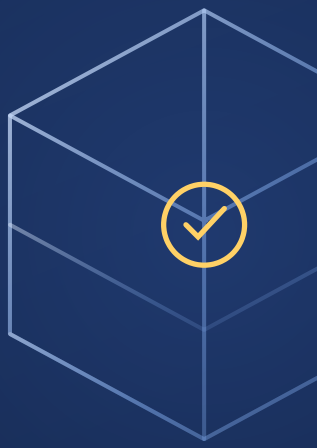
PITON Global

EXECUTIVE WHITE PAPER · WP-40

BIM COORDINATION · PHILIPPINES

The constructability standard: the executive economics of BIM coordination outsourcing to the Philippines.



An analysis of why clashes logged is a volume vanity metric, how clash-resolution quality and constructability — never detection throughput — decide the true cost of a coordination program once false clashes, unresolved conflicts, RFIs, and field rework are counted, and the vendor-selection discipline that drives a federated model to a buildable zero.

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ABOUT THIS SERIES — VOLUME 40

Every BIM-coordination proposal is priced per clash detected, because a clash report is easy to generate. This volume is about the only coordination outcome a project's schedule and budget actually depend on: the clash resolved for real in the model — routed, re-sized, or re-sequenced — so it never becomes an RFI, a change order, or a crew standing idle in the field. The gap between logging a clash and resolving it is where false positives and field rework live. The full series lives at piton-global.com.

THE PITON-GLOBAL LEADERSHIP TEAM

About the authors

John Maczynski

Chief Executive Officer

John has bought coordination capacity for three decades, and learned that the fast pod that logs ten thousand clashes and resolves none of them is the most expensive one a builder can hire — because a clash report nobody actioned is a field conflict waiting, and a false clash is an engineer's afternoon wasted chasing a non-issue. His standing question ignores the detection count: of the clashes you logged, how many were real, and how many did you drive to a resolved, buildable state in the model? Applied at PITON-Global, that question is what clients get on every coordination sourcing decision — personally, with no account layer in between.

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Ralf has spent twenty-five years running Philippine engineering-support floors, and he judges a coordination pod by its resolution rate and its field-RFI record, not its clash count: whether conflicts were cleared in the model before release, or exported to the site as rework. The coordination contract in Section 3 codifies what he learned rebuilding pods that ran detection fast and resolution never. He now reads coordination providers the way he once ran them — from the RFI log and the resolved-clash burndown backward.

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ABOUT PITON-GLOBAL

PITON-Global is a buyer-side advisory practice, Manila-based since 2001, that has never operated a delivery floor or taken a placement commission. Its stock-in-trade is knowing the Philippine provider market at the operating level — 1,000+ mapped operations, re-verified continuously, including each coordination pod's real resolution rate and field-RFI record rather than its clashes-detected headline — and converting that knowledge into a shortlist of six to ten genuinely qualified partners per engagement. Buyers from Tripadvisor, Garmin, TSYS, HealthPartners, Yetipay, Workrise, and Norman Disney & Young have run their searches through the practice.

SECTION 01

Executive summary

-59%
Fully-loaded cost per resolved clash vs. US onshore

96%+
Clash-resolution rate at model release, up from 70–82%

-67%
Reduction in coordination-driven field RFIs on vetted pods

6.3×
First-year ROI, reconstructed case (Section 6)

A BIM-coordination engagement is bought on the price per model or per clash and paid for on the conflicts it fails to resolve. The vendor reports twelve thousand clashes detected at a fraction of the onshore cost; the builder finds the false clashes that burned engineer hours, the real conflicts left unresolved at release, the RFIs that surface them on site, and the change orders and idle crews when a duct and a beam meet in steel that is already erected. The pod ran its detection and the project inherited a coordination backlog, an RFI storm, and rework the model was supposed to prevent. The gap between logging a clash and resolving it is where the real cost of cheap coordination hides, because an unresolved or false clash is not coordination delivered — it is field rework deferred or an engineer's day wasted.

The Philippines — with a deep, licensed-engineer-supervised VDC talent pool fluent in the major coordination platforms — is where BIM coordination is delivered with the most resolution discipline, because that pool can run the clean federation, real resolution, and drive-to-zero coordination that constructability demands. Five findings:

1 **Clashes detected is the industry's most flattering number.** Any pod can run a detection and export a report with ten thousand hits. Vetted pods are measured on outcome: real-clash precision, resolution rate

at release, and field RFIs avoided. Weak providers quote a low per-model price the builder repays in false-positive hours and field rework. Section 2 shows the gap.

