



folium

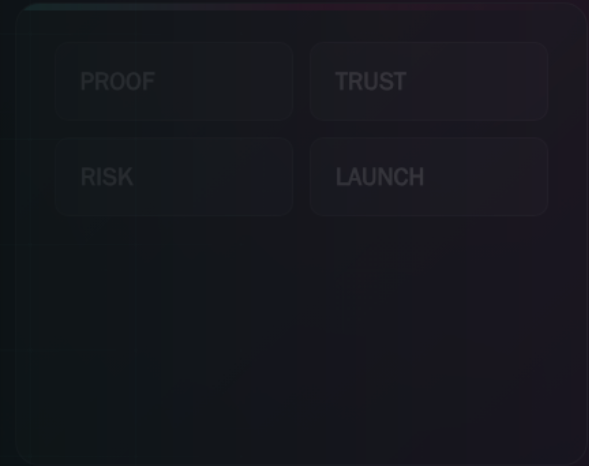
PUBLIC-FACING PDF

REVIEW BEFORE PRODUCTION

FOLIUM SYSTEMS

FORWARD ENGINEERING FIELD GUIDE

Folium Forward Engineering Field Guide



Folium Forward Engineering is the delivery discipline between advice and production dependency. We enter the process, name the pressure, design the system, build the working surface, connect the tools and data, evaluate behavior, govern launch, and hand off operations with records the buyer can inspect.

AUDIENCE

Owners, operators, executives, technical buyers, and AI launch sponsors

PURPOSE

Define the Folium method from discovery through operating handoff

UPDATED

May 2026

Forward engineering turns AI confusion into a visible operating path.

The method is model-agnostic because the value is the operating layer around the model.

Every stage should leave behind records: maps, surfaces, tests, gates, owners, and handoff material.

FORWARD ENGINEERING METHOD

Advice becomes capability when the build path is engineered end to end.

Folium Forward Engineering moves from workflow discovery to system design, build, integration, evaluation, governance, launch, and operations with review records at every gate.

FORWARD ENGINEERING



01

Names Folium's category with more force than consulting alone.

02

Shows the buyer where each deliverable enters the path.

03

Keeps the method model-agnostic and operating-layer focused.

Choose the review route before reading cover to cover.

This packet is meant to support a real decision meeting. Different reviewers should enter through different routes, then come back together around the same controlled next step.

DECISION ROUTE

OPERATING ROUTE

TRUST ROUTE

EXECUTIVE ROUTE

Decision first

Start with the cover, visual summary, executive read, controls, first ninety days, and handoff. This route helps leaders decide whether the next move is education, audit, first build, pilot, or operations.

- Outcome
- Risk
- Owner
- Next gate

OPERATIONS ROUTE

How the work will run

Read the workflow map, procedures, operating roles, metrics, first sprint, and buyer worksheet. This route shows whether staff can actually use, review, and improve the future process.

- Workflow
- Staff
- Support
- Improve

TECHNICAL AND TRUST ROUTE

Where the boundaries live

Focus on records and work products, controls, risk assumptions, reference work products, source truth, runtime placement, and launch conditions before any private access expands.

- Source
- Access
- Runtime
- Rollback

BUYER SESSION ROUTE

Turn reading into a working session

Use the discovery questions, role review route, buyer worksheet, and engagement fit ladder to prepare one process, one owner, one source map, and one next decision.

- Process
- Examples
- Questions
- Decision

Best use: bring one workflow, the people who own it, the systems it touches, the data classes involved, and the decision this packet should help leadership make.

Forward engineering field guide in plain language.

Folium Forward Engineering is the delivery discipline between advice and production dependency. We enter the process, name the pressure, design the system, build the working surface, connect the tools and data, evaluate behavior, govern launch, and hand off operations with records the buyer can inspect.

RECORD

BOUNDARY

ACTION

CATEGORY

Not just consulting

Consulting can diagnose. Forward engineering enters the workflow and builds the thing the business can inspect.

- Embedded workflow review
- Technical scoping
- Working surface

METHOD

From discovery to operations

The delivery path moves from diagnosis into system design, integration, evaluation, governance, launch, and operating support.

- Design bench
- Build lane
- Launch room

CONTROL

Review before dependency

Folium keeps each step visible before customer data, live provider access, or business-critical action enters scope.

- Known limits
- Approval gates
- Rollback path

FIT

Model-agnostic operating layer

OpenAI, Claude, Qwen, local models, Ollama, vLLM, SGLang, RAG, databases, and agents can each fit the right lane.

- Runtime placement
- Source grounding
- Human review

This packet is public-facing. It is written for serious review without exposing private infrastructure, customer data, credentials, live provider wiring, or internal project labels.

The operating path should be visible before anyone trusts the outcome.

Folium uses workflow maps to turn broad AI ambition into inspectable work. Each phase names the procedure, the visible output, and the decision gate that prevents excitement from outrunning control.

DECISION GRID

REVIEW LENS

NEXT STEP

PHASE	PROCEDURE	VISIBLE OUTPUT	DECISION GATE
Diagnose	Interview owners, map pain, identify repeated work, name data classes, and choose the first safe lane.	Pressure map and first-process candidate list.	The problem is narrow enough to test.
Scope	Translate the chosen process into users, systems, permissions, records, risks, and acceptance criteria.	Technical scope and review boundary.	The buyer can explain what is in and out.
Design	Design the working surface, data path, model route, agent behavior, review states, and fallback path.	Architecture sketch and experience map.	The system has owners and visible stops.
Build	Create the sandbox, workflow screen, RAG assistant, agent lane, dashboard, integration adapter, or control room.	Clickable surface with testable behavior.	Stakeholders can touch and challenge it.
Integrate	Connect approved APIs, files, databases, documents, commerce tools, legacy systems, or local runtimes.	Integration map and source-custody record.	No source or provider boundary is hidden.
Evaluate	Run prompts, routes, edge cases, browser checks, retrieval checks, and known-limit review.	Evaluation file and blocker list.	Behavior is strong enough to pilot or refine.
Govern	Define access, permissions, human review, logging, blocked actions, support, and rollback.	Governance layer and launch gate.	The buyer knows who can approve what.
Operate	Hand off operating cadence, release notes, source refresh, monitoring, staff feedback, and improvement loop.	Operations playbook and improvement backlog.	The first win can improve without losing control.

The work should leave behind material a buyer can inspect.

A serious engagement should produce more than conversation. Folium packages records, diagrams, checklists, routes, system surfaces, launch gates, and handoff material so the buyer can keep control after the first win.

DECISION GRID

REVIEW LENS

NEXT STEP

WORK PRODUCT	WHAT IT CONTAINS	HOW THE REVIEWER USES IT
Workflow pressure map	Pain points, owners, systems, handoffs, repeated decisions, exposed risk, and desired outcome.	Confirms the project starts from business pressure, not tool enthusiasm.
System design sheet	Runtime choices, interfaces, source truth, databases, APIs, model routes, and fallback paths.	Shows how the future system will be assembled.
Working surface	Prototype, portal, dashboard, RAG assistant, workflow, agent route, or control room.	Lets users test the process before production risk.
Evaluation harness	Test cases, prompts, retrieval checks, browser checks, edge cases, and blocker definitions.	Reveals behavior quality before dependency grows.
Governance layer	Permissions, access roles, approval states, audit trail, blocked actions, and review cadence.	Makes authority visible.
Launch room	Owner map, support plan, training notes, rollback triggers, incident path, and go/no-go record.	Turns a build into an operating decision.

The procedure is the product as much as the technology.

The goal is not to make AI look impressive for one meeting. The goal is to make the operating path repeatable, explainable, reviewable, and safe enough to improve.

CHECKLIST

OWNER PATH

RELEASE SIGNAL

- Start every engagement by naming the business process in plain language.
- Separate public review, scoped discovery, sandbox build, pilot, and production operations.
- Keep source truth visible: which documents, databases, systems, people, and policies are authoritative.
- Define what AI may draft, retrieve, route, recommend, or never do without approval.
- Build a working surface early enough for stakeholders to challenge the process.
- Test behavior against edge cases, stale sources, wrong answers, and human escalation points.
- Record the known limits instead of hiding them in a polished walkthrough.
- Define the owner who can stop, approve, refine, or expand the system.
- Prepare rollback before launch, not after the first incident.
- End each phase with a decision record and next-stage gate.

Governance, quality, and launch gates keep speed honest.

Folium keeps the buyer's next decision tied to observable gates: source truth, authority, access, testing, ownership, support, rollback, and improvement cadence.

DECISION GRID

REVIEW LENS

NEXT STEP

GATE	WHAT MUST BE TRUE	STOP OR REFINE SIGNAL
Scope gate	Process, owner, data class, desired outcome, and excluded actions are named.	The work is still broad, vague, or tool-led.
Source gate	Documents, databases, APIs, and systems have custody and freshness rules.	Source truth is unclear or duplicated.
Behavior gate	The model, RAG, or agent path passes representative tasks and edge cases.	The system is confident but wrong or cannot explain its source.
Authority gate	Human review points and blocked actions are enforced, not merely suggested.	AI can act outside its approved role.
Launch gate	Support, rollback, monitoring, training, and incident paths are documented.	The team cannot operate the system after handoff.

The right questions expose the real project.

These prompts help a buyer and Folium decide whether the next step should be education, audit, first build, security review, pilot, or an operating support path.

CHECKLIST

OWNER PATH

RELEASE SIGNAL

- What process is slow, risky, expensive, repetitive, confusing, or exposed?
- Who owns the process today, and who will own the AI-assisted version after launch?
- Which systems, files, databases, stores, forms, inboxes, or tools does the process touch?
- Which decisions must stay human-owned no matter how capable the AI becomes?
- What would a safe first working example show in two weeks or less?
- What data cannot leave the business, cannot enter a public model, or cannot be used at all?
- What failure would cause harm, customer confusion, compliance risk, staff resistance, or financial loss?
- What record would make leadership comfortable with the next step?

Diagrams, charts, and overlays make the work easier to review.

Dense AI work should not only be explained in paragraphs. The reviewer should be able to inspect maps, scorecards, matrices, lanes, and before-after views that reveal where the value and risk live.

RECORD

BOUNDARY

ACTION

Discovery-to-operations lane

A horizontal flow from diagnose to operate with visible decision gates between each phase.

- Diagnose
- Scope
- Design
- Build
- Operate

Authority overlay

A layered map showing where AI drafts, where humans approve, and where actions are blocked.

- Draft
- Recommend
- Escalate
- Block

Runtime placement matrix

A chart comparing cloud API, private endpoint, local model, hybrid route, and manual fallback.

- Cost
- Privacy
- Latency
- Control

Launch room board

A review surface for owners, blockers, support, training, rollback, and improvement backlog.

- Owner
- Gate
- Incident
- Release

Every serious AI path needs named owners before it becomes dependency.

The same technology can be safe or unsafe depending on who owns the workflow, data, quality, launch authority, support, and improvement loop. Folium makes those responsibilities explicit so no buyer inherits an orphaned system.

DECISION GRID

REVIEW LENS

NEXT STEP

ROLE	OWNS	RECORD TO INSPECT
Executive sponsor	Priority, budget, risk tolerance, stop/continue decision, and expansion timing.	Decision note, value hypothesis, and approval boundary.
Business process owner	The day-to-day work, acceptance criteria, staff impact, and operational usefulness.	Workflow map, user feedback, and adoption notes.
Technical owner	Systems, APIs, databases, runtime placement, deployment, monitoring, and fallback.	Architecture map, integration log, and support route.
Knowledge owner	Source truth, document freshness, policies, retrieval scope, and correction workflow.	Source inventory, freshness cadence, and review exceptions.
Security or risk reviewer	Data classes, credentials, access, logs, retention, blocked actions, and incident path.	Boundary map, permission table, and rollback trigger.
Folium delivery lead	Build coordination, review file, known limits, quality checks, and handoff completeness.	Launch room, eval record, and improvement backlog.

A max-detail packet should tell reviewers how to judge the work.

Folium uses scorecards to make a subjective AI conversation more inspectable. The score is not a substitute for judgment; it helps leadership see whether the next step is education, repair, sandbox, pilot, or operations.

DECISION GRID

REVIEW LENS

NEXT STEP

SCORE AREA	STRONG SIGNAL	WEAK SIGNAL
Business fit	The workflow is specific, painful, owned, and tied to measurable operational improvement.	The project is framed as adding AI generally.
Source truth	Approved sources are known, fresh, classified, and connected to the answer path.	The system mixes stale, unknown, or unapproved sources.
Behavior quality	Representative tasks pass, wrong-answer behavior is known, and edge cases are recorded.	The review build only shows a polished happy path.
Authority control	AI actions are separated into draft, retrieve, recommend, route, execute, block, and escalate.	The system can act without visible permission.
Staff readiness	Users can explain the tool, correct it, escalate, and understand their role.	Staff feel replaced, confused, or unsupported.
Operations readiness	Support, monitoring, rollback, release rhythm, and source refresh are owned.	No one knows who maintains the system after launch.

The work should have a believable first ninety days.

A controlled first ninety days keeps ambition high without turning uncertainty into production risk. Folium uses the period to move from understanding into a narrow working example, then into reviewable operating rhythm.

