

VEKTOR
BY
INVESTPUPPY

OUR BETTER WAY · VEKTOR BY INVESTPUPPY

Implementation at VEKTOR : HOUSE

*What we built in response to what we witnessed — a staged, gated
engagement at institutional scale.*

Institutional-scale financial software implementations fail at a higher rate than boutique ones — and at a higher cost when they do. More stakeholders, more integration points, more governance layers, and more distance between the people who signed the contract and the people who will use the system. Every failure mode the Unvarnished series documented exists at boutique scale. At institutional scale, each one is amplified. This paper describes how the Vektor : House implementation pathway was structured to address them directly.

Public distribution. Written for technical and operational leads at prospective institutional partners — not as a sales document, but as an honest account of how we approach institutional implementation and why.

OUR BETTER WAY · THE SERIES

The Unvarnished series documented what we witnessed in the rooms where financial software implementations fail — thirteen papers, published under the InvestPuppy name, naming the failure modes clearly because naming them seemed more useful than another optimistic vendor promise.

Our Better Way is the other half of that account. Each paper describes what we built in response to what we witnessed: the architectural decisions, the engineering discipline, and the operational choices that define how InvestPuppy approaches the problems the Unvarnished series named. Not theory. A record of how we applied what we learned.

THE INSTITUTIONAL IMPLEMENTATION PROBLEM

Why every failure mode we documented becomes harder at institutional scale.

The thirteen papers in the Unvarnished series documented structural failure modes in financial software implementations. None are boutique-specific. But every one is worse at institutional scale — because institutional scale adds layers: more stakeholders, more integration points specified too late, more governance, more distance between decision-maker and operational reality. A boutique implementation that fails costs months. An institutional one costs years.

Failure modes at scale:

Nobody owns it (UNV-02): At boutique scale — two parties, one accountability gap. At institutional scale — multiple parties and governance layers between the decision-maker and the decision.

Plan before discovery (UNV-04): At boutique scale — one practice's workflow underdocumented. At institutional scale — multiple business units, each with exceptions, workarounds, and legacy dependencies.

Invisible stakeholders (UNV-06): At boutique scale — a compliance officer not in the room. At institutional scale — compliance, risk, operations, legal, IT, client reporting, each with separate requirements.

The change request trap (UNV-05): At boutique scale — integration underspecified, CRs at premium. At institutional scale — multiple third-party integrations. CR exposure multiplies with each touchpoint.

UAT without users (UNV-09): At boutique scale — consultants test against the specification. At institutional scale — more functions, more reporting requirements, more temptation to outsource UAT.

Life after live (UNV-08): At boutique scale — workaround economy in one practice. At institutional scale — workaround economies across multiple departments, each invisible to the others.

Adding people late (UNV-10): At boutique scale — coordination tax on a small team. At institutional scale — sixty-six communication channels. Rework multipliers applied to a larger codebase.

BEFORE CONFIGURATION BEGINS

Ownership, discovery, and the stakeholder question — resolved before week one.

Three things must be true before a financial software implementation begins: named ownership on both sides with real authority, a completed discovery that reflects how the organisation actually operates, and a stakeholder map that includes the people who do the work. The Vektor : House pathway addresses all three before the engagement begins.

Named ownership with real authority:

The Unvarnished failure: Both parties assume the other owns the implementation. By week six the accountability gap has become the only question that matters. (UNV-02)

The Vektor : House approach: Stage 1 establishes named decision-makers on both sides before any configuration begins — with authority to make workflow decisions without referral upward.

Discovery before configuration:

The Unvarnished failure: The project plan is produced before anyone understands the workflow. Configuration begins. Discovery findings arrive in week three. Change requests follow. (UNV-04)

The Vektor : House approach: Stage 2 includes a structured integration architecture assessment before any configuration commitment. The proof of concept runs on the partner's actual mandate data — not a synthetic dataset.

Visible stakeholders before go-live:

The Unvarnished failure: Compliance, risk, and reporting leads are on the stakeholder map but not in the configuration workshops. They discover the system at go-live. (UNV-06)

The Vektor : House approach: Stage 2 maps every function that will use the system and every report it will produce. Sign-off on the integration architecture requires sign-off from the people who will use the outputs.

THE STAGED AND GATED PATHWAY

Why the engagement is structured in stages — and why the gates are real.

The Vektor : House engagement is staged and gated. Each stage has defined deliverables and a defined trigger for advancement. The gates are not formalities — they are the mechanism by which the cost of a wrong direction is contained. A Stage 1 that concludes without fit costs both parties a conversation. A Stage 2 that concludes without fit costs both parties a proof of concept. Neither costs what a failed live implementation costs.

Stage	What happens · What is established	Gate trigger
Stage 1 Conversation / NDA	Founding team call. Both parties describe their operation: mandate structure, markets, existing infrastructure, governance, and integration dependencies. Named decision-makers. Mutual NDA. Explicit confirmation of fit — or honest conclusion that fit does not exist.	Mutual agreement that Stage 2 is the right next step.
Stage 2 Proof of concept and scoping	Full Vektor workflow on the partner's actual mandate data. Structured integration architecture assessment across all integration points. Documented integration architecture contributed to by both parties. Proof of concept output evaluated on real data. One Alloy Partner at Stage 2 at a time.	Both parties have validated the proof of concept and contributed to the integration architecture.
Stage 3 Commercial	Commercial negotiation between two parties who know exactly what they are agreeing to, having completed Stages 1 and 2. A commercial agreement grounded in a documented integration architecture, a validated proof of concept, and an agreed operational definition of what success looks like.	Completion of Stage 2 with explicit agreement from both parties.

Stage 2 capacity is limited: one Alloy Partner at a time. This is the structural guarantee that the engagement receives the attention it requires. An overcommitted vendor is a risk to the partner. The Unvarnished series documented that from the inside.

IF THE ENGAGEMENT DOES NOT PROCEED

If either party concludes the engagement is not the right fit at any stage, the off-ramp is structured. The NDA remains in force. Mandate data used in the Stage 2 proof of concept is returned or destroyed on request — not retained for any other purpose. The integration architecture document produced in Stage 2 remains confidential to both parties. There is no ongoing commercial obligation beyond any costs explicitly agreed for Stage 2. The gate exists to make this outcome low-cost, not to make it difficult.

WHAT BOTH PARTIES COMMIT TO BEFORE STAGE 3

InvestPuppy commits to:	The Alloy Partner commits to:
– A named founding team member as the primary engagement lead for the duration of the relationship.	– A named decision-maker with the authority to make workflow decisions without referral upward — not a project sponsor.
– Stage 2 workshops conducted by the people who built the platform, not a delivery team that inherited the sales commitments.	– Stage 2 workshop participation by the people who do the work: compliance officer, operations analyst, risk team lead — not their representatives.
– An honest account of what is live, what is in progress, and what is being built — before Stage 3 is agreed.	– Allocated time for genuine UAT: the people who will use the system in production, on real transactions, with authority to reject.

PLANNING FROM EVIDENCE, NOT ASSUMPTION

When the plan is built, what it contains, and who builds it.

UNV-04 described the sequence problem: the plan is produced before anyone has understood the workflow. For Vektor : House, the plan is built after Stage 2 — not before. The integration architecture document produced in Stage 2 is the input. Both parties build the plan jointly. A partner who has not contributed to the plan does not believe in it.

Each phase has defined entry and exit criteria — not milestones on a Gantt chart. A milestone is a date. An exit criterion is a condition. The sequencing dependencies below cannot be compressed by adding people (UNV-10). Infrastructure cannot be parallelised: Network → Security → Platform → Services. Each layer must be complete before the next begins.

Phase 1 — Infrastructure foundation:

Entry: Stage 2 integration architecture agreed by both parties.

Work: Network → Security → Platform → Services. The sequence cannot be compressed.

Exit: Each layer complete before the next begins. Platform layer stable and security-reviewed. No integration work begins before this criterion is met.

Phase 2 — Integration implementation:

Entry: Phase 1 exit criterion met.

Work: Market data inbound, PMS bidirectional, custodian connectivity, compliance reporting outbound. Each built to the API contract agreed in Stage 2. Contract violations detected in CI — not at testing.

Exit: All integration points operating as specified in the Stage 2 architecture document. Both parties confirm.

Phase 3 — RBAC and governance configuration:

Entry: Phase 2 exit criterion met. Governance requirements documented and agreed by the compliance function.

Work: Maker/checker workflow configured to reflect the institution's documented governance requirements. Role definitions agreed with compliance — not assumed from the architecture.

Exit: Compliance function sign-off on the RBAC configuration. Not project team sign-off on behalf of compliance.

Phase 4 — Data migration and parallel running:

Entry: Phase 3 exit criterion met.

Work: Historical data migrated. System run in parallel with the legacy system. Output compared against the legacy benchmark for every report with a regulatory dimension. Discrepancies resolved before Phase 5.

Exit: System output matches legacy benchmark within agreed tolerances. Compliance function confirms.

Phase 5 — User acceptance testing:

Entry: Phase 4 exit criterion met.

Work: UAT conducted by the people who will use the system in production. Test scripts include the twenty most common workflow exceptions. Sign-off authority rests with users — not the project team.

Exit: Every function that will use the system has signed off. No outstanding failures. No project team overrides of user rejection.

Phase 6 — Cutover and go-live:

Entry: Phase 5 exit criterion met.

Work: Cutover is an operational event, not a technical one. The cutover plan is reviewed by the users who will execute it. Go-live is declared when the compliance function confirms regulatory output in the parallel run — not on a calendar date.

Exit: Both parties confirm go-live conditions are met. A condition signed off by the people accountable for what happens next.

Post-live commitments:

Entry: Go-live confirmed.

Work: 60-day workaround audit. First reporting period regulatory validation. 90-day adoption review. Named account management throughout.

Exit: 90-day adoption review complete. No material workarounds. Regulatory output validated.

SCOPE CHANGE HANDLING

The change request mechanism from UNV-05 is a commercial problem because it reprices scope changes after the partner's negotiating position has weakened. The Stage 2 integration architecture document is the scope baseline. Every change is assessed against it before it is accepted.

Refinement (within architecture):

Does not alter the Stage 2 integration architecture — a configuration decision, workflow variation, or reporting format adjustment. Assessed jointly against the Stage 2 baseline. If confirmed: implemented without additional commercial negotiation. Rationale recorded.

Extension (beyond architecture):

Requires modifying the integration architecture — an additional integration point, new data source, or governance requirement not present in Stage 2. Impact assessed before the change is accepted. Cost and timeline agreed before any build begins. Priced at the rate agreed at Stage 3.

Architecture redesign:

Requires revisiting foundational decisions — data model changes, domain boundary changes, infrastructure topology changes. Full cascade impact agreed before redesign begins: what was built on the changed

foundation, what must be rebuilt, what downstream work is affected. (UNV-10 rework multiplier applies.)

SUCCESS AND FAILURE CRITERIA

UNV-02 named the requirement: both parties must agree, explicitly, on what success looks like in operational terms. These five criteria are agreed at Stage 3, before the plan is built.

Regulatory output:

System produces the required regulatory output from the system, not around it. Output matches the parallel-run benchmark within agreed tolerances. Confirmed at close of first post-live reporting period by the compliance function — not the project team.

Governance compliance:

The maker/checker workflow reflects documented governance requirements. Every order has passed through the required approval chain. Confirmed at go-live and at the 60-day workaround audit by the compliance function and named account lead.

Integration fidelity:

All integration points operating as specified in the Stage 2 architecture document. No undocumented dependencies have emerged. Confirmed at 60-day workaround audit by both parties against the Stage 2 document.

Genuine UAT:

User acceptance testing signed off by the people who use the system in production — not by a project team member on their behalf. Confirmed before go-live. Non-negotiable gate. Each function that uses the system.

Adoption:

No material manual processes built around the system that were not present in the Stage 2 integration architecture. Confirmed at 90-day adoption review by the named account lead with operational leads.

Failure conditions:

Stage 2 proof of concept does not validate: If Vektor does not produce credible output on the partner's actual mandate data, we say so. The engagement concludes at Stage 2. No obligation proceeds.

Integration architecture cannot be made to work: If the partner's technical constraints cannot be accommodated within the integration architecture, we say so at Stage 2 — not after configuration has begun.

RBAC requirements cannot be met before go-live: If the maker/checker workflow required by the partner's governance framework cannot be implemented before go-live, the go-live date moves. The system does not go live without it.

INTEGRATION IS THE IMPLEMENTATION

Not the afterthought. The thing itself.

UNV-01 named it: integration is not a peripheral concern. It is the implementation. Treating any integration point as a detail to be resolved after configuration is the decision that produces the change request cascade UNV-05 described. At institutional scale, the integration surface is larger: an existing PMS, a compliance system, a risk reporting layer, one or more custodian feeds, and the identity architecture that governs all of them.

Market data inbound:

Price feeds, instrument master data, exchange rates, corporate actions. Scoped in Stage 2 — data model decisions depend on the source schema. Risk if left late: data model built for one feed. Source changes or second feed added. Schema mismatch requires rebuild of the market data domain.

External PMS bidirectional:

Position data in, allocation data out. The most complex integration point. API contract agreed in Stage 2 before either side builds. Risk if left late: Vektor built for one PMS API. Partner migrates PMS. Integration rebuilt from scratch. This is UNV-05 at institutional scale.

Custodian connectivity:

Order routing outbound, fill confirmation inbound, position reconciliation. Scoped in Stage 2 — requirements vary significantly by custodian. Risk if left late: execution layer built for standard custodian API. Partner uses non-standard protocol. Go-live delayed by work that should have been scoped in month one.

Compliance and reporting outbound:

Regulatory reports, risk reports, client reporting. Every report recipient identified and requirements documented in Stage 2 before architecture is finalised. Risk if left late: reports built to specification. Compliance discovers at the first post-live reporting period that output does not match what the regulator requires. Reportable event.

Identity and access management:

RBAC, user provisioning, maker/checker workflow, and — for hybrid deployments — the client-controlled identity vault. Scoped in Stage 2. Risk if left late: single-user configuration deployed to an institution with formal governance requirements. Maker/checker not present. Pre-live blocker.

DATA GOVERNANCE AT INSTITUTIONAL SCALE**Client identity, data residency, and the hybrid deployment option.**

The most substantive functional difference between deployment configurations is what happens to client identifying information. At boutique scale, standard cloud data processing under a Data Processing Agreement is typically adequate. At institutional scale, the question is often determined by regulatory requirements, banking secrecy obligations, or institutional policy that predates the Vektor engagement.

	Standard cloud Vektor : House	Hybrid identity vault Vektor : House
InvestPuppy holds	Client names and identifying information under a Data Processing Agreement with institutional terms and audit rights. Breach position: A breach of InvestPuppy's cloud constitutes a personal data breach. When this applies: Where the regulatory framework permits standard cloud data processing under a robust institutional DPA.	Pseudonymised portfolio data only. Client names and identifying information never enter InvestPuppy's systems at any point. Breach position: A breach of InvestPuppy's cloud does not constitute a personal data breach. "We have never seen your clients' names." When this applies: Where client identity must not leave the partner's infrastructure. Architecture designed; deployment in active development.

The hybrid identity vault is not a premium variant. It is a data governance configuration available to any Vektor : House client whose requirements make it appropriate. The architecture is designed. Deployment requires a partner to build it with — which is what the Alloy Partners programme is for.

GOVERNANCE, UAT, AND THE PEOPLE WHO USE THE SYSTEM

The user is not decorative. Neither is the U in UAT.

UNV-09 made the point directly: a consultant running UAT from a test script derived from the specification is not testing whether the system works for the people who will use it. At institutional scale the failure mode is more acute: more functions, more reporting requirements, more temptation to outsource UAT. The cost when it goes wrong is proportionally higher.

Who runs the tests:

Standard failure: Consultants with test scripts. The U is removed before UAT begins.

Vektor : House approach: The people who will process transactions, produce reports, and handle exceptions in production. Not delegates.

What the test scripts cover:

Standard failure: The specification — produced before discovery was complete.

Vektor : House approach: Test scripts built with users before UAT begins. The twenty most common workflow exceptions are explicitly included.

Sign-off authority:

Standard failure: The project manager can override a user's rejection. This is documentation of the gap that will appear at go-live.

Vektor : House approach: Sign-off rests with the users. Project team override of user rejection is not permitted. The user's judgment is the test.

Regulatory reporting validation:

Standard failure: Discovered at the first post-live reporting period. Project closed. Remediation is a new project.

Vektor : House approach: Conducted before go-live in parallel run: system output compared against legacy output for every report with a regulatory dimension.

RBAC with maker/checker workflow is Priority 1 on the Vektor pre-live engineering roadmap. The architecture is designed. The implementation is being built with the first Alloy Partner. We name it here because UNV-06 named the failure mode: a requirement not in the room during design appears at go-live as a blocker.

WHAT WE ARE STILL BUILDING

Honest disclosure of the institutional path under active development.

The Unvarnished series documented a specific failure: the vendor who describes a capability that does not exist, or that exists in a different form from the one sold. This is the honest account of what is live, what is in progress, and what is being built with the first Alloy Partner.

Eleven-step portfolio workflow — Live:

Signal selection, optimisation, lot sizing, order generation, and full audit trail. Any listed equity market, any exchange, any currency. Multiple concurrent mandates.

Proof of concept on partner data — Live:

Stage 2 runs the full Vektor workflow on actual mandate data. Output: efficient frontier, correlation matrix, max-Sharpe allocation, per-instrument signal selection.

Integration architecture scoping — Live:

Live as a structured Stage 2 process. Deliverable: a documented integration architecture contributed to by both parties.

RBAC and maker/checker workflow — Priority 1, pre-live:

Architecture designed. Single-user mode operational. The maker/checker implementation is being built with the first Alloy Partner.

External PMS integration — In progress:

Integration architecture scoped during Stage 2. API contract design complete for standard protocols. Implementation is partner-specific.

Hybrid identity vault deployment — In progress:

Architecture designed. Client-controlled identity vault being built with the first Alloy Partner. Standard cloud deployment available now.

Institutional SLA and named account management — Stage 3:

Named account management committed from Stage 3. Formal SLA terms defined during commercial negotiation with the first Alloy Partner.

Client reporting portal — Roadmap:

Compliance documentation and audit trail available in the current platform. Dedicated client reporting portal on the institutional roadmap.

LIFE AFTER LIVE AT INSTITUTIONAL SCALE**The implementation does not end at go-live. It begins there.**

UNV-08 described the go-live mythology: the project plan terminates at the go-live milestone, as if go-live is an arrival rather than a starting gun. At institutional scale, workaround economies span multiple departments and some failures do not appear until the first post-live reporting period — which may be weeks or months after the project is closed.

Cutover is an operational event, not a technical one. The cutover plan is reviewed and agreed by the users who will execute it. A parallel-running period is mandatory before the legacy system is switched off. Go-live is declared when the compliance function confirms regulatory output in the parallel run — not on a calendar date.

Named account management:

Standard failure: Hypercare ends when the project ends. The issues that matter most arrive after it ends.

Vektor : House commitment: Named founding team member as account lead for the duration of the relationship. The relationship does not end at go-live.

60-day workaround audit:

Standard failure: Not conducted. Workarounds accumulate invisibly.

Vektor : House commitment: Structured review — manual processes that have emerged around the system, configuration changes that would eliminate them, and the delta between the Stage 2 architecture and the current operational reality.

Regulatory reporting validation:

Standard failure: Discovered at the first reporting period. Project closed. Remediation is a new project.

Vektor : House commitment: Conducted before the close of the first post-live reporting period: system output compared against the legacy benchmark for every regulatory report.

90-day adoption review:

Standard failure: Go-live usage reported as success. Correct usage not measured.

Vektor : House commitment: Not whether the system is being used, but whether it is being used correctly — the proportion of transactions processed through the designed workflow rather than around it.

WHAT A SUCCESSFUL IMPLEMENTATION LOOKS LIKE

A successful Vektor : House implementation is measurable against five operational criteria agreed at Stage 3: regulatory output from the system not around it; maker/checker workflow reflecting actual governance requirements; integration points operating as the Stage 2 architecture specified; genuine UAT sign-off from the people who use the system; and no material workaround economy at ninety days.

Standard institutional implementation vs The Vektor : House pathway:

Legacy approach	The Vektor approach
Plan produced before discovery	→ Plan built after Stage 2, from the integration architecture. Phases with exit criteria, not milestones with dates.
Ownership gap opens between signing and month six	→ Named decision-makers with real authority established at Stage 1.
Integration scoped after configuration begins	→ All integration points mapped and API contracts agreed in Stage 2 before any build begins.
Invisible stakeholders discovered at go-live	→ Every report recipient and integration owner identified before Stage 2 is closed.
UAT conducted by consultants against the specification	→ UAT conducted by users, on real transactions, with genuine sign-off authority.
Go-live declared on a date. Workaround economy assembles	→ Go-live declared on a condition. 60-day audit. First-period validation. 90-day adoption review.
Success undefined. Failure discovered in retrospect	→ Five operational success criteria agreed at Stage 3. Three failure criteria stated before the plan is built.

We documented what goes wrong in the rooms. This paper describes what we built to ensure we are not in those rooms again.

ABOUT INVESTPUPPY

InvestPuppy Pte Ltd is a Singapore-based financial technology company building Vektor — a systematic listed equity portfolio management platform for boutique discretionary portfolio managers, independent wealth managers, and family offices. The Vektor : House channel serves institutional DPM desks, larger family offices, and mid-size asset managers at institutional scale.

This is Paper 02 of the Our Better Way series. Paper 01 (BW-01) covers the cost of technical debt and the architectural decisions that prevent it. The full Unvarnished series — thirteen papers on the failure modes documented here — is available at investpuppy.com/unvarnished. For the Alloy Partners institutional evaluation, contact contact@investpuppy.com.