

## FICTIONAL CASE STUDY

# From AI Roadmap to Operating Rhythm

*How a 120-person manufacturer used a Fractional Chief AI Officer to turn governance into execution*

This case study is illustrative. The company name, people, findings, metrics, costs, decisions, and results are invented to demonstrate how a Fractional Chief AI Officer engagement may work.

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| <b>Client</b>         | Gulf Coast Precision Components, Inc. - fictional |
| <b>Industry</b>       | Industrial manufacturing                          |
| <b>Size</b>           | 120 employees                                     |
| <b>Engagement</b>     | Fractional Chief AI Officer, 6 months             |
| <b>Starting point</b> | Governance framework and roadmap already approved |

## The Situation

The fictional manufacturer had completed an AI governance setup and had a reasonable first-year roadmap. Leadership knew which AI uses were permitted, had named decision owners, and had identified several candidate projects. The problem was execution.

The COO was already responsible for operations. IT could support systems, but did not own business prioritization. Legal and security could review risk, but neither function should decide which AI projects deserved investment. Business managers wanted to move quickly, and vendors were arriving with new AI features faster than the existing team could evaluate them.

The company did not need another full-time executive. It needed one senior owner who could keep the roadmap moving, run the governance process, challenge assumptions, and make sure experiments produced evidence before they became permanent systems.

## The Fractional CAIO Mandate

CAVA Suite LLC was engaged on a monthly retainer to operate the AI program for six months. The Fractional CAIO did not replace IT, legal, security, finance, engineering, or operations. The role coordinated those functions and turned their input into management decisions.

- Run the monthly AI Steering Group and maintain the decision register.
- Own the active AI roadmap and sequence work based on value, readiness, and risk.
- Screen new use cases before teams spent time or money on them.
- Create measurable pilot plans with owners, acceptance criteria, and stop conditions.
- Coordinate vendor diligence and identify unresolved data, performance, and control questions.
- Track benefit, correction effort, user adoption, incidents, and material model or vendor changes.
- Provide the CEO and COO with a concise monthly executive report.

## What Happened During the First 90 Days

| Period  | Focus              | Illustrative action                                                                      | Result                                               |
|---------|--------------------|------------------------------------------------------------------------------------------|------------------------------------------------------|
| Month 1 | Portfolio reset    | Reviewed 14 proposed and active AI ideas                                                 | Reduced active portfolio to 5 priorities             |
| Month 1 | Ownership          | Assigned sponsor, business owner, system owner, and reviewer for each priority           | No project remained ownerless                        |
| Month 2 | Vendor control     | Reviewed 3 AI-enabled products against data, logging, retention, and change requirements | 1 proceeded, 1 conditional, 1 rejected               |
| Month 2 | Pilot design       | Defined baseline and acceptance criteria before launch                                   | Two pilots entered controlled testing                |
| Month 3 | Governance cadence | Ran monthly Steering Group and weekly sponsor review                                     | Decisions reached named owners with due dates        |
| Month 3 | Measurement        | Added time saved, correction effort, adoption, and exceptions to reporting               | Leadership could compare benefit with operating cost |

## The Use-Case Portfolio

The Fractional CAIO's first job was not to create more AI projects. It was to reduce noise and force each request into a decision-ready format.

| Use case                        | Business hypothesis                                       | Risk   | Decision    | Evidence gate                               |
|---------------------------------|-----------------------------------------------------------|--------|-------------|---------------------------------------------|
| Internal procedure assistant    | Reduce repetitive shop-floor and administrative questions | Low    | Proceed     | Cited approved procedures; owner review     |
| Maintenance knowledge assistant | Reduce time locating troubleshooting guidance             | Medium | Pilot       | Source traceability; no autonomous control  |
| Supplier RFQ summarization      | Reduce engineer review time                               | Medium | Pilot       | Compare against source RFQs; human approval |
| Customer email drafting         | Reduce routine drafting time                              | Medium | Limited use | Human approval; no pricing or commitments   |
| Predictive production decisions | Automate schedule or quality decisions                    | High   | Defer       | Insufficient evidence and control           |

## A Useful Failure

One candidate vendor looked strong in demonstrations, but could not give the company enough evidence about data retention, model changes, logging, and customer testing. The business sponsor wanted to proceed because the interface looked useful.

The Fractional CAIO recommended a conditional hold rather than a purchase. The vendor was given a short list of evidence gaps and the project stayed off the production roadmap until those items were resolved. The value of the role was not simply accelerating adoption. It was creating a disciplined way to say not yet.

## Illustrative Six-Month Results

By the end of the fictional six-month engagement, the operating model had shifted from ad hoc requests to a managed executive program.

| Measure               | Starting point                 | Illustrative month-6 condition                                    |
|-----------------------|--------------------------------|-------------------------------------------------------------------|
| Active AI priorities  | 14 loosely defined ideas       | 5 funded or actively evaluated priorities                         |
| Use-case ownership    | Inconsistent                   | Named sponsor and owner on all active items                       |
| Governance decisions  | Ad hoc                         | Monthly Steering Group with recorded decisions                    |
| Vendor AI review      | General procurement only       | AI-specific gates used for material products                      |
| Pilot measurement     | Benefits described anecdotally | Baseline and acceptance criteria required before pilot            |
| Executive visibility  | Project-by-project updates     | One monthly portfolio dashboard                                   |
| Stopped/deferred work | Rarely documented              | Low-value or high-uncertainty work explicitly deferred or stopped |

## Why the Fractional Model Worked

The company did not need 40 hours of AI leadership every week. It needed enough senior attention to keep decisions moving, maintain discipline, and connect specialists who otherwise saw only one part of the problem.

Because the Fractional CAIO was not trying to sell a particular software platform, the role could challenge vendors, stop weak projects, and redirect effort toward use cases with clearer business value.

## What the Client Owned at Handoff

- A current AI roadmap with owners, timing, dependencies, and decision gates.
- An operating Steering Group cadence and decision register.
- A repeatable intake process for new AI requests.
- Pilot scorecards and acceptance criteria for active initiatives.
- An AI-aware vendor evaluation process.
- A monthly executive reporting format.
- Named internal owners capable of operating the process with less external support.

## The Lesson

AI governance creates the rules. A roadmap creates the direction. Neither one executes itself. For organizations that are not ready to hire a full-time Chief AI Officer, a fractional executive can provide the missing ownership layer while the internal team builds capability.

## Is Fractional CAIO Support the Right Next Step?

CAVA Suite LLC works with organizations that need senior AI leadership but want a practical alternative to adding a permanent executive position. Engagements can begin after an AI Exposure Audit or Governance Setup, or directly when a company already has sufficient visibility and controls.