DECISION GRID

REVIEW LENS

NEXT STEP

WINDOW	FOCUS	EXPECTED OUTPUT
First 30 days	Discovery, source inventory, first-lane selection, staff interviews, data boundary, and build plan.	Process map, owner map, first-build scope, source list, and launch blockers.
Days 31-60	Working surface, RAG or agent behavior, integration stub, evaluation cases, browser checks, and staff review.	Sandbox, evaluation file, screenshots, known limits, and repair list.
Days 61-90	Architecture review, pilot conditions, governance layer, training guide, support path, and improvement cadence.	Launch room, go/no-go record, operations guide, and next-stage recommendation.

The hidden assumptions should be visible before they become expensive.

Every AI engagement contains assumptions about data, people, systems, cost, behavior, and authority. Folium treats those assumptions as review material, not background noise.

DECISION GRID

REVIEW LENS

NEXT STEP

ASSUMPTION	WHY IT MATTERS	HOW FOLIUM REVIEWS IT
The source is authoritative	AI can only be as reliable as the sources and business rules it is allowed to use.	Source inventory, owner confirmation, retrieval tests, freshness cadence.
The process is ready	A broken process can become a faster broken process when AI is added too early.	Workflow mapping, bottleneck review, owner interview, first-lane narrowing.
The runtime fits the data	Cloud, private, local, and hybrid routes carry different privacy, cost, latency, and support tradeoffs.	Runtime matrix, data classification, provider review, fallback plan.
Staff will adopt the tool	Adoption fails when users do not understand, trust, correct, or benefit from the system.	Training notes, staff review, feedback loop, manager visibility.
Authority is clear	The system can create harm if it sends, updates, approves, or routes without permission.	Permission table, blocked actions, human review, audit trail.
The system can be supported	A useful first build becomes fragile if nobody owns incidents, source updates, or cost review.	Support guide, owner map, release rhythm, rollback trigger.

The first sprint should produce something real and reviewable.

Folium prefers a narrow first sprint that creates a working surface or review file the buyer can challenge. The first sprint is not the final system; it is the safest way to make the future visible.

CHECKLIST

OWNER PATH

RELEASE SIGNAL

- Confirm the single process and the decision the sprint must support.
- Collect approved example material, redacted review records, public references, screenshots, workflow notes, and source rules.
- Define what will be built: portal, dashboard, RAG assistant, agent route, integration adapter, audit file, or launch room.
- Create the visual workflow: intake, source, model or agent route, human review, output, record, and next gate.
- Run representative tasks, edge cases, bad input, missing data, and blocked-action tests.
- Prepare browser screenshots, known limits, support questions, and next-stage blockers.
- Review with staff and leadership before expanding data, access, authority, or dependency.
- End with a decision: stop, refine, rebuild, pilot, or prepare an operating plan.

The packet should make the invisible work tangible.

AI work often fails because the important pieces are invisible until something breaks. Folium turns those pieces into work products the buyer can open, print, challenge, and improve.

RECORD

BOUNDARY

ACTION

Process map

A before-and-after workflow showing people, systems, data, decision points, blockers, and expected output.

- Before
- After
- Owner
- Gate

Data boundary map

A map of source classes, approved use, blocked use, retention, provider exposure, and custody.

- Public
- Internal
- Private
- Blocked

Model and agent route

A path showing which model, tool, retrieval source, or agent lane is used and where humans approve.

- Route
- Tool
- Review
- Escalate

Evaluation file

A record of tasks, expected outcomes, failures, repairs, known limits, and acceptance criteria.

- Cases
- Failures
- Repairs
- Limits

Launch room

A board for owners, support, training, rollback, incidents, go/no-go, and improvement backlog.

- Owner
- Support
- Rollback
- Backlog

Handoff guide

A plain-language guide staff can use to understand what the system does, cannot do, and how to report problems.

- Use
- Limit
- Correct
- Report

The business should know how improvement will be measured.

Folium keeps measurement practical. The first goal is not a perfect dashboard; it is a clear set of signals that shows whether the process is saving time, reducing risk, strengthening staff, or improving customer outcomes.

DECISION GRID

REVIEW LENS

NEXT STEP

SIGNAL	WHAT TO WATCH	DECISION IT SUPPORTS
Time recovered	Manual steps removed, average handling time, repeated work reduced, faster routing.	Should this workflow expand to more users or adjacent processes?
Quality improved	Wrong answers, missing sources, correction rate, review exceptions, customer rework.	Is behavior strong enough for pilot or does it need repair?
Risk reduced	Blocked unsafe actions, escalations, data-boundary violations avoided, rollback readiness.	Can authority expand or should controls remain tight?
Staff confidence	Training completion, feedback volume, adoption friction, override rate, manager notes.	Does the workforce need more support before launch?
Cost and runtime	Provider cost, local infrastructure cost, latency, uptime, fallback use, subscription sprawl.	Should runtime placement change?
Customer impact	Response speed, consistency, issue resolution, conversion support, satisfaction signals.	Is the capability improving the business outcome?

Each reviewer should know what to inspect first.

A max-detail packet is only useful when different reviewers can find their lane quickly. Folium separates executive, operations, technical, security, finance, and staff questions so the buyer can bring the right people into the right part of the review.

DECISION GRID

REVIEW LENS

NEXT STEP

REVIEWER	START WITH	DECISION THEY SUPPORT
Executive sponsor	Value hypothesis, launch gate, first ninety days, and stop/refine/continue choices.	Whether the process deserves a controlled engagement.
Operations lead	Workflow map, operating roles, support rhythm, and staff feedback loop.	Whether the future process can be run by the team.
Technical lead	Runtime placement, data path, integration surface, monitoring, and fallback.	Whether the architecture can be supported safely.
Security or risk reviewer	Data classes, permissions, blocked actions, logs, retention, and rollback.	Whether access can expand beyond public review.
Finance or owner	Cost signals, subscription overlap, runtime tradeoffs, labor impact, and support burden.	Whether the first build has a practical business case.
Staff user	Plain-language use, limits, escalation, correction path, and training expectations.	Whether the tool strengthens the job instead of confusing it.

The packet should turn into a working session, not only reading material.

Before a call, Folium wants the buyer to gather the real operating pieces that make the review useful. The worksheet keeps the conversation grounded in one process, one owner, one source map, and one next decision.

CHECKLIST

OWNER PATH

RELEASE SIGNAL

- Bring one workflow that is slow, risky, expensive, repetitive, customer-visible, or staff-heavy.
- Name the systems touched by the workflow: store, CRM, ERP, inbox, spreadsheet, database, portal, document folder, or legacy application.
- Separate approved public material from internal, customer, regulated, confidential, credential, and blocked material.
- Write down who owns the work today, who reviews exceptions, and who will own the AI-assisted version.
- List the decisions AI may draft, retrieve, recommend, route, block, or escalate, and the decisions that stay human-owned.
- Bring examples of good output, bad output, common exceptions, missing data, and customer-facing risk.
- Name the first useful working surface: dashboard, portal, assistant, queue, control room, commerce lane, integration, or review file.
- Decide what record would make leadership comfortable with the next stage.

The next step should match the maturity of the record.

Folium does not need every buyer to start at the same altitude. The right offer depends on how much process clarity, source truth, owner alignment, and launch readiness already exists.

DECISION GRID

REVIEW LENS

NEXT STEP

IF THE BUYER HAS	BEST NEXT FOLIUM MOVE	OUTPUT TO EXPECT
AI interest but no clear process	AI systems audit or first workflow finder.	Pressure map, source inventory, first-lane recommendation, and risk view.
A clear process but no working surface	Forward engineering first sprint.	Clickable surface, route map, known limits, and next-stage blockers.
A tool that works in parts but not in operations	Architecture and launch readiness review.	Permission map, runtime decision, support model, and go/no-go record.
A failed or frightening rollout	AI recovery and staff enablement path.	Issue register, staff training plan, repair roadmap, and confidence loop.
Sensitive data or cost pressure	Local, private, or hybrid AI placement review.	Runtime matrix, data custody plan, fallback route, and vendor-exit view.
A useful pilot that needs care	AI operations support.	Monitoring rhythm, source refresh, release notes, incident path, and improvement backlog.

The last page of a packet should create the next controlled move.

Folium's handoff view separates what can be done now, what needs customer records, what needs approval, and what should wait until the review file is stronger.

DECISION GRID

REVIEW LENS

NEXT STEP

HANDOFF LANE	OWNER	NEXT RECORD
Buyer owner	Business sponsor	Signed process map and outcome definition.
Technical owner	IT or implementation lead	Architecture, integration, runtime, and security notes.
Review owner	Operations or compliance lead	Known limits, blocker list, and approval log.
Support owner	Folium and customer operator	Launch room, incident path, and improvement backlog.

The strongest next step is narrow: one process, one owner, one source map, one working surface, one review file, and one decision gate.

Forward engineering earns trust by making the future process visible.

Use this guide to select one process Folium can inspect, map, build, test, govern, and hand off through a controlled path.

Bring the process

Name the business process, the systems involved, the people affected, and the decision this PDF should support.

Separate review from production

Keep public examples, sandbox review, pilot access, and production dependency in separate stages with clear owners.

Ask for the record

Request screenshots, browser checks, known limits, launch blockers, support plans, and the next approval path.