2 **The resolved, buildable model, not the clash report, is the product.** A model a crew can build from comes from a clean federation, real resolution of every true conflict, and a drive to zero before release — not from a detection run. Pods that resolve deliver a buildable model; pods that only detect deliver a report and a field full of RFIs.

3 **A bad clash set cuts both ways — false positives and missed conflicts.** A report bloated with false clashes buries the real ones and burns hours; a missed hard conflict ships to the field as rework. Vetted pods hold real-clash precision and resolution both high precisely because both tails cost — the time wasted and the conflict built.

4 **The field RFI and the change order, not the detection, are what cost.** A clash left for the field costs the RFI cycle, the change order, and the idle crew — many times the coordination fee. Pods that resolve in the model cut RFIs and protect the schedule, and that avoided rework — not the offshore rate alone — is where the case study's return is built.

5 **Contract on the resolved clash, not the detected one.** The contracting failure of coordination is paying per model and hoping the clashes get resolved. Vetted deals price against real-clash precision, resolution-rate floors, and field-RFI ceilings, making the buildable model the pod's problem, which is where it belongs.

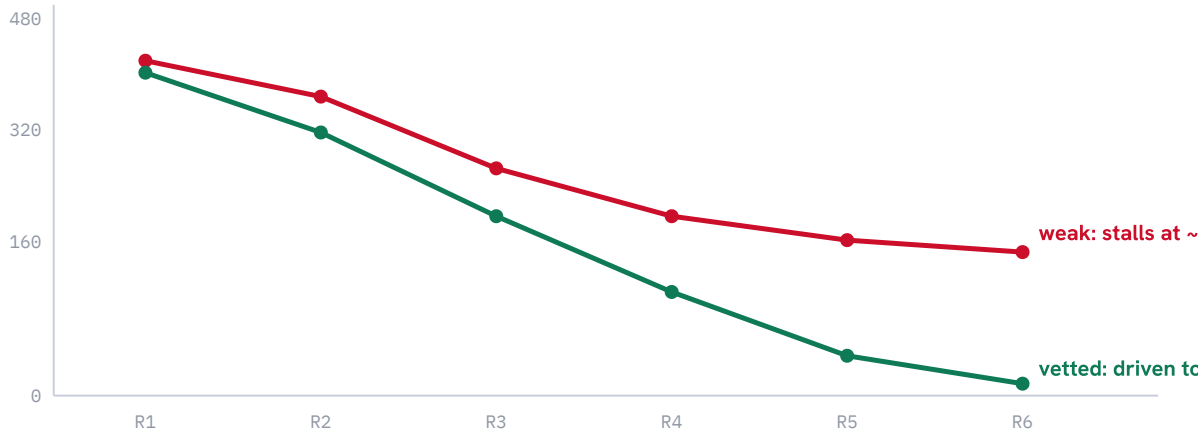
The intended reader is a VDC director, preconstruction lead, or COO buying BIM coordination per model and paying for it in false clashes, RFIs, and field rework. Sections 2–4 separate the pods that resolve from the pods that only detect; Sections 5–7, the method and the proof.

SECTION 02

The volume mirage: clashes logged versus clashes resolved

Figure 1 reads one coordination cycle as a resolution burndown — the count of open true clashes across weekly coordination rounds — for a vetted pod against a weak vendor, alongside the detection number each one bills. The clashes-logged figure is identical in spirit to a chatbot's containment rate: engineered to look like output while false positives and unresolved conflicts pile up underneath.

FIG. 1 — TRUE-CLASH RESOLUTION BURNDOWN ACROSS COORDINATION ROUNDS



Open true clashes remaining per weekly round. Left axis excludes false positives (removed at federation). Left: PITON-Global engagement instrumentation, 2025–26. Weak-vendor curve from pre-engagement reporting reviewed in diligence.

VETTED POD — MEASURED ON RESOLUTION

Federated 6 models, ~2,400 raw hits triaged to **410 true clashes**, of which **96% resolved** in the model by release. Real-clash precision 91%. Field RFIs from coordination: 7.

WEAK VENDOR — AS BILLED

"**12,000 clashes detected**" — the invoice headline. Un-triaged: ~70% false positives. True clashes resolved by release: **~74%**. Field RFIs from coordination: 41, with three change orders.

The economics follow the resolution, not the detection. On the left, the burndown reaches zero and only seven conflicts reach the field; on the right, the curve stalls above a hundred open clashes, the report is three-quarters noise, and forty-one conflicts surface on site — paid in false-positive hours, RFIs, and change orders at once. A big detection number over a stalled burndown is not coordination; it is field rework, deferred and compounding. The resolution-and-precision audit — real-clash precision, resolution rate at release, field RFIs — is the cheapest due-diligence instrument in this paper.

SECTION 03

The coordination contract: federate it clean, resolve it real, drive it to zero

Figure 2 lays out the three clauses of a working coordination contract — the machinery a floor read verifies before any per-model price is believed.

FIG. 2 — THE COORDINATION CONTRACT, AS OPERATED ON VETTED PODS

FEDERATE IT CLEAN

Discipline models are aligned to a shared origin and LOD, tolerances and clash rules are tuned to the project so the detection surfaces real conflicts instead of noise, and known non-issues are ruled out at the source. A clean federation is what makes the clash set worth acting on rather than wading through.

RESOLVE IT REAL

Every true clash is resolved in the model — rerouted, re-sized, or re-sequenced — under a discipline lead's review, with the fix coordinated across trades rather than shunted from one to the next. Resolution means the conflict is gone from the model, not reassigned in the report.

DRIVE IT TO ZERO

Coordination rounds run on a cadence that burns the open-clash count to zero before the release milestone, with a signed-off clash-free report and an audit trail — not a milestone hit with a hundred conflicts still open. Zero at release is the only state the field actually experiences as buildable.

↓ yields ↓

THE BUILDABLE MODEL

96%+ RESOLVED AT RELEASE | HIGH-PRECISION CLASH SET | RFI-LEAN FIELD

The federation is clean, every true clash is resolved in the model, and the burndown reaches zero before release — so false positives stop wasting hours, conflicts stop reaching the field, and the crew builds from a coordinated model. The program gets cheaper per resolved clash and protects the schedule at the same time, which is the entire promise of outsourcing coordination to people who measure resolution, not detection.

Operating parameters from PITON-Global engineering-support engagements, 2025–26. Coordination runs under a licensed-engineer / VDC-lead review; nothing here substitutes for the design professional of record.

In diligence, the contract is tested from the model's side: pull a coordinated federation and re-run detection to measure real-clash precision and how many "resolved" clashes actually cleared; read the field-RFI log against the release; check the burndown cadence for whether it reaches zero or stalls. Perhaps one pod in ten survives it cleanly. Steps 3 and 5 of the framework exist to find that one before the contract does — because everything in Table 3 of Section 6 depends on resolution, not detection.

SECTION 04

Cost and performance: cost-per-resolved-

clash economics and benchmarks

TABLE 1 — FULLY-LOADED COST PER RESOLVED CLASH: THREE OPERATING MODELS (2026)

OPERATING MODEL	COST / RESOLVED CLASH	VS. US BASELINE
US onshore in-house VDC coordination	$41.00	baseline
Low-cost offshore detection mill (per-model)	$28.50	–30%
Vetted Manila pod — federate, resolve, zero	$16.70	–59%

Basis: PITON-Global engagement pricing 2025–26; cost per resolved clash = fully-loaded operating cost divided by true clashes resolved in the model by release (false positives and unresolved clashes excluded); the detection mill looks cheap per model but false-positive triage, unresolved conflicts, and field RFIs lift its true cost per resolved clash; US comparator fully-loaded in-house VDC cost.

TABLE 2 — BIM-COORDINATION BENCHMARKS, VETTED VS. BASELINE (2025–26)

METRIC	VETTED TOP TIER	BASELINE	EXECUTIVE READING
Clash-resolution rate at release	96%+	70–82%	The only number the field feels
Real-clash precision (vs. false positives)	90%+	30–55%	Signal, or a report of noise
Coordination field RFIs vs. baseline	–67%	baseline	"Resolve it real" — held or not
Clash-free milestones hit on schedule	97%+	72–85%	Zero at release, or a slipped date
Rework cost avoided per $1 of fee	$5.80	baseline	Prevention pays, or it doesn't

Source: PITON-Global engineering-support engagement data 2025–26; baseline = typical pre-engagement operations billed on clashes detected or per model.

The strategic read: the detection mill's –30% per model is a false economy — false-positive triage, unresolved conflicts, and field RFIs lift its true cost per resolved clash far above the per-model gap, and a change order on erected steel is a cost no rate recovers. The vetted Manila pod's –59% is real because it is measured where the value is: the clash resolved in the model, the burndown at zero, the field RFI-lean. Buy on clashes detected and you buy the right column of Figure 1; buy on cost-per-resolved-clash and you buy constructability — the same discipline every volume in this series keeps arriving at from a different door.

SECTION 05

Sourcing discipline: