from this data

Do not recommend salary actions or increments.

Highlight what additional information would be required for any decision.

Review the output carefully.

Step 6 — Compare Outputs

Complete the following comparison table:

Prompt Type	Clarity	Accuracy	Risk	Notes
Zero-Shot	Low / Medium / High	Low / Medium / High	Low / Medium / High	
Step-Based	Low / Medium / High	Low / Medium / High	Low / Medium / High	

Step 7 — Reflection & Discussion

Individually or in groups, discuss:

- How did visualisation affect confidence?
- Which output felt safer for review?
- Where did the AI correctly stop?
- What additional data would be required before making any salary decision?

Key Learning Points

- Raw data does not equal insight

- Visuals can amplify assumptions
- Averages hide important detail
- AI should explain patterns, not decide outcomes
- Step-based prompting improves auditability

Critical Reminder

, **Never ask AI to decide, recommend, or justify salary increments.**
 AI outputs are **supporting explanations only**.
 Human accountability and governance always apply.

Step 8 — Structured Analysis Summary (AI-Assisted, No Recommendations)

Prompt — Analysis Summary Agent

ROLE:

You are a Finance & HR Analysis Support Agent.

CONTEXT:

You are reviewing anonymised salary data by department.
 The data includes department and monthly salary only.
 No performance, tenure, or role-level detail is available.

TASK:

Produce a structured analysis summary covering:

1. Key observable patterns by department
2. Notable salary range differences
3. Areas where visualisation may mislead interpretation
4. Explicit data limitations

CONSTRAINTS:

- Do NOT recommend salary changes
- Do NOT suggest increments or adjustments
- Do NOT infer performance, seniority, or fairness
- Do NOT rank departments as overpaid or underpaid

OUTPUT FORMAT:

Section 1: What the data shows
 Section 2: What the data does NOT show

Section 3: Risks of misinterpretation
Section 4: Data gaps that block decision-making

STOP RULE:

If asked to justify actions, stop and state that governance requires human review.

Review Check

Participants must confirm:

- The summary is neutral
- No judgement language is used
- Limitations are clearly stated

Step 9 — Framing “Recommendations” Safely (Human-Led, AI-Assisted Drafting)

Learn how to **frame discussion points** for management **without making decisions**.

è In finance & HR governance, this is often called
“**Areas for Further Review**”, not recommendations.

Prompt — Management Framing Agent

ROLE:
You are a Management Reporting Support Agent.

CONTEXT:
You are preparing content for a management discussion deck.
The purpose is awareness and further review, not decision-making.

TASK:
Based on the salary analysis:
Draft neutral discussion points under the heading
"Areas Requiring Further Review".

Each point should:
- Be phrased as a question or consideration
- Explicitly state that no action is implied
- Reference missing data required before any decision

CONSTRAINTS:

- Do NOT recommend salary increases or decreases
- Do NOT propose actions or timelines
- Do NOT suggest fairness or inequity conclusions
- Use neutral, governance-safe language only

OUTPUT FORMAT:

Bullet list:

- Observation
- Why it matters
- What additional data would be required

STOP RULE:

If an action is implied, stop and reframe as a question.

Example (What “Good” Looks Like)

“Salary ranges vary significantly within some departments.

Further review would require role-level and tenure data before any interpretation.”

Step 10 — Drafting the Management Report (AI Draft, Human Ownership)

Produce a **management-ready report draft** that is:

- Clear
- Defensible
- Audit-friendly

Prompt — Report Drafting Agent

ROLE:

You are a Corporate Reporting Drafting Agent.

CONTEXT:

You are drafting a management briefing note using anonymised salary data.
This report supports discussion only.

TASK:

Prepare a short management report with the following sections:

1. Purpose of the Review
2. Data Scope and Limitations
3. Key Observations (Visualisation-Based)
4. Risks and Interpretation Warnings
5. Areas for Further Review
6. Explicit Statement of What Was Not Done

CONSTRAINTS:

- Do NOT include recommendations or decisions
- Do NOT include salary figures for individuals
- Do NOT justify or propose changes
- Use professional, neutral corporate tone

FINAL SECTION (MANDATORY):

"Governance Statement"

State clearly that:

- Analysis is explanatory only
- Decisions require additional data and human approval

STOP RULE:

If policy or action language appears, remove it and restate limitations.

Step 11 — Governance Self-Check (Mandatory)

Before submission, participants must answer:

- Could this report be misread as a decision document?
- Are limitations repeated clearly?
- Is ownership of decisions explicitly human?
- Would this pass an internal audit review?

If **any answer is “No”**, revise.

Final Critical Reminder

, **AI may help explain, structure, and draft — but never decide.**

Salary, compensation, and HR actions always require:

- Broader context
- Additional datasets
- Human accountability

This lab ends at **discussion readiness**, not execution.

Market Benchmarking Agent — Industry Salary Research & Management Slides

, Read This First (Critical Framing)

This lab demonstrates:

- How an **agent-style workflow** can coordinate analysis + research + drafting
- How **external market data** differs from internal salary data
- How recommendations can be **framed, caveated, and contained**

This lab **does NOT**:

- Approve salary changes
- Replace HR policy
- Override internal governance

All outputs are **reference material only**.

Step 12 — Agent Setup: Market Benchmarking Use Case

Scenario

Management asks:

“How do our departmental salary ranges compare to the broader industry market?”

You are asked to:

- Research **market salary benchmarks by industry/domain**
- Compare **internally observed ranges vs external benchmarks**
- Produce a **management slide draft**, not a decision memo

Step 13 — Define the Agent (Explicitly)

Agent Name

Market Salary Benchmarking Agent

Agent Boundaries (Explain to Participants)

This agent:

- Uses **external market references**
- Produces **ranges and commentary**
- Stops before **execution or approval**

Step 14 — Analyse Mode: Internal vs External Framing

Prompt — Agent Step 1: Analysis Framing

ROLE:

You are a Market Benchmarking Analysis Agent supporting HR and Finance leadership.

CONTEXT:

Internal salary analysis has been completed using anonymised departmental data.

You are NOT provided individual roles, grades, or performance data.

TASK:

Explain:

1. How internal salary data differs from market benchmark data
2. What comparisons are valid at department/domain level
3. What comparisons are NOT valid without role-level detail

CONSTRAINTS:

- Do NOT provide salary recommendations
- Do NOT infer underpayment or overpayment
- Do NOT assume job seniority or performance

OUTPUT FORMAT:

Three short sections:

- Valid comparisons
- Invalid comparisons
- Risks of misuse

STOP RULE:

If decision language appears, stop and restate limitations.

- This shows **Analyse mode discipline**.

Step 15 — Research Thinking: Market Salary Exploration (Demonstration)

, Trainer note: This is a **demonstration**, not a factual benchmark exercise.
Participants should focus on **structure**, not accuracy.

Prompt — Agent Step 2: Market Research Simulation

ROLE:

You are a Market Salary Research Agent.

CONTEXT:

You are asked to reference commonly published industry salary benchmarks for Malaysia (or relevant region) at a high level.

TASK:

Provide indicative monthly salary ranges by domain for:

- Technology
- Finance & Accounting
- Operations
- Sales & Marketing
- HR / Administration

ASSUMPTIONS:

- Use publicly reported market summaries (job portals, surveys)
- Use broad ranges only
- Treat figures as illustrative, not authoritative

CONSTRAINTS:

- Clearly label all figures as "market reference estimates"
- Do NOT claim accuracy
- Do NOT personalise to any company
- Do NOT recommend internal changes

OUTPUT FORMAT:

Table:

Domain | Typical Market Range (MYR/month) | Source Type | Notes

MANDATORY DISCLAIMER:

State that figures are for contextual discussion only.

STOP RULE:
If asked to justify decisions, stop and defer to HR policy.

- This **demonstrates research-style reasoning without pretending to be a data source**.

Step 16 — Controlled Recommendation Framing (Key Teaching Moment)

This is where you **explicitly teach the boundary**.

Prompt — Agent Step 3: Recommendation Framing (Not Decision)

ROLE:
You are a Management Advisory Drafting Agent.

CONTEXT:
You have:

- Internal salary pattern observations
- External market reference ranges (illustrative only)

TASK:
Draft HIGH-LEVEL, NON-BINDING recommendation statements that:

- Compare internal patterns to external references
- Highlight alignment or gaps at a conceptual level
- Emphasise that recommendations are NOT actions

CONSTRAINTS:

- Phrase all recommendations as "market-informed considerations"
- Do NOT suggest numbers to apply internally
- Do NOT imply urgency or mandate
- Explicitly require HR policy, role mapping, and approval

OUTPUT FORMAT:
For each department/domain:

- Market context summary
- Observed internal pattern (generic)
- Consideration for leadership discussion
- Required next steps BEFORE any decision

FINAL LINE (MANDATORY):
"These are reference considerations only and do not constitute salary decisions."

STOP RULE:
If numerical recommendations appear, remove them.

This is **the clearest agent boundary demo**:

AI can *recommend what to discuss, not what to do.*

Step 17 — Slide Creation Agent (Management Deck Draft)

Objective

Show how an agent can **produce presentation-ready content**.

Prompt — Agent Step 4: Slide Drafting

ROLE:

You are a Corporate Strategy Slide Drafting Agent.

TASK:

Create an outline for a 5-slide management deck titled:
"Salary Market Context — Discussion Brief"

Slides:

1. Purpose & Scope
2. Internal Salary Analysis Summary
3. External Market Reference Overview
4. Market-Informed Considerations
5. Governance & Decision Boundaries

CONSTRAINTS:

- Bullet points only
- No numbers on individual salaries
- No directives or approvals
- Neutral, professional tone

GOVERNANCE SLIDE (MANDATORY):

State clearly:

- AI assisted analysis and drafting
- Human approval required
- Market data is illustrative

OUTPUT FORMAT:

Slide title + bullet points per slide.

Step 18 — Governance Reflection (Critical Close)

Participants must answer:

- Where did the agent switch from analysis to advisory?
- What made the recommendations “safe”?
- What would make this dangerous if misused?
- Where must human judgement intervene?

LAB ADD-ON — Image Prompting for Finance Communication

Step 19 — When Visuals Beat Text (Discussion)

- Which insights were easier to grasp via charts?
- Which explanations felt harder to read in text?
- What would management understand faster as an image?

Step 20 — Image Prompt Structure (Teach Explicitly)

Introduce a simple template:

STYLE:
(flat vector / corporate / infographic / diagram)

SUBJECT:
(what the image explains)

COMPOSITION:
(layout, left-to-right, layers, icons)

TONE:
(neutral, professional, governance-safe)

CONSTRAINTS:
(no numbers / no decisions / no branding / no people)

Step 21 — Image Prompt Exercise (Hands-on)

Participants write **image prompts**, not images.

Example 1 — Budget Trend Infographic

STYLE:

Flat vector infographic, corporate finance style

SUBJECT:

Average salary by department trend comparison

COMPOSITION:

Bar-style comparison with clear labels and neutral icons

TONE:

Neutral, explanatory, non-judgmental

CONSTRAINTS:

No recommendations, no individual data, no arrows implying action

Example 2 — Finance Workflow Diagram

STYLE:

Flat vector workflow diagram, blue/teal enterprise palette

SUBJECT:

Salary analysis workflow from data to management discussion

COMPOSITION:

Left-to-right flow:

Input → Visualisation → AI Explanation → Human Review → Discussion

TONE:

Governance-focused, calm, professional

CONSTRAINTS:

No automation beyond explanation, no decision symbols

Step 22 — Deliverable: Image Prompt Library

Each participant/team submits:

- 2–3 **finance-safe image prompts**
- Categorised by:

- Infographic
- Workflow
- Governance visual

This directly fulfills the Session 6 deliverable.

Key Learning Points

- Agents are **workflows, not magic**
- Research ≠ authority
- Recommendations must be framed, caveated, and contained
- Slides can be drafted by AI — accountability cannot
- Governance is about **where the agent stops**

Final Trainer Note

This lab intentionally shows:

“Yes, AI *can* research and recommend —
but only inside a controlled, reviewable structure.”

LAB 7 — Designing a Controlled Finance AI Workflow

Invoice Intake, Validation & Category Suggestion (Concept, Control & Governance)

Lab Objective

By the end of this lab, participants will be able to:

- Design a **finance-grade AI workflow**, not just write prompts
- Decide **where AI may assist** (extraction, validation, categorisation)
- Decide **where AI must stop** (approval, posting, payment)
- Introduce **explicit human approval gates**
- Design an **audit-ready Excel log**
- Prepare the workflow for **Zapier implementation with parsing controls**

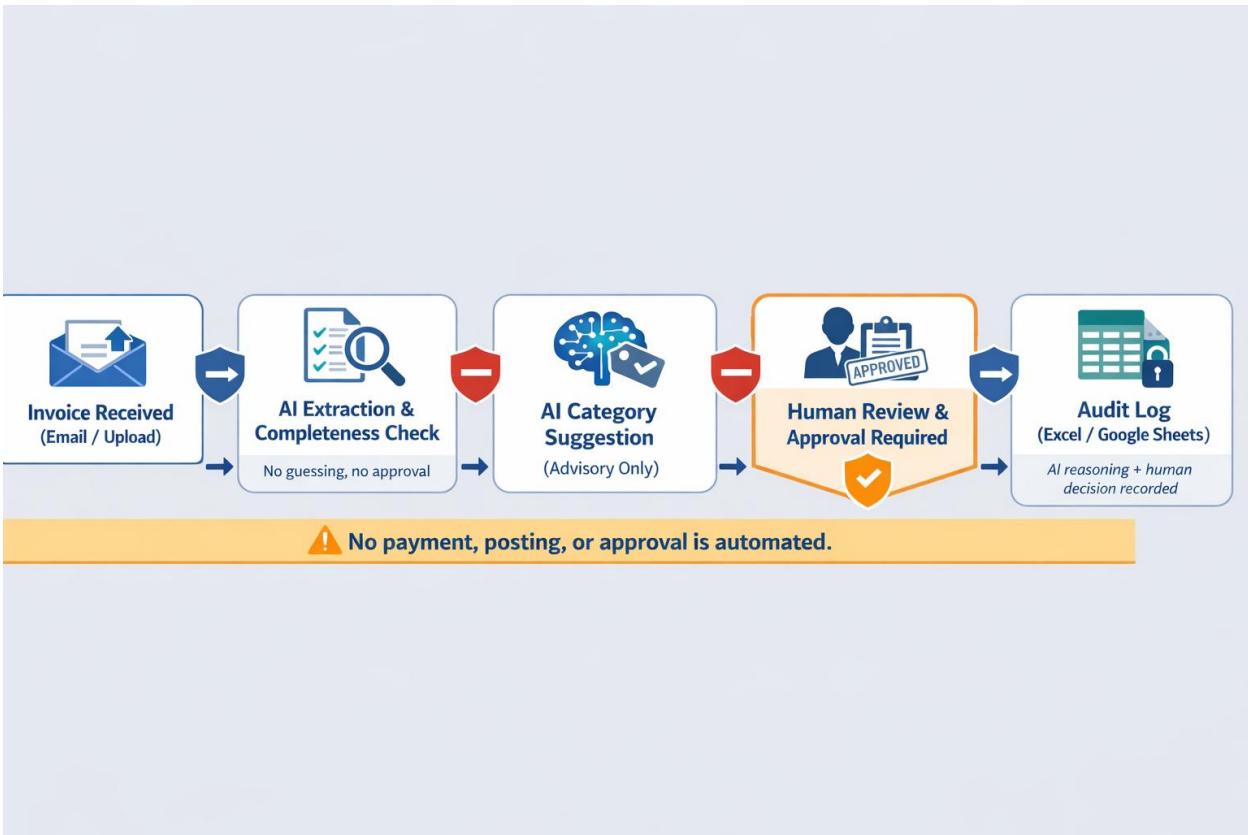
Scenario

Invoices arrive via email or file upload.

Before any payment or accounting entry, each invoice must be:

1. Extracted and checked for completeness
2. Validated for required fields
3. Categorised by AI (suggestion only)
4. Reviewed and approved by a human
5. Logged in Excel for audit and traceability

, No payment, posting, or approval may be automated.



Step 1 — Define the Workflow Scope

Each group defines clearly:

- **Start:** Invoice file received
- **End:** Invoice approved or rejected by a human
- **Explicitly excluded:**
 - Payment execution
 - Accounting posting
 - Supplier master updates

Groups must write and agree on this statement:

**“AI assists only before approval.
No financial action is automated.”**

Step 2 — Map the Core Workflow Stages

Groups draw a workflow that includes **all stages below**:

1. Invoice received (email / upload)
2. Invoice details extracted (AI)
3. Completeness check (AI)
4. Validation result produced (AI)
5. Category suggestion based on supplier + description (AI)
6. Human review
7. Human approval / rejection
8. Excel audit record updated

Every stage must be visible.

No hidden automation.

Step 3 — Assign AI vs Human Responsibilities

For **each stage**, label responsibility as:

- **AI-assisted**
- **Human-only**
- **System (Zapier / Excel)**

Rules to enforce:

- **AI may extract, validate, and suggest**
- **AI must never approve, reject, post, or pay**
- All decisions remain human

Encourage explicit annotations such as:

- “AI stops here”
- “Human decision required”
- “Logged for audit”

Step 4 — Design the Excel Audit Sheet

Groups design the Excel structure **before automation**.

Required columns

Category	Columns
Invoice	Invoice_Reference
Supplier	Supplier_Name
Content	Invoice_Description
Financial	Amount, Currency
Validation	Missing_Fields, Validation_Status
AI Category	Suggested_Category, Category_Confidence, Category_Reason
Approval	Approver_Name, Approval_Decision, Decision_Timestamp

Discussion question:

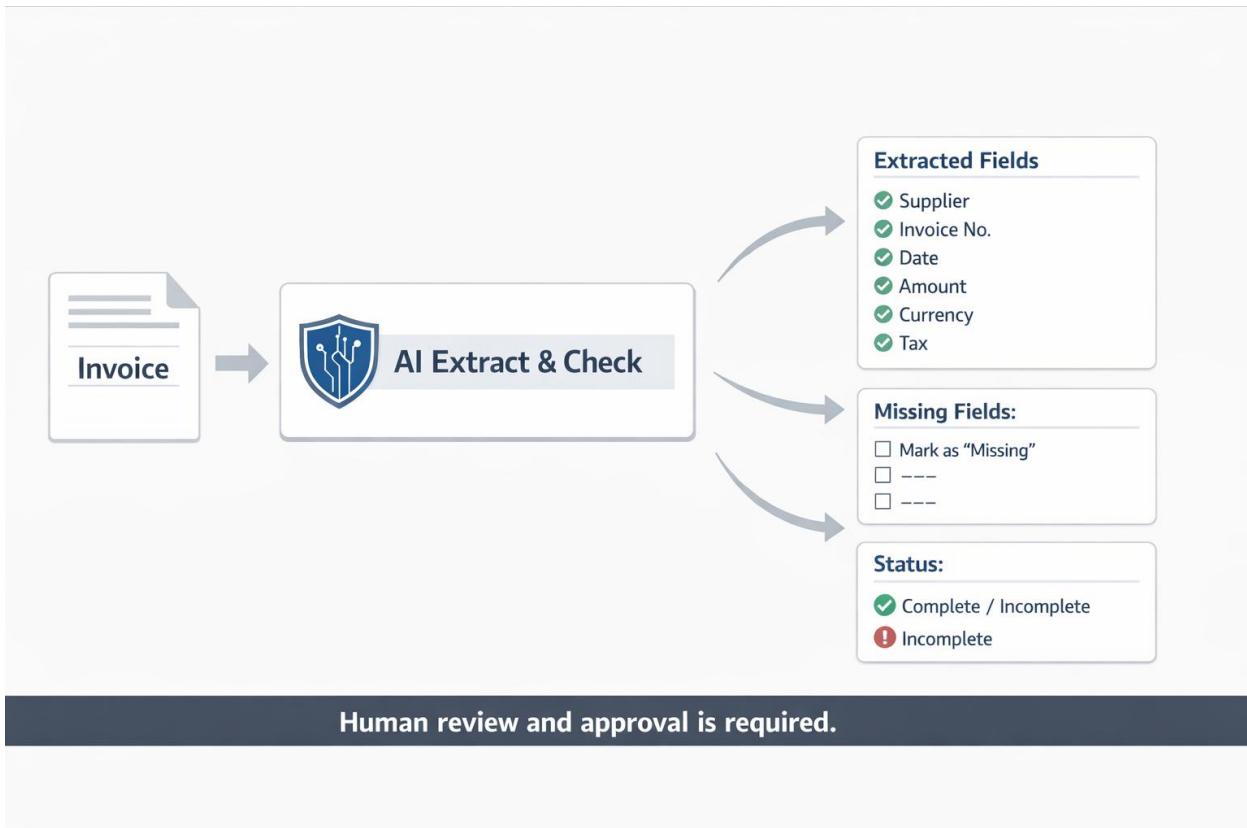
“Could an auditor understand **what the AI did and why** using Excel alone?”

If not → redesign.

Step 5 — Design the AI Instructions (Concept Level)

Groups write **two conceptual AI instructions**, focusing on **boundaries**, not cleverness.

Concept Prompt A — Invoice Validation (Concept)



You assist a finance invoice intake workflow.
Your role is **extraction and completeness checking only**.

You must:

- Extract supplier name, invoice number, date, amount, currency, tax
- Mark missing fields explicitly as "Missing"
- Never guess or calculate
- Never approve or reject invoices

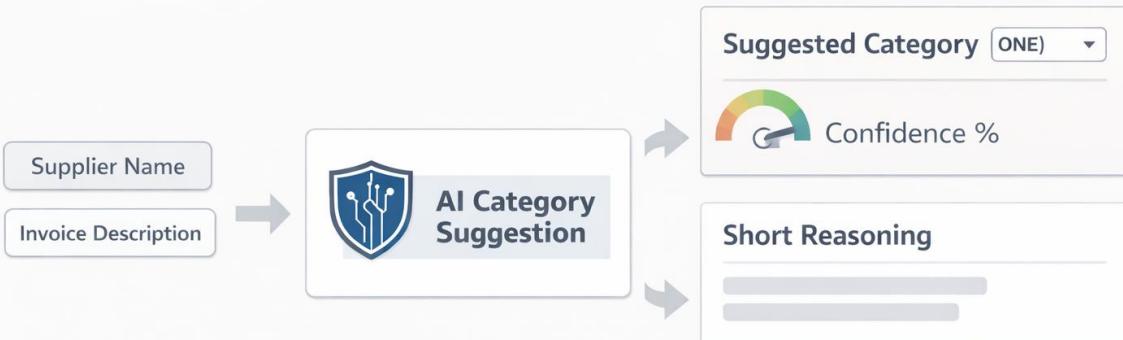
Output:

- Extracted fields
- Missing fields
- Validation status (Complete / Incomplete)

End with:

“Human review and approval is required.”

Concept Prompt B — Category Suggestion (Concept)



Human review and approval is required.

You assist a finance invoice review process.

Suggest ONE expense category based only on:

- Supplier name
- Invoice description

Choose from a closed list only.

Provide confidence and short reasoning.

You must not approve, reject, or recommend actions.

End with:

“Human review and approval is required.”

Deliverables

Each group produces:

- Workflow diagram
- AI vs Human responsibility map
- Excel audit structure
- Two AI concept prompts

Key Learning Reinforced (LAB 7)

- AI suggestions ≠ decisions
- Control comes from **workflow design**, not prompt wording
- Excel is part of governance, not just storage

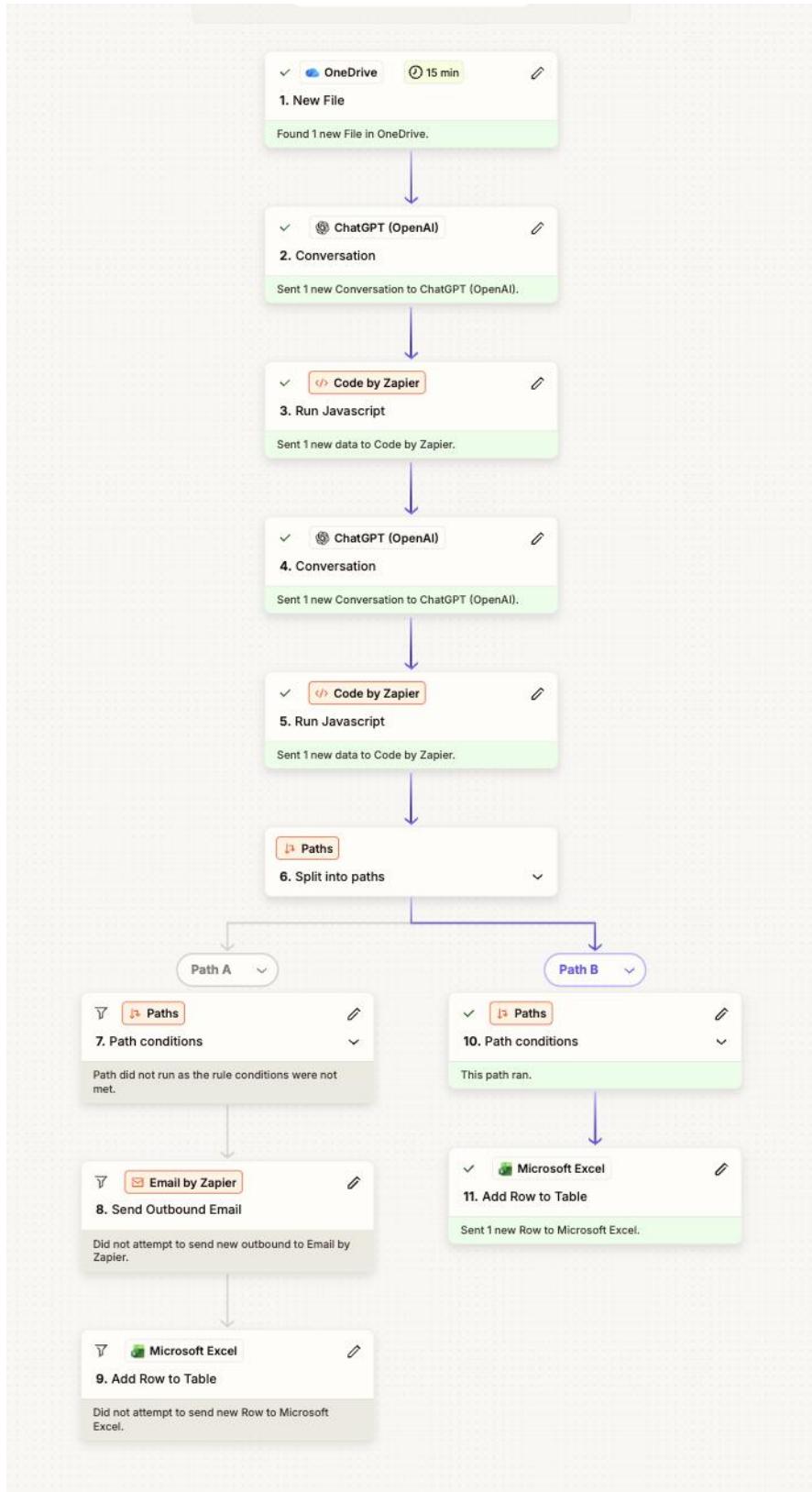
LAB 8 — Implementing a Controlled Finance AI Workflow in Zapier

Invoice Intake, Validation & Category Suggestion (Hands-On with Confidence Paths)

Objective

By the end of this lab, participants will:

- Build an invoice intake workflow in Zapier using One Drive + Excel Sheets
- Use AI only for **extraction/validation** and **category suggestion**
- Convert AI outputs into structured fields using Code by Zapier
- Route invoices via Paths based on **Low / Medium / High confidence**
- Enforce **human approval** and log everything for audit



Governance Rules (must be shown in the lab)

- AI may **extract, validate, suggest**
- AI must never **approve, reject, pay, post, or execute actions**
- Human approval is always required

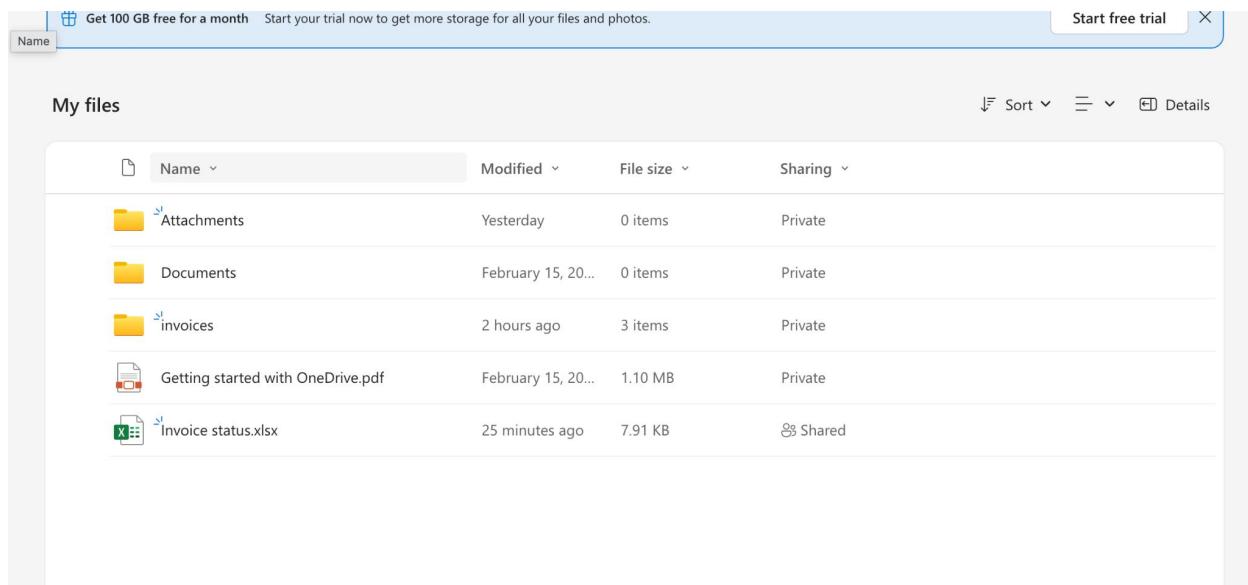
A) Pre-Lab Setup (One Drive + Excel Sheets)

A1) One Drive folders

Create these folders in Google Drive:

1. **/Invoices_Inbox**
2. **/Invoices_ProCESSED** (optional)

Purpose: Trigger starts from Inbox folder.



The screenshot shows the OneDrive web interface. At the top, there's a banner with the text "Get 100 GB free for a month" and a "Start your trial now" button. Below the banner, the header includes "Name" and "Sort" dropdowns, and "Details" buttons. The main area is titled "My files" and displays a list of items. The columns are "Name", "Modified", "File size", and "Sharing". The items listed are:

Name	Modified	File size	Sharing
Attachments	Yesterday	0 items	Private
Documents	February 15, 20...	0 items	Private
invoices	2 hours ago	3 items	Private
Getting started with OneDrive.pdf	February 15, 20...	1.10 MB	Private
Invoice status.xlsx	25 minutes ago	7.91 KB	Shared

A2) Excel Sheet (audit log)

Create a Excel Sheet called:

Invoice_Audit_Log

Create a sheet tab called:

Log

Add these headers in Row 1 (exact spelling recommended):

1. Invoice_Reference
2. File_Name
3. File_URL
4. Supplier_Name
5. Invoice_Number
6. Invoice_Date
7. Invoice_Description
8. Total_Amount
9. Currency
10. Missing_Fields
11. Validation_Status
12. Suggested_Category
13. Category_Confidence
14. Category_Reason
15. Reviewer_Note
16. Processing_Path
17. Approver_Name
18. Approval_Decision
19. Decision_Timestamp

Invoice_Reference	File_Name	File_URL	Supplier_Name	Invoice_Number	Invoice_Date	Invoice_Description	Total_Amount	Currency	Missing_Fields	Validation_Status	Suggested_Category	Category_Confidence	Category_Reason
1													
2													
3													
4													
5													
6													

B) Open API Key Explanation

NAME	STATUS	SECRET KEY	CREATED	LAST USED	PROJECT ACCESS	CREATED BY
Trainer key	Active	sk-...UskA	23 Jan 2026	23 Jan 2026	Default project	Wan Muzaffar Wan H...
training key	Active	sk-...JncA	21 Jan 2026	28 Jan 2026	Default project	Wan Muzaffar Wan H...

<https://platform.openai.com/settings/organization/api-keys>

What is the API key?

- A secret credential that lets Zapier call the AI service.
- It controls access, usage, and billing.

Where does it goes in Zapier?

- When you connect **ChatGPT (OpenAI)** in Zapier, Zapier stores the key in the connection.
- You never paste it into prompts or store it in Sheets.

Key hygiene rules

- Don't email or share it.
- Rotate if exposed.
- Restrict who can edit Zaps.

C) Build the Zap (Full Steps)

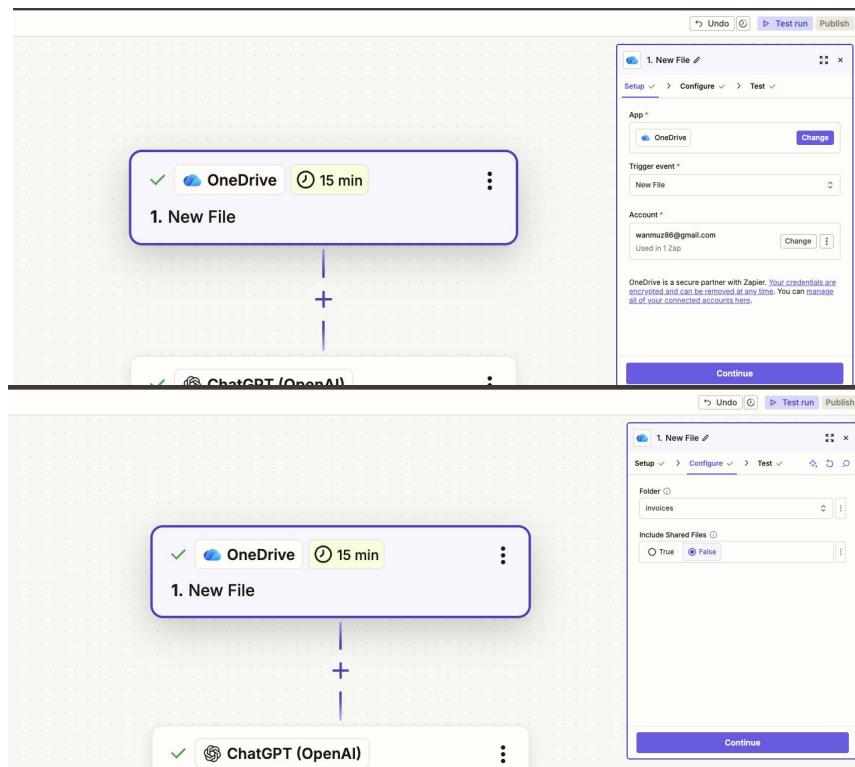
Step 1 — Trigger (Google Drive)

App: One Drive

Event: New File in Folder

Folder: /Invoices_Inbox

Test: Upload a sample invoice PDF into the folder.



Step 2 — AI Step 1 (ChatGPT): Extract + Validate

App: ChatGPT (OpenAI)

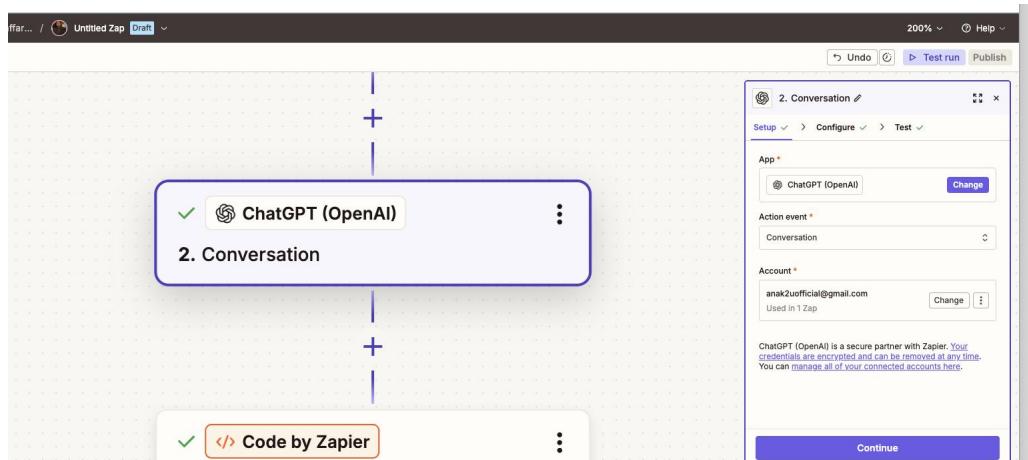
Event: Conversation

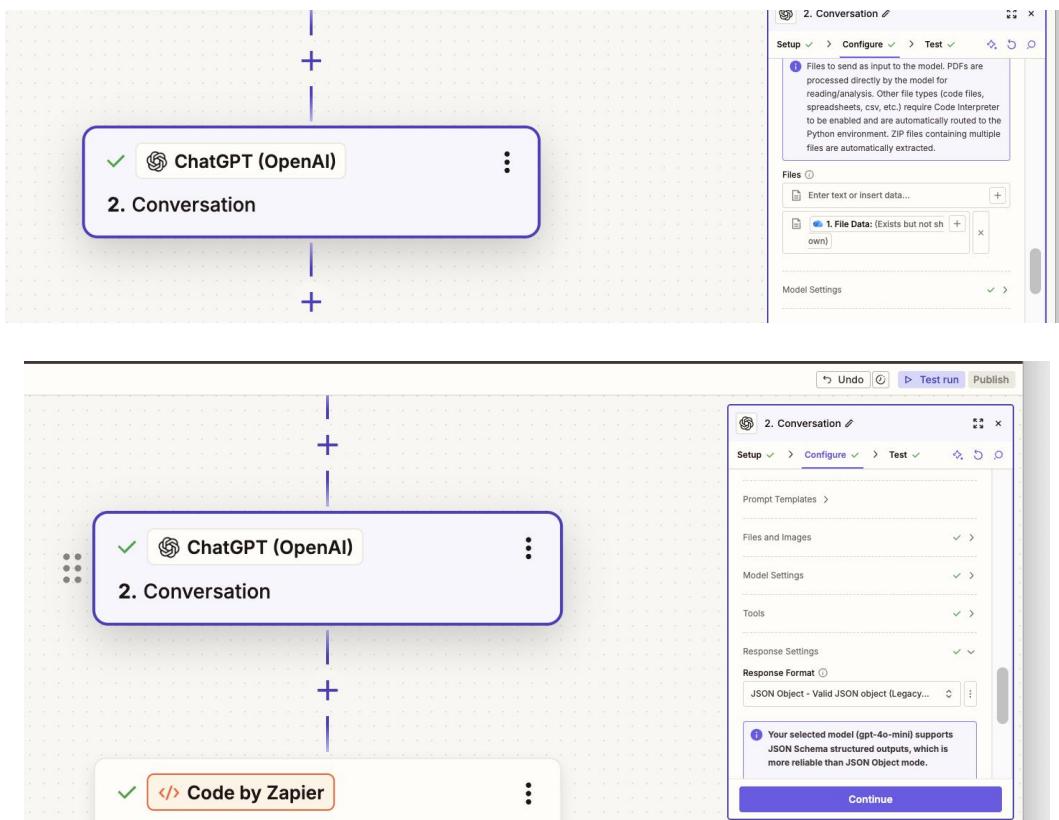
Response Format: JSON Object Format (for simplicity)

Input to AI

Pass invoice text/content if your trigger provides it.

If you only have a file, use whatever extraction method your environment supports (e.g., Drive file text, OCR step, or “file content” field if available).





Prompt A — Validation (COPY/PASTE)

Important: This prompt forces JSON-only output to make parsing safe.

You are assisting a finance invoice intake and pre-check workflow.

Extract the following fields from the invoice content provided:

- Supplier_Name
- Invoice_Number
- Invoice_Description
- Invoice_Date
- Total_Amount
- Currency

Rules:

- If a field is not explicitly shown, return "Missing"
- Do NOT guess, infer, or calculate values
- Do NOT approve or reject the invoice

After extraction:

- Identify which fields are missing
- Set Validation_Status to:

- "Complete" if no fields are missing
- "Incomplete" if one or more fields are missing

Return the result in valid JSON with EXACTLY this structure:

```
{  
  "Supplier_Name": "",  
  "Invoice_Number": "",  
  "Invoice_Date": "",  
  "Invoice_Description": "",  
  "Currency": "",  
  "Missing_Fields": [],  
  "Validation_Status": ""  
}
```

End the response with the sentence:
"Human review and approval is required."

Test this step. Ensure the result is valid JSON only.

Step 3 — Parse Validation JSON (Code by Zapier)

App: Code by Zapier

Event: Run JavaScript

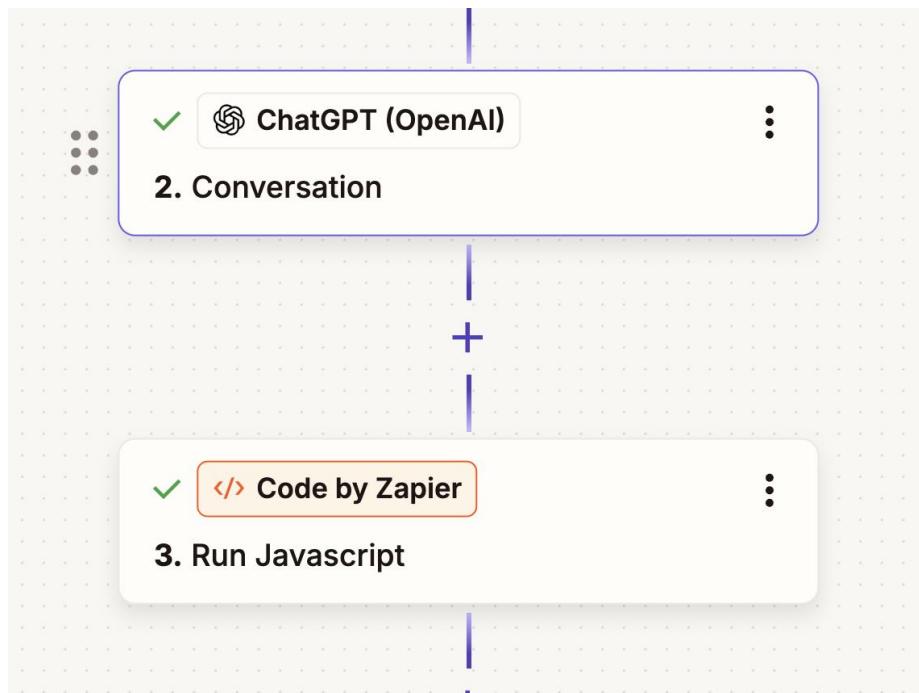
Input Data mapping

Add one input:

- **raw_json = Step 2 → Messages Content Text**

Code (COPY/PASTE)

This is robust and will not crash if fields are missing.



minutes ago

3. Run Javascript

Input Data

raw_json

2. Messages Content T

ext: { "Supplier_N...": "Co
mplete" }

+ Add value set

Code

JavaScript

Run Code

```
1 // 2) Parse JSON safely
2 const parsed = JSON.parse(inputData.raw_json);
3
4 return {
5   Supplier_Name: parsed.Supplier_Name || "",
6   Invoice_Number: parsed.Invoice_Number || "",
7   Invoice_Description:parsed.Invoice_Description || "",
8   Invoice_Date: parsed.Invoice_Date || "",
9   Total_Amount: parsed.Total_Amount || "",
10  Currency: parsed.Currency || ""
11};
```

```
// 2) Parse JSON safely
const parsed = JSON.parse(inputData.raw_json);

return {
  Supplier_Name: parsed.Supplier_Name || "",
  Invoice_Number: parsed.Invoice_Number || "",
  Invoice_Description:parsed.Invoice_Description || "",
  Invoice_Date: parsed.Invoice_Date || "",
  Total_Amount: parsed.Total_Amount || "",
  Currency: parsed.Currency || ""
};
```

Test: You should now see separate outputs like Supplier_Name, Validation_Status, etc.

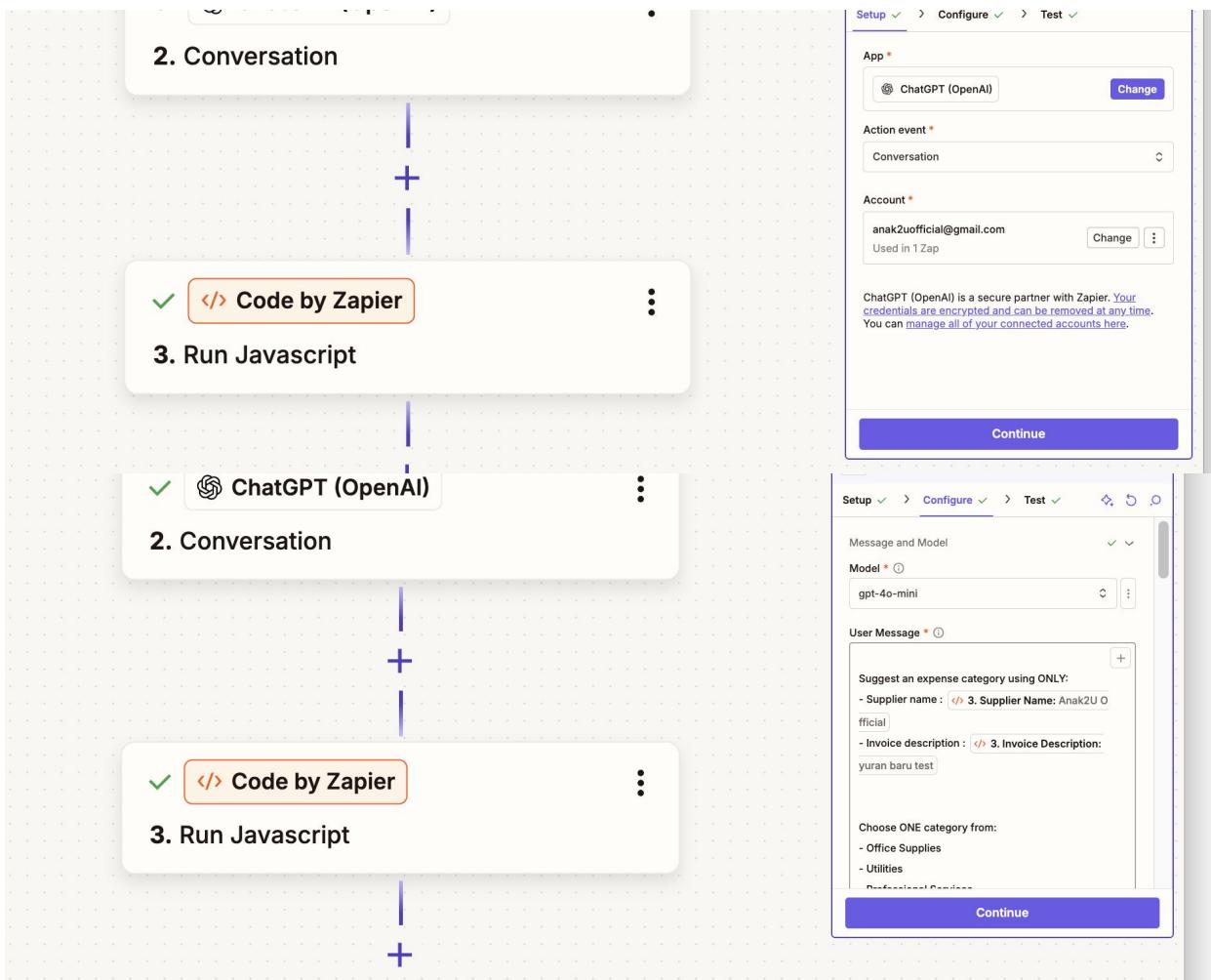
Step 4 — AI Step 2 (ChatGPT): Category Suggestion

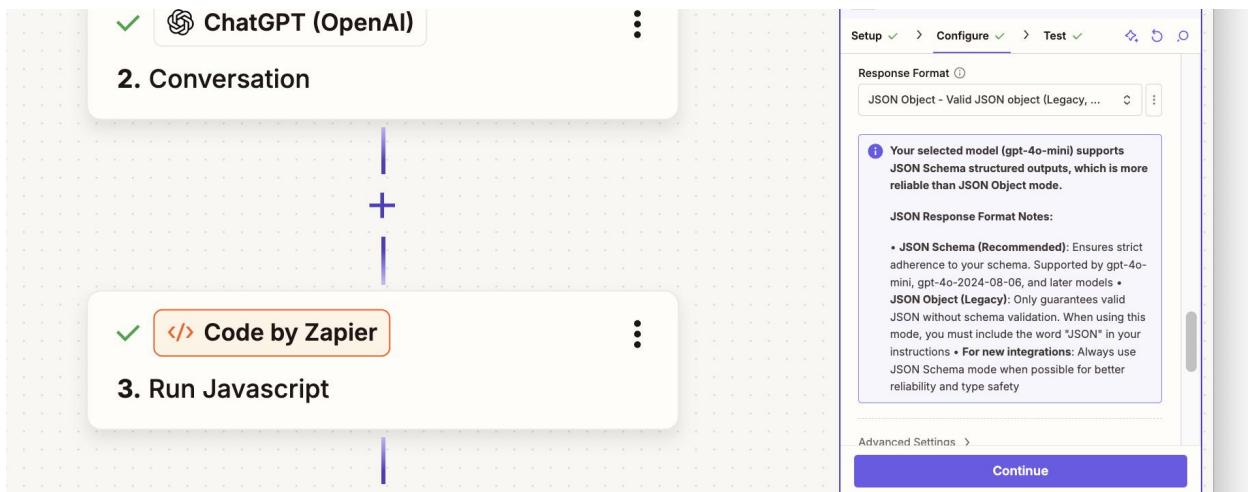
App: ChatGPT (OpenAI)

Event: Conversation

Response Format: JSON Object Format (for simplicity)

Prompt B — Category (COPY/PASTE)





You are assisting a finance invoice review workflow.

Suggest an expense category using ONLY:

- Supplier name : `{"Supplier_Name"}`
- Invoice description : `{"Invoice_Description"}`

Choose ONE category from:

- Office Supplies
- Utilities
- Professional Services
- Software / Subscription
- Marketing / Advertising
- Logistics / Delivery
- Maintenance / Repairs
- Other / Unclear

Rules:

- Do not invent new categories
- Do not approve or reject the invoice
- If unclear, choose "Other / Unclear" with Low confidence

Output format:

Category:

Confidence: High / Medium / Low

Reason:

Reviewer Note:

Return the output in JSON with exactly these fields:

```
{
  "Category": "",
  "Confidence": ""}
```

```

    "Reason": "",
    "Reviewer_Note": "",
    "AI_Processed_Flag": ""
}
```

Test this step. Output must be JSON only.

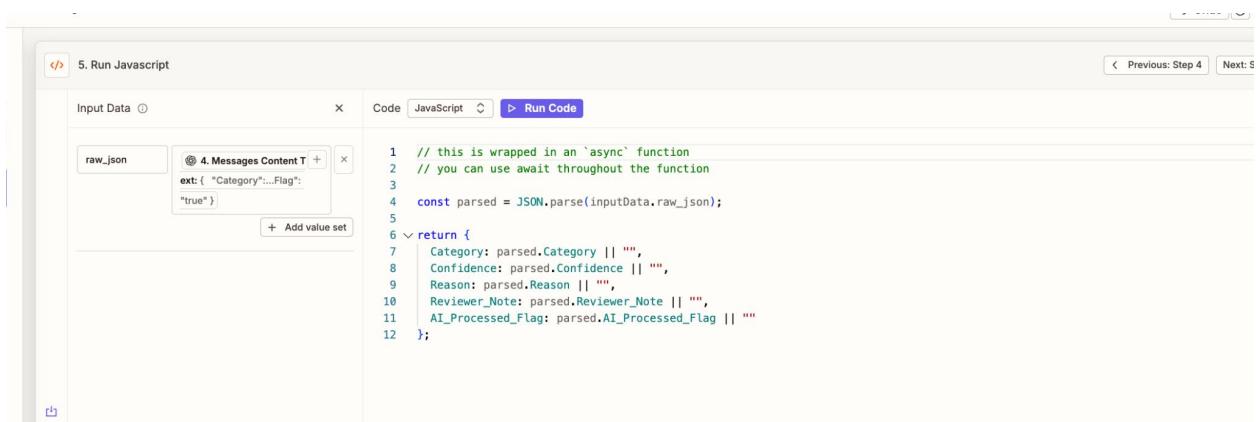
Step 5 — Parse Category JSON (Code by Zapier)

App: Code by Zapier

Event: Run JavaScript

Input Data mapping

- **raw_json** = Step 4 → Messages Content Text



Code (COPY/PASTE)

```

// this is wrapped in an `async` function
// you can use await throughout the function

const parsed = JSON.parse(inputData.raw_json);

return {
```

```
Category: parsed.Category || "",  
Confidence: parsed.Confidence || "",  
Reason: parsed.Reason || "",  
Reviewer_Note: parsed.Reviewer_Note || "",  
AI_Processed_Flag: parsed.AI_Processed_Flag || ""  
};
```

Test: outputs should be clean and mappable.

D) Step 6 — Paths by Confidence (Low / Medium / High)

App: Paths by Zapier

Action: Split into paths

Path A — Low confidence

Condition:

- Step 5 → Category_Confidence (**Text Contains**) **Low**

Actions in Path A:

1. **Send Email** (urgent manual review)
2. **Create Row in Google Sheets** with Processing_Path = **Low**

Path B — Medium confidence

Condition:

- Category_Confidence contains **Medium**

Actions:

1. Send Email (standard)
2. Create row with Processing_Path = Medium

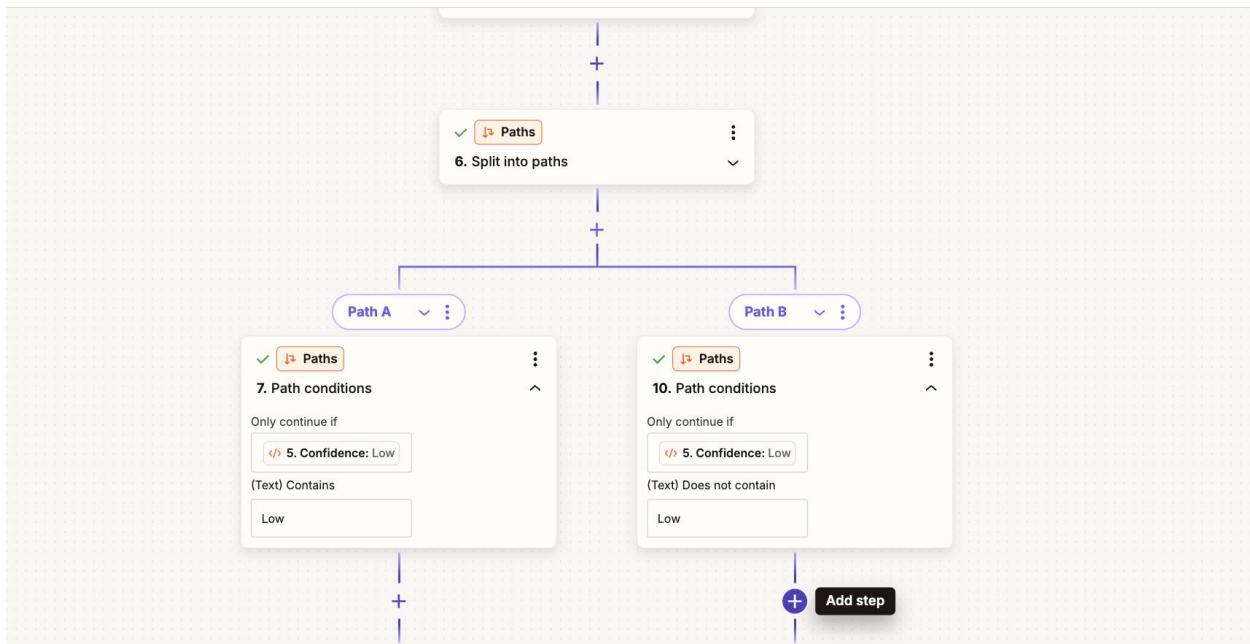
Path C — High confidence

Condition:

- Category_Confidence contains High

Actions:

1. Send Email (lighter wording, still approval required)
2. Create row with Processing_Path = High

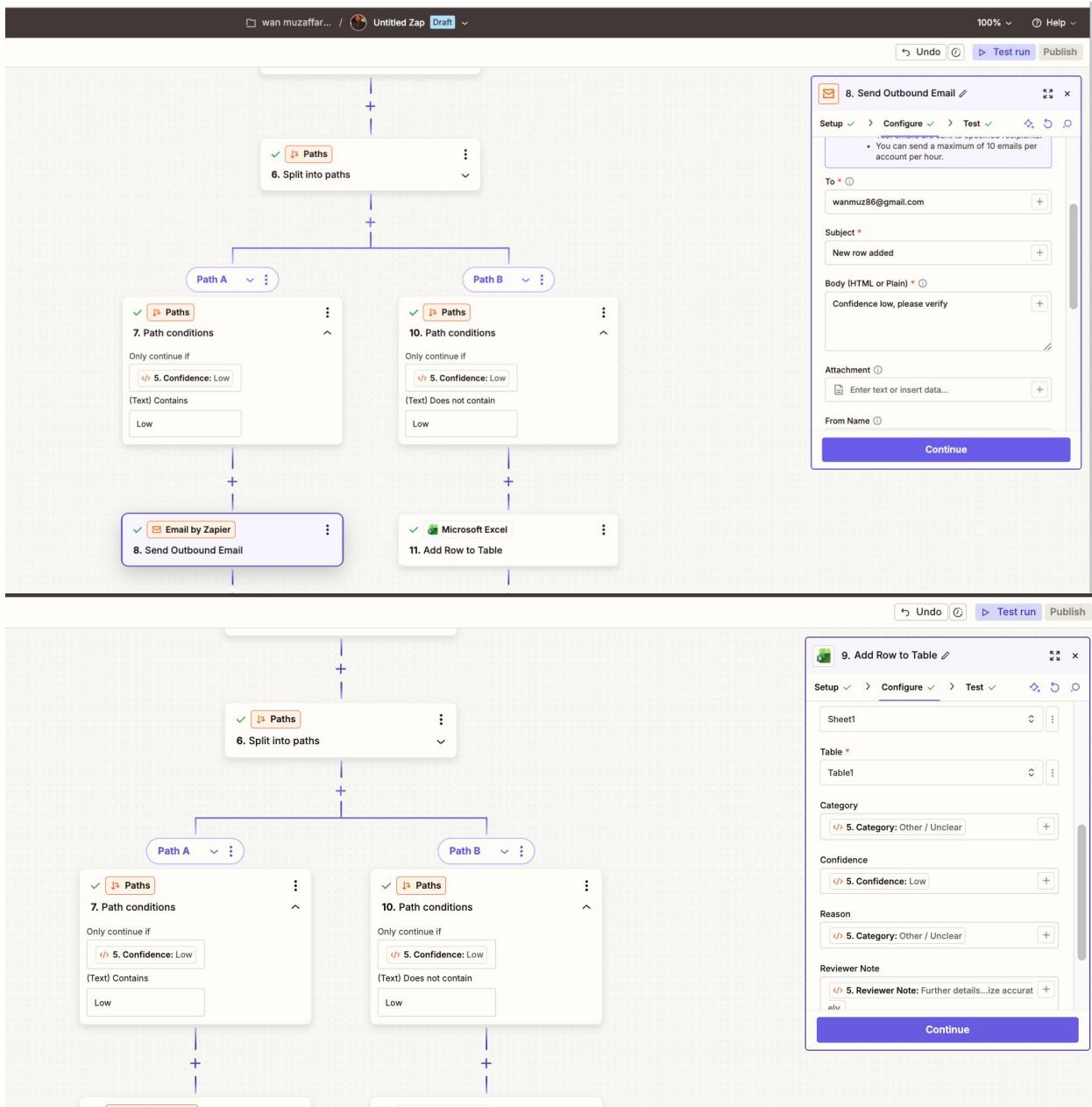


For simplicity we will do Low and Others

E) Step 7 — Email (Approval Gate)

App: Email by Zapier

Event: Send Outbound Email



Email Subject (example)

- [Invoice Review Required] {{File_Name}} — {{Category_Confidence}} confidence

Email Body (copy/paste template)

Invoice requires human review and approval.

File: {{File_Name}}

Link: {{File_URL}}

VALIDATION

Supplier: {{Step 3 Supplier_Name}}

Invoice No: {{Step 3 Invoice_Number}}

Invoice Date: {{Step 3 Invoice_Date}}

Amount: {{Step 3 Total_Amount}}

Currency: {{Step 3 Currency}}

Tax: {{Step 3 Tax_Amount}}

Missing Fields: {{Step 3 Missing_Fields}}

Validation Status: {{Step 3 Validation_Status}}

CATEGORY SUGGESTION (AI)

Suggested Category: {{Step 5 Suggested_Category}}

Confidence: {{Step 5 Category_Confidence}}

Reason: {{Step 5 Category_Reason}}

Reply with one word:

APPROVE

or

REJECT

In finance governance, email is a **human approval gate**, not a workflow shortcut.

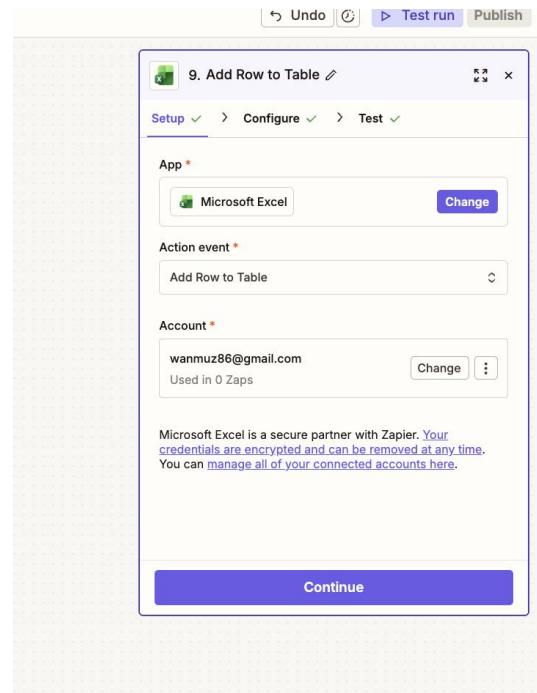
Step 8 — Log to Excel (Audit)

App: Excel Sheets

Event: Create Spreadsheet Row

Spreadsheet: Invoice_Audit_Log

Worksheet: Log



Map columns from steps:

- Invoice_Reference → (your reference rule: file id or email id)
- File_Name → Trigger file name
- File_URL → Trigger file link
- Supplier_Name → Step 3 Supplier_Name
- Invoice_Number → Step 3 Invoice_Number
- Invoice_Date → Step 3 Invoice_Date
- Invoice_Description → Step 3 Invoice_Description
- Total_Amount → Step 3 Total_Amount
- Currency → Step 3 Currency

- Tax_Amount → Step 3 Tax_Amount
- Missing_Fields → Step 3 Missing_Fields
- Validation_Status → Step 3 Validation_Status
- Suggested_Category → Step 5 Suggested_Category
- Category_Confidence → Step 5 Category_Confidence
- Category_Reason → Step 5 Category_Reason
- Reviewer_Note → Step 5 Reviewer_Note
- Processing_Path → Low/Medium/High (static per path)
- Approver_Name → (if you capture it later)
- Approval_Decision → (if you capture it later)
- Decision_Timestamp → Zap meta timestamp

G) Testing Checklist

Test with 3 invoices:

1. **Complete + clear supplier** → High confidence
2. **Complete + ambiguous description** → Medium confidence
3. **Missing invoice no/date** → Incomplete + Low confidence

Observe:

- Paths route correctly
- AI never approves
- JSON parsing prevents “blob into Excel”
- Audit row explains AI result

Final Reinforcement

In finance, “automation” is not removing humans.
It is enforcing consistent checks, evidence, and approval gates.

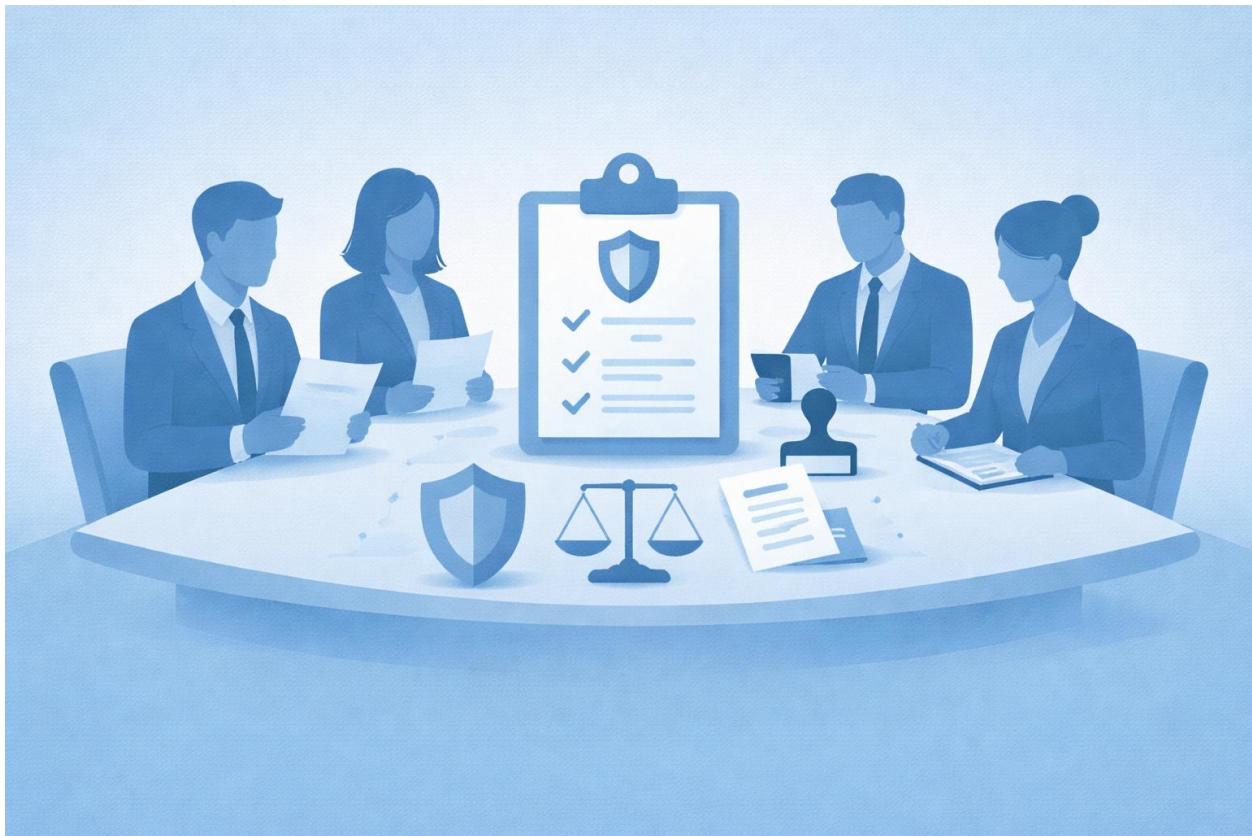
Lab 9 — Group Workshop

Drafting a Responsible AI Charter (Finance Context)

Lab Objective

By the end of this workshop, participants will:

- Apply **Deep Research thinking** to policy design
- Translate ethics and governance principles into **clear rules**
- Define **allowed and prohibited AI usage** in finance
- Design an **approval and audit workflow**
- Produce a **Responsible AI Charter** ready for internal review



Lab Setup

Grouping

- Groups of **4–6 participants**
- Each group acts as a **Finance AI Governance Committee**

Tools

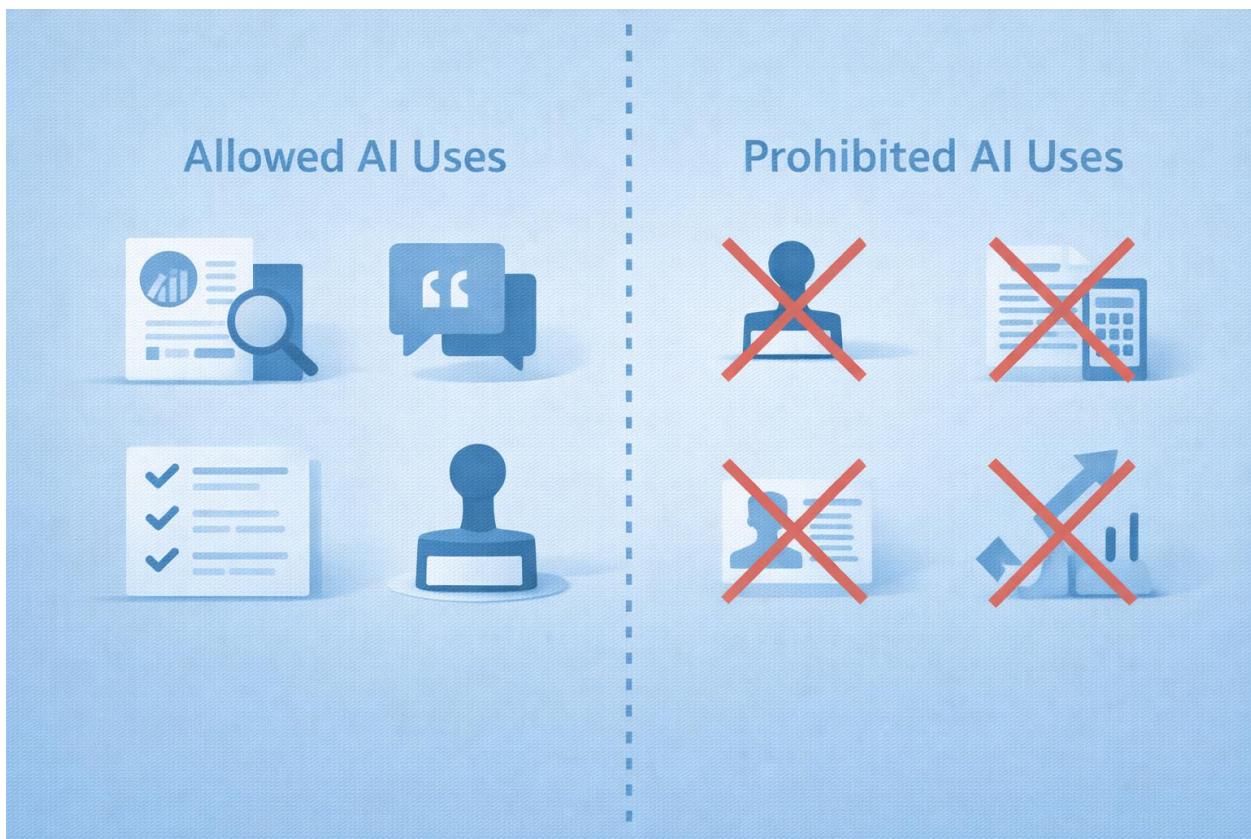
- Whiteboard, flip chart, or shared document
- No AI tools required during drafting
(AI use may be discussed, not executed)

, This is a **policy drafting exercise**, not a debate or brainstorming session.

Instructions Overview

Groups will:

1. Define the purpose and scope of AI usage
2. Identify allowed and prohibited use cases
3. Design an approval workflow
4. Ensure audit, ethics, and compliance readiness
5. Produce a short Responsible AI Charter



Step-by-Step Instructions

Step 1 — Set the Policy Context

Each group agrees on:

- Target audience (e.g. finance team, controllers, analysts)
- Scope (internal use only)
- Assumption: AI is used to **assist**, not decide

Trainer reminder:

This charter must survive audit and regulatory scrutiny.

Step 2 — Define Allowed AI Use

Groups list **acceptable AI uses** in finance, aligned with Deep Research principles.

Guidance

Allowed uses should:

- Support analysis, explanation, and summarization
- Require source citation for policy or regulatory work
- Involve human review and approval

Examples

- Policy summarization with cited sources
- Draft explanations for reconciliation
- Structured report drafting

Step 3 — Define Prohibited AI Use

Groups list **explicitly forbidden uses**.

Guidance

Prohibited uses typically include:

- Approving financial decisions
- Posting journal entries
- Using chat mode for policy interpretation
- Uploading sensitive or personal data
- Bypassing controls or audit logs

Trainer emphasis:

If it creates untraceable risk, it belongs here.

Step 4 — Design the Approval Workflow

Groups design a **simple approval flow** covering:

- Who can use AI
- For which tasks
- When human approval is required
- How outputs are reviewed and stored

Required Elements

- AI output is always provisional
- Named reviewer or role
- Approval before external or executive use
- Storage of prompts and outputs for audit

Step 5 — Ensure Ethics, Bias & Privacy Controls

Groups must explicitly address:

- Source citation requirements
- Bias awareness and human review
- Data privacy rules (what must never be uploaded)
- Local regulatory or organizational constraints

Ask:

Could this policy prevent misuse without blocking value?

Deliverable — Responsible AI Charter (1–2 Pages)

Each group produces a **Responsible AI Charter** with the following sections:

Required Charter Structure

1. Purpose & Scope

Why AI is used and where it applies

2. Allowed Use

Clear list of approved AI use cases

3. Prohibited Use

Clear list of forbidden activities

4. Approval Workflow

Roles, review steps, and accountability

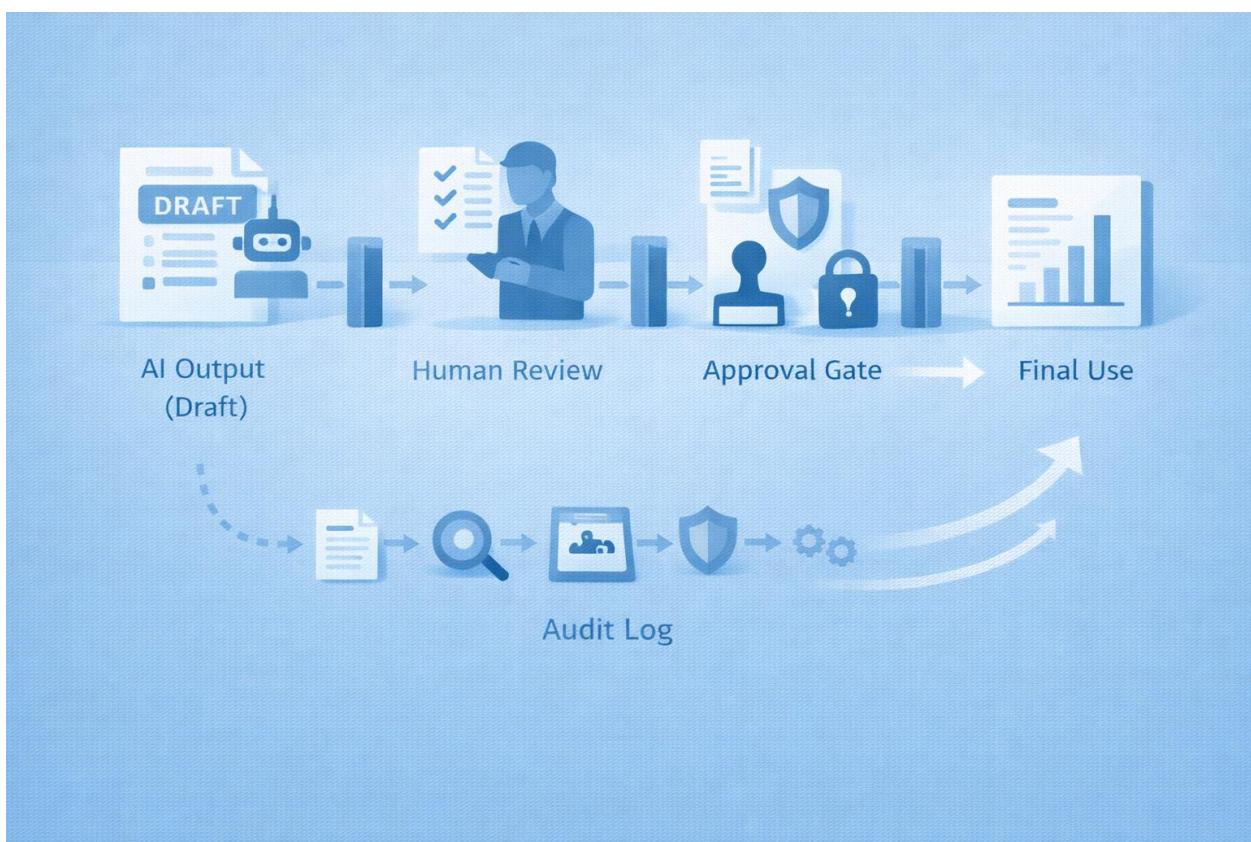
5. Audit & Compliance

Logging, traceability, and retention rules

Presentation & Discussion

Each group presents:

- One allowed use they believe is *high value*
- One prohibited use they believe is *critical*
- One approval rule they would not compromise



Key Learning Outcomes

- Policy use requires Deep Research, not chat
- Source citation is mandatory for governance
- Ethics must be explicit, not implied
- Approval workflows protect accountability
- Responsible AI is a **management system**, not a feature

Common Pitfalls to Highlight

- Vague wording (“use responsibly”)
- Missing prohibited use section
- No named accountability
- Ignoring data privacy
- Treating AI policy as optional guidance

Optional Extension

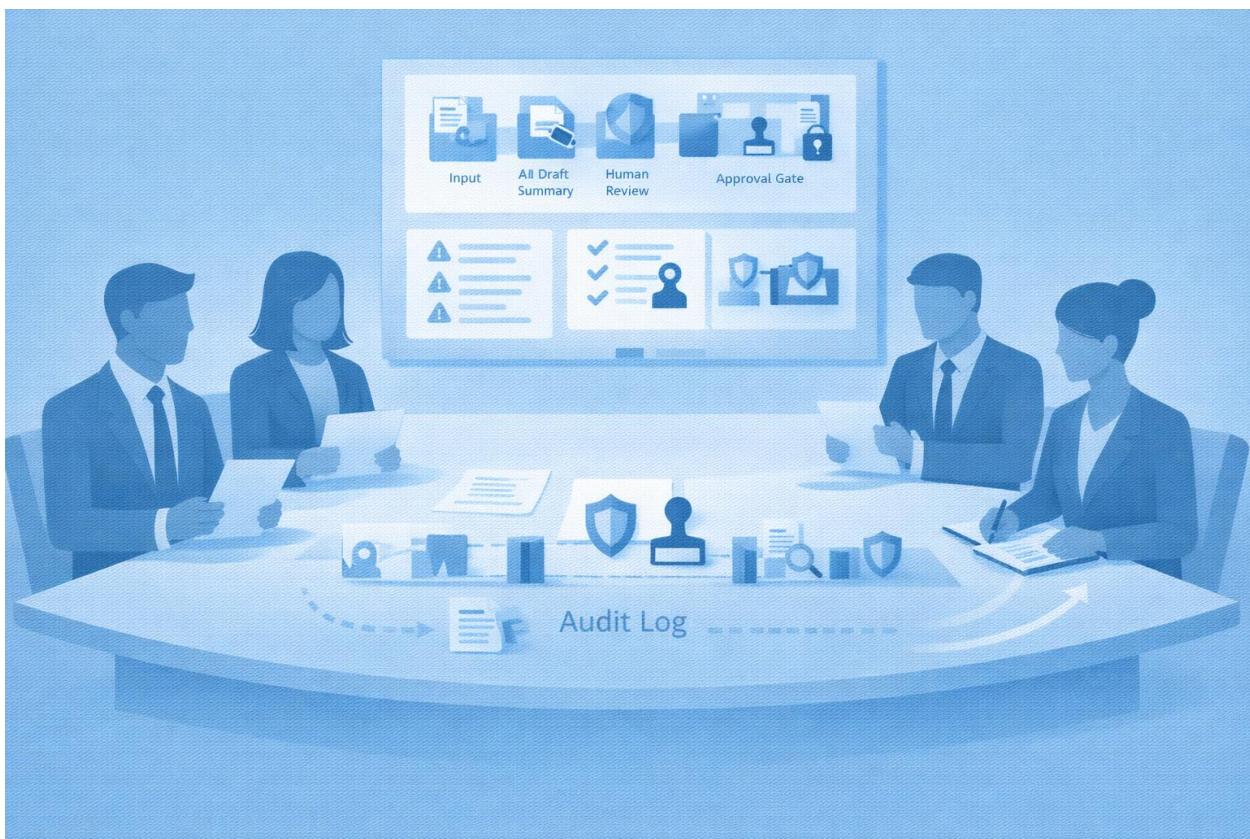
- Compare charters between groups
- Identify gaps or conflicting rules
- Discuss how the charter would be enforced
- Map the charter to internal audit controls

Lab 10 — End-to-End Finance AI Scenario

Capstone Objective

By the end of this capstone, teams will:

- Apply **AI modes, prompt types, and techniques** correctly
- Design a **finance-safe AI workflow**
- Enforce **human approval and auditability**
- Apply **ethics, bias, and privacy checks**
- Produce a complete, defensible AI usage package



This capstone simulates **real-world finance decision support**, not experimentation.

Capstone Setup

Team Formation

- Teams of **4–6 participants**
- Each team acts as a **Finance AI Design Committee**

Scenario

Each team receives **one finance scenario**, for example:

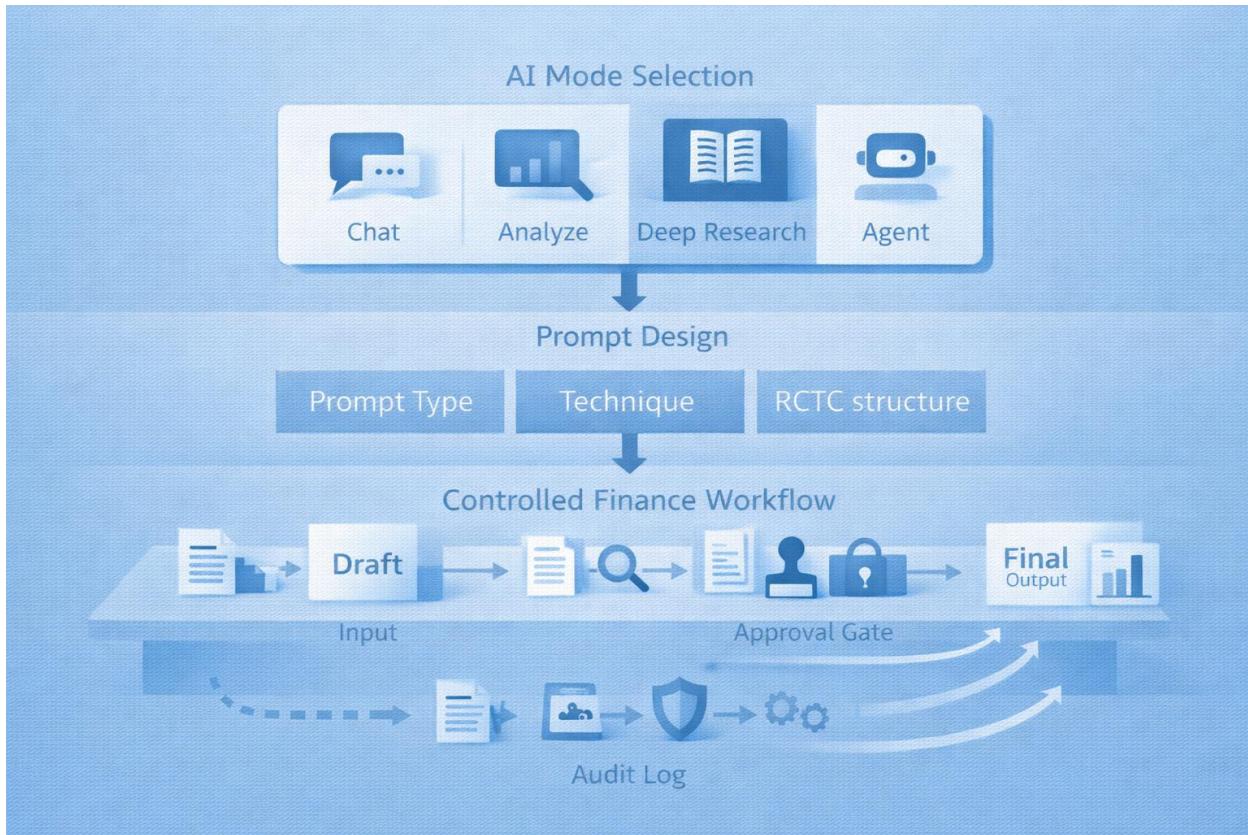
- Monthly management reporting
- Investment performance review
- Budget vs actual reconciliation
- Vendor master data review
- Regulatory policy impact assessment

Teams must **not change the scenario**.

Instructions Overview

Teams must design an **end-to-end AI usage approach** covering:

1. Mode selection
2. Prompt design
3. Workflow structure
4. Ethics and risk controls



Step-by-Step Instructions

Step 1 — Understand the Finance Scenario

Teams clarify:

- What is the **business goal**
- What data is involved
- What decisions are **in scope**
- What decisions are **out of scope for AI**

Reminder:

AI may assist understanding — not make decisions.

Step 2 — Select the Appropriate AI Mode(s)

Teams must select **one or more AI modes**:

- Chat
- Analyse
- Deep Research
- Agent / Automation

For each selected mode, teams must justify:

- Why this mode is appropriate
- Why other modes are risky

Step 3 — Choose Prompt Type & Technique

Teams must define:

- **Prompt type**
 - Analysis
 - Design
 - Agentic
 - Deep Research
- **Prompt technique**
 - Zero-shot
 - One-shot
 - Question-based
 - Step-based
 - Iterative

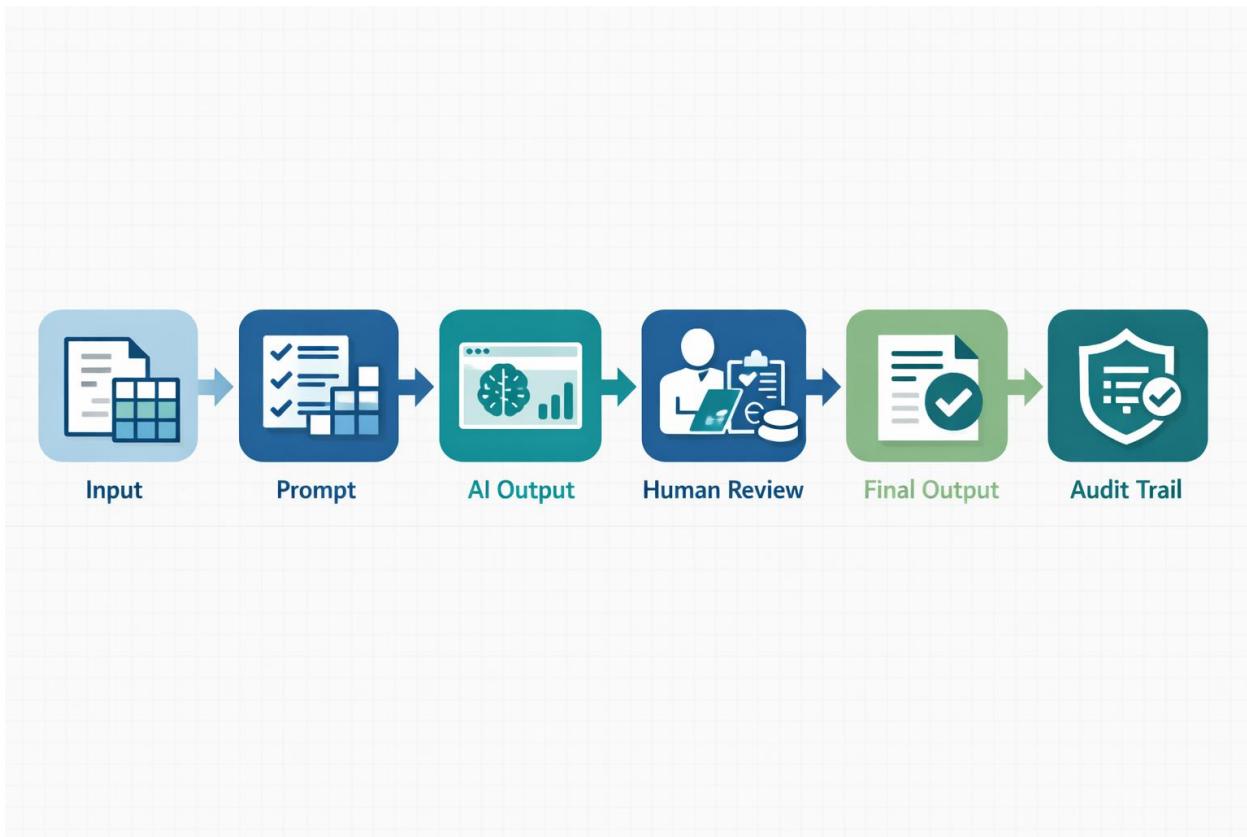
- Chain-of-thought (controlled)

, Teams must explain:

Why this combination is **safe for finance**

Step 4 — Design the AI Workflow

Teams design a workflow using the required model:



They must clearly mark:

- AI automation points
- Human approval gates
- Where AI must stop

Step 5 — Apply Ethics & Governance Checks

Teams must explicitly address:

- **Source citation** (if policy or research involved)
- **Bias awareness**
- **Data privacy rules**
- **Prohibited AI actions**
- **Audit readiness**

Ask:

Could this design survive audit, compliance, and regulator review?

Final Deliverables (Required)

Each team submits **three outputs**:

1. Prompt Set

A small set of **finance-ready prompts**, including:

- Mode selected
- Prompt type
- Prompt technique
- RCTC structure

2. Finance AI Workflow Diagram

A visual diagram showing:

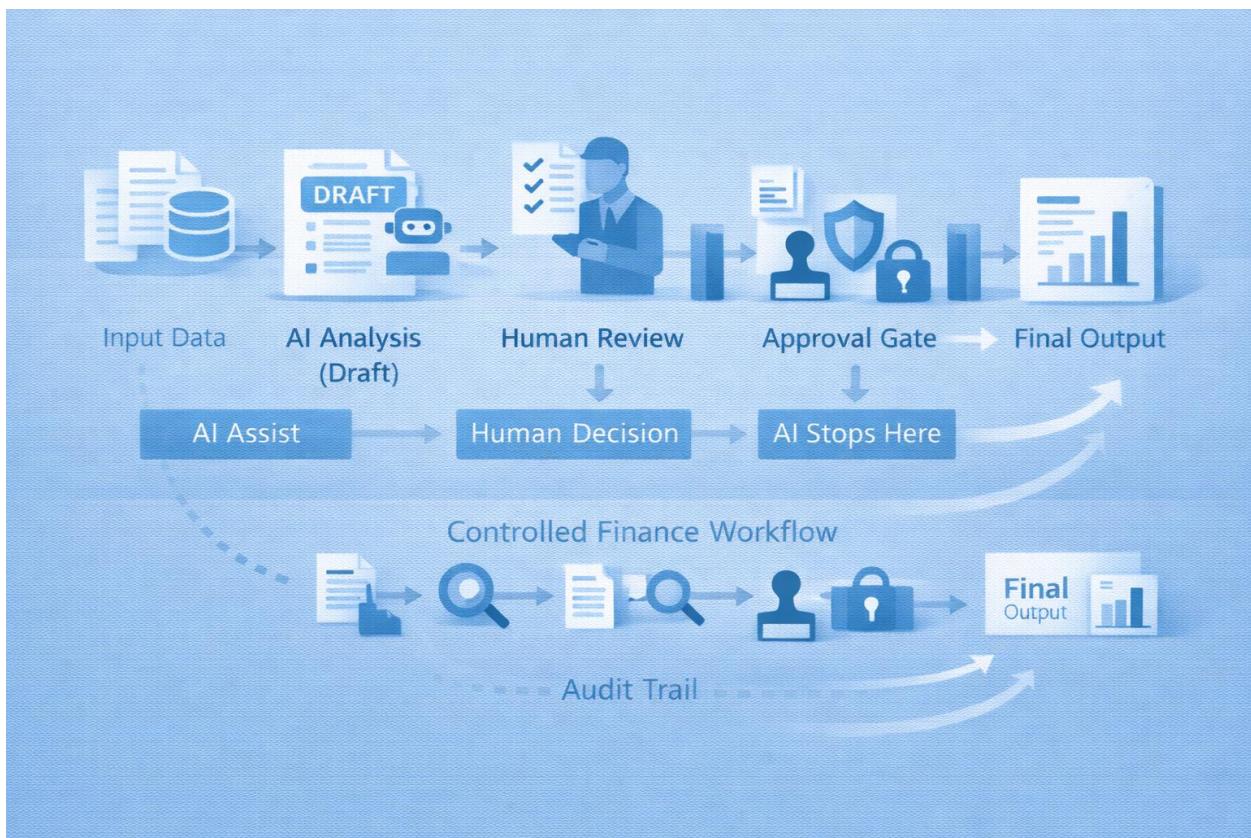
- End-to-end process
- AI vs human responsibilities
- Approval gates
- Audit trail components

3. Risk Assessment Summary (1 Page)

Must include:

- Key risks identified
- Mitigation controls
- Autonomy level (manual / semi / automated)
- Ethical and compliance considerations

Presentation & Review



Each team presents:

- Why they chose their AI mode
- Where AI adds value

- Where AI must stop
- One key risk they designed around

Evaluation Criteria

Teams are assessed on:

- Correct mode and prompt selection
- Workflow clarity and control
- Governance and approval design
- Ethics and privacy awareness
- Practical finance realism

Key Learning Outcomes

- Safe AI use is **system design**, not prompt skill
- Mode, prompt, and workflow must align
- Human accountability is mandatory
- Ethics and auditability are non-optional
- Finance AI must be defensible, not impressive

Common Capstone Pitfalls

- Letting AI decide or approve
- Over-automation
- Missing audit trail
- Vague ethics statements

- Tool-driven rather than risk-driven design

Optional Extension (If Time Allows)

- Swap designs between teams for peer review
- Identify one place autonomy could be increased safely
- Redesign workflow to reduce highest risk