ARCWISE OPS RECON REPORT

Roark Architecture — Arcwise Ops Recon Report

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Executive summary

> Roark Architecture loses 8–10 hours per week reconciling project data across disconnected systems — a CRM, project management platform, document repository, and accounting software — because no single system of record ties drawings, revisions, client approvals, milestones, and billing triggers together. The root cause is not any individual tool failure but the absence of an enforced, connected workflow between document control and project/financial tracking. This manifests as version mismatches (causing 5–6 hours of rework per incident), billing delays or corrections on 30–40% of projects, and occasional client-facing credibility risk when approvals aren't reflected in project updates. The highest-leverage move is implementing a unified project-to-billing workflow — anchored in a single system of record — that eliminates manual reconciliation and enforces structured handoffs between design, execution, and finance.

02

Observed pain themes

Cross-System Reconciliation as a Default Operating Mode

High

The team spends 8–10 hours per week verifying that the project management system, document repository, client approvals, and billing records agree with each other. This is non-value-added work that displaces design, client service, and delivery improvement.

IMPACT

8–10 hours/week (~400–500 hours/year) of staff time consumed by verification and reconciliation across PM, document control, and finance.

Document Version Confusion Driving Rework and Delays

High

Drawings, revisions, and client approvals live in a document repository disconnected from the project management task list. The execution team periodically works from stale drawing sets because the latest approved revision was never reflected in the project record.

IMPACT

Occurs every 2–3 projects. Recent incident caused 5–6 hours of rework and a 2-day execution delay. Also creates client communication risk when status updates are held pending internal alignment.

Billing Accuracy Dependent on Manual Pre-Invoice Verification

High

30–40% of projects require billing reconciliation before or after invoicing because hours, milestones, or deliverables in the financial record don't match the project record. Finance flags mismatches back to the PM and coordinator, consuming 30 minutes to 2 hours per occurrence.

IMPACT

Invoicing delays on nearly a third of projects; post-send corrections erode client confidence in the billing process and create cash-flow drag.

Loosely Defined Ownership of Document Control Updates

Medium

Responsibility for capturing the latest drawings, approvals, and revision notes in the project record is shared between the lead architect and coordinator but not enforced.

Steps are skipped or delayed on roughly 1 in 3–5 projects.

IMPACT

Missed or delayed updates propagate downstream into execution misalignment and billing errors. Worst case: the client flags a missing revision, creating a perception of disorganization.

Email as an Unstructured Data Store for Approvals and Feedback

Medium

Client approvals and feedback frequently live in email threads or marked-up PDFs rather than being captured in a structured project record. Someone must manually interpret and transfer this information, introducing delay and interpretation risk.

IMPACT

Contributes to version mismatches and adds time to every reconciliation cycle. Difficult to audit or trace approval history when disputes arise.

03

Workflow friction

Design-to-execution handoff requires 1.5–3 hours of manual re-entry per project: project details, status, scope, deliverables, and billing structures must be duplicated from the CRM/document repository into the project management system.

Latest client-approved drawings are uploaded to the document repository but not automatically linked to or reflected in the project management task list, causing the execution team to work from outdated drawing sets.

Client approvals captured in email threads are not systematically transferred into the project record, requiring manual interpretation and creating audit gaps.

Milestone completion and deliverable status in the project management system are not automatically connected to billing triggers in accounting software, forcing finance to manually verify before invoicing.

The coordinator's update step — organizing files, updating naming conventions, and noting changes in the PM system — is not enforced by any system or workflow gate, making it easy to skip or partially complete under time pressure.

When a mismatch is discovered, resolution requires cross-referencing folders, email threads, PM notes, and sometimes direct conversation with the architect — a multi-step, multi-person investigation that can take hours.

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Systems in use

SYSTEM	ROLE	LIMITATION
CRM	Client tracking and relationship management through early project stages	Data captured during client intake and early engagement does not flow automatically into the project management or billing systems, requiring manual re-entry at project kickoff.
Project Management Platform	Active project tracking — tasks, milestones, status, and team assignments	Not connected to the document repository or accounting software. Milestone and deliverable status must be manually updated and is frequently out of sync with the latest drawings and client approvals.
Document Repository	Storage for drawings, revisions, client feedback, and design files	Functions as a file store without structured linkage to project status or billing milestones. Version control depends on manual folder organization and file naming discipline, which breaks down with multiple revisions and stakeholders.
Accounting Software	Invoicing, billing, and financial tracking	Relies on accurate project data (hours, milestones, deliverables) that must be manually verified against the PM system before invoicing. Mismatches cause billing delays on 30–40% of projects.
Email	Client communication, approvals, feedback, and internal coordination	Acts as an unstructured data store for critical project decisions. Approvals and revision notes trapped in threads are not systematically captured in the project record, contributing to version confusion and reconciliation overhead.

> EXISTING TOOLS CONSIDERATION
>
> The current stack — CRM, project management platform, document repository, and accounting software — each serves a legitimate function, and none is fundamentally broken in isolation. The problem is the absence of structured connections between them, particularly between the document repository and the project management system, and between project milestones and billing triggers. Optimizing the existing tools (e.g., stricter naming conventions, manual checklists) could reduce error frequency but would not eliminate the

> reconciliation overhead because the core issue is disconnected data, not undisciplined use. A purpose-built integration layer or a consolidated platform that ties documents, project status, and billing into a single workflow would address the root cause rather than patching symptoms.

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Contradictions or misalignment

No major contradictions identified from current inputs. The participant's account is internally consistent: the pain is systemic (disconnected tools), the frequency and impact estimates are proportional, and the desired future state aligns logically with the diagnosed problems.

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MVP opportunity

WHAT TO BUILD / FIX

A unified project record that connects document versions, client approvals, milestone status, and billing triggers in a single system — implemented as either a consolidated architecture-specific project management platform (e.g., Monograph or BQE CORE) or a structured integration layer (e.g., Airtable + automations) that links the existing document repository and PM system to accounting software.

WHO IT SERVES

Project managers and coordinators use it daily to track status and manage handoffs. Lead architects use it to confirm that approved revisions are reflected in the project record. Finance uses it to generate invoices directly from verified milestone completions.

PROBLEM SOLVED

Eliminates the 8–10 hours/week spent reconciling project data across disconnected systems, removes the version mismatch risk that causes rework every 2–3 projects, and closes the billing accuracy gap that currently affects 30–40% of projects.

WHY THIS IS THE HIGHEST-LEVERAGE MOVE

When a client approves a revision, the architect uploads the final drawing and marks the approval in the project record. That action automatically updates the milestone status, links the approved document version to the relevant task, and flags the milestone as invoice-ready for finance. Finance opens the billing queue, sees the verified milestone with the linked deliverable, and sends the invoice without a reconciliation step. This is the highest-leverage move because it attacks the single root cause — disconnected data — that drives rework, billing delays, and client communication risk simultaneously.

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Recommended path

HYBRID

The observed pain is structural — disconnected systems creating reconciliation overhead — which means process improvement alone won't solve it. However, the firm's existing tools are functional in their domains, and a full platform replacement carries adoption risk and disruption. The best path is a Hybrid approach: (1) evaluate an architecture-specific SaaS platform like Monograph or BQE CORE that natively connects project management, document tracking, and billing for AEC firms, and (2) if the existing tools are retained, build a structured integration layer using a no-code hub (e.g., Airtable as the central record with automations pushing updates to the PM system and accounting software). Monograph is purpose-built for architecture firms and handles project tracking, time/fee management, and invoicing in a single interface, making it a strong fit for a firm at this scale. BQE CORE offers deeper financial reporting and resource planning if the firm's billing complexity warrants it.

ALTERNATIVES CONSIDERED

— Buy SaaS only (Monograph or BQE CORE as full replacement): Would provide the tightest integration but requires migrating off existing tools, which introduces adoption risk and potential disruption to active projects. Best if the firm is willing to commit to a platform switch.

— Build no-code only (Airtable + Zapier/Make as integration hub): Lower cost and preserves existing tools, but requires ongoing maintenance and may not handle document version control as robustly as a purpose-built platform. Best if the firm has strong internal process discipline and wants to avoid new software adoption.

— Improve process only (checklists, enforced naming conventions, mandatory update steps): Lowest cost and fastest to implement, but does not address the root cause of disconnected systems. Would reduce error frequency but not eliminate reconciliation overhead.

⚠ TRADEOFFS

— The Hybrid path requires a decision on whether to consolidate into a single platform or integrate existing tools — this decision should be made within the first two weeks based on a structured evaluation, not deferred indefinitely.

— If the firm adopts Monograph or BQE CORE, there will be a 2–4 week transition period where active projects need to be migrated, which requires dedicated coordinator time

and may temporarily increase workload.

— This path is not ideal if the firm has fewer than 5 active projects at a time, in which case the reconciliation overhead may not justify the cost and effort of a new platform — process improvement alone might suffice.

— A no-code integration layer (Airtable + automations) requires someone to own and maintain the automations; if that person leaves, the system can degrade quickly without documentation.

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Roadmap

PHASE 1 — IMMEDIATE

01 Define the project lifecycle model with explicit status gates: Lead Capture → Design → Client Approval → Execution → Billing → Close. Each gate must have a defined owner, a required action (e.g., 'link approved drawing set'), and a verification step before the project advances.

02 Evaluate Monograph and BQE CORE against the firm's current workflow in a 1-week structured trial: test project creation, document linking, milestone tracking, and invoice generation on one active project. Score each on fit, adoption friction, and integration with existing accounting software.

03 Establish a single-source-of-truth policy: all client approvals must be captured as a structured record (not just an email forward) in the project system within 24 hours of receipt. Assign the coordinator as the enforcer with a daily 15-minute check.

04 Migrate 3–5 active projects into the selected system (or integration layer) and archive the parallel spreadsheet/folder-based tracking for those projects. Run both systems in parallel for one billing cycle to validate accuracy.

05 Conduct a 60-minute walkthrough with the PM, coordinator, lead architect, and finance on the new workflow — focusing on where approvals are captured, how milestones trigger billing, and what the escalation path is when something doesn't match.

PHASE 2 — NEXT

01 Build automated billing triggers: when a milestone is marked complete and the linked deliverable is confirmed, the system generates a draft invoice for finance review — eliminating the manual pre-invoice reconciliation step.

02 Implement a client-facing project portal or structured status update workflow so that revision approvals and feedback are captured directly in the project record rather than in email threads.

03 Create a weekly project health dashboard showing: projects with stale status (no update in 5+ days), milestones approaching deadline without linked deliverables, and invoices pending for completed milestones.

04 Extend the system to track consultant and subconsultant deliverables (structural, MEP, etc.) with the same version-control and approval-capture discipline applied to

internal drawings.

05 Conduct a 90-day retrospective: measure reconciliation hours/week, billing correction rate, and average days-to-invoice against the current baseline to quantify ROI and identify remaining gaps.

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What "better" looks like

When a client approves a design revision, the architect uploads the final drawing set and records the approval directly in the project record. That action automatically updates the project milestone status, links the approved document version to the relevant execution tasks, and flags the milestone as invoice-ready. The coordinator's role shifts from manual data transfer to exception management — reviewing a daily queue of flagged items rather than searching through emails and folders. Finance sees a billing queue of verified, milestone-linked invoices and sends them without a reconciliation step. The project manager opens a single dashboard showing real-time status across all active projects — milestones, document versions, and billing status — without needing to cross-reference multiple systems. The 8–10 hours/week currently spent proving that systems agree with each other is eliminated, and the team redirects that time to design quality, client service, and business development.

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Cost of inaction

If no changes are made:

HOURS / WEEK	HOURS / YEAR	EST. ANNUAL COST
8–12	400–600	$26K–$39K at $65/hr operational cost

8–10 hours/week of staff time (PM, coordinator, architect, finance) consumed by reconciliation and verification work that produces no client value — with additional spikes of 1.5–3 hours per project during design-to-execution handoffs.

Billing delays or corrections on 30–40% of projects, directly impacting cash flow and extending the average days-to-invoice cycle by days to weeks on affected projects.

Rework incidents every 2–3 projects due to version mismatches, with recent examples costing 5–6 hours of multi-person effort and 2-day execution delays.

Client-facing credibility risk when approvals or revisions are not reflected in status updates or deliverables — the kind of error that erodes trust and makes client retention harder over time.

Strategic decisions (staffing, capacity planning, project prioritization) made on incomplete or outdated project data because no single system reflects current reality.

At an estimated $65/hour blended operational cost for the roles involved (PM, coordinator, architect, finance), the reconciliation overhead alone represents $26,000–$39,000/year in lost productivity — before accounting for the revenue risk of billing delays, rework costs, and client confidence erosion.

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Why this matters now

Every new project added to the pipeline multiplies the reconciliation burden: more handoffs, more revisions, more billing cycles, more opportunities for version mismatches. What is currently an 8–10 hour/week drag at the firm's current project volume will scale linearly — or worse — as the team takes on more concurrent projects or adds staff who inherit the same disconnected workflow. Fixing this now, while the team is small enough to adopt a new workflow quickly, is significantly cheaper and less disruptive than attempting it at 2x the project volume.

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Next step

Arcwise can assist with:

Structured evaluation of Monograph, BQE CORE, and a no-code integration alternative against Roark Architecture's specific workflow requirements — delivered as a scored comparison with a clear recommendation.

System configuration and setup: project lifecycle model, status gates, document-linking rules, and billing trigger logic built into the selected platform.

Migration of active projects into the new system with parallel-run validation against current billing and project records.

Team training: role-specific walkthroughs for PMs, coordinators, architects, and finance — focused on the 3–5 actions each role performs daily in the new workflow.

90-day post-implementation review: measure reconciliation hours, billing correction rate, and days-to-invoice against baseline to confirm ROI and identify remaining friction.

TYPICAL ENGAGEMENT

3–5 weeks from kickoff to stabilized operation: Week 1 for evaluation and selection, Weeks 2–3 for configuration and migration, Weeks 4–5 for training, parallel run, and adjustment.

If you'd like help executing this plan, we can scope a focused implementation engagement tailored to your current project load and team capacity.