# Version 4 — *Two Checkpoints*


**ADOPTED 2026-11-01** · Session 43, PM-AI-9 (D-400)
Supersedes **design_architecture_v3**

Version 3 carried the plan to three years. Version 4 keeps every step, layer and loop of v3 and adds **two owner checkpoints** (D-398): **Checkpoint 1 — Getting your inputs right**, after Step 4 and before Step 5, and **Checkpoint 2 — Getting your statements right**, after Step 9 and before Step 10. Both are **flag-only**: they explain a risk and point to the step that fixes it, and the owner decides. Nothing about the owner's assumptions blocks the way forward. Their purpose is to raise, at the two decision points, what the Excel workbook used to raise only after the plan was built.

## Entry Point

LAYER 5 · NAVIGATION

**11**

### Hub Page

Where the user enters the plan and navigates to any component. Unchanged.

USER STARTS HERE · DROPS DOWN TO INPUT

## Deliverables

LAYER 4 · FINAL OUTPUTS

**10**

### Final Outputs — Create My Financial Plan

One step, two deliverables covering Years 1–3: the **PDF Financial Plan** and the **Excel Financial Plan Workbook**. Generated only once the three-year statements are settled and Checkpoint 2 has been reviewed. The workbook carries a short validation summary: the date of the check, flags raised, and flags the owner acknowledged.

**CP2** — **Checkpoint 2 — Getting your statements right**

About 6 flags, mirroring what the workbook raises today: any month with negative cash · ratios below target (gross margin default **40%**) · debt service coverage · losses through Year 3 · growth above the Year 2/3 guide ranges · Year 2–3 funding needs not identified. Each flag names the step that fixes it: back to **Step 9** (out-years) or down to **Steps 1–4** (inputs).

NEW · FLAG-ONLY
AFTER STEP 9 · BEFORE STEP 10

## Multi-Year Extension

LAYER 3B · OUT-YEARS

**9**

### Out-Year Assumptions

The user sets growth, inflation and capacity assumptions for **Years 2 and 3** against a Year 1 that has already been validated. **Completing Step 9 returns the user to Step 5**, where those assumptions are posted as out-year entries through the same engine — producing a Year 2 and a Year 3 trial balance. Steps 6, 7 and 8 then re-render from each year's own trial balance.

ASSUMPTIONS RETURN TO THE ENGINE — STEP 9 DOES NOT REPORT, IT POSTS

## Output Layer · Financial Statements

LAYER 3 · REPORTING

**6** YEAR-AWARE

### Income Statement

Profitability, Year 1 / 2 / 3 and total.

**7** YEAR-AWARE

### Balance Sheet

Position at each year end. Balances by construction, because each year has its own trial balance.

**8** YEAR-AWARE

### Cash Flow Statement

Sources and uses of cash, by year.

ACCOUNT BALANCES FEED THE STATEMENTS — ONE SET PER FORECAST YEAR

## Posting Engine · Chart of Accounts

LAYER 2 · BRIDGE · THE FOUNDATION

**5**

### Trial Balance — Base Year 1, extended to Years 2 and 3

Maps each input line to an account and accumulates posted amounts by period. The same engine runs three times: once from the Steps 1–4 inputs for **Base Year 1**, then twice more from the Step 9 out-year entries. One engine, three trial balances. **Both return loops land here.** The engine's own integrity checks (debits equal credits, the balance sheet balances, each year rolls into the next) run silently here: a failure is a software defect, never a message to the owner.

**OUT-YEAR LOOP** Step 9 → back to Step 5 → re-post → 6 · 7 · 8

**OPTIMIZATION LOOP** Review statements → refine Steps 1–4 → re-post

FREE MODULE ENDS HERE · ABOVE THIS LINE IS THE PAID MODULE · CONVERSION MOVES THE OWNER'S DATA TO THE SERVER (D-157)

**CP1** — **Checkpoint 1 — Getting your inputs right**

About 8 flags, each computable from Steps 1–4 alone: cash runway · contingency reserve · funding coverage · funding timing · sales against the market estimate · negative unit margin · gross margin (default **40%**) · initial inventory budget. Each flag names the input step that fixes it. Runs in the owner's browser, with the free module's data.

NEW · FLAG-ONLY
AFTER STEP 4 · BEFORE STEP 5

## Input Layer · Data Foundation

LAYER 1 · BEGIN HERE · FREE MODULE

**1**

### Cost Estimate

One-time costs to open.

**2**

### Funding Plan

Equity and debt sources.

**3**

### Revenue Forecast

Top-line projections.

**4**

### Cost Model

Variable and fixed operating costs.

**Sequence:** 1 → 2 → 3 → 4 → **Checkpoint 1** → 5 → 6 → 7 → 8 → *(validate Year 1)* → 9 → **back to 5** → 6 · 7 · 8 *(Years 1–3)* → *(iterate)* → **Checkpoint 2** → 10

Bottom-up build · Top-down navigation

### The two checkpoints — flags, not gates

**Why they exist.** The Excel workbook raised its red flags only after the owner had built the whole plan, so fixing one meant redoing the work. The checkpoints raise the same kinds of flag at the two points where the owner can still act cheaply.

**What a flag does.** It says what looks wrong, why it matters, and which step to revisit. The owner may revise or acknowledge it and move on. An honest plan that shows a weak business is a correct result, not an error to be hidden: a plan should never be "cooked" to satisfy a lender.

**What a flag never does.** It never blocks the owner's assumptions. Data-entry errors (a down payment larger than the price) are caught on the step page as they are typed. Accounting-integrity failures are engine defects, caught silently in Step 5.

**When an input changes,** an acknowledged flag that depends on it re-opens at the next checkpoint.

### The two return loops — unchanged from v3

**Optimization Loop (blue).** The user reviews the statements, goes back down to Steps 1–4 to refine inputs, and re-posts. Re-posting passes through Checkpoint 1 again.

**Out-Year Loop (purple).** Completing Step 9 sends the user **back to Step 5**, where the out-year assumptions post as entries and generate the Year 2 and Year 3 trial balances. Steps 6, 7 and 8 then re-render across all three years.

**Checkpoint 2 sits outside both loops:** it runs once the owner is ready to leave them for Step 10, and sends the owner back into whichever loop fixes the flag.

### What changed from v3, and why

- **Checkpoint 1 added** between Step 4 and Step 5 (D-398). It sits on the line where the free module ends and conversion to the paid module begins (D-157).
- **Checkpoint 2 added** between Step 9 and Step 10 (D-398).
- **Step 10 deliverables renamed** to the PDF Financial Plan and the Excel Financial Plan Workbook (D-303), and they now carry a validation summary.
- **Step 5 states plainly** that the engine's integrity checks are silent, so they are not mistaken for owner flags.
- **Nothing else changes:** ten steps plus the Hub, five layers, two loops, one engine.
- **Not yet specified:** exact formulas, thresholds and messages for each flag. Those come in "Checkpoint Business Rules v0.1", next session. No change order before it is accepted (SOP 6.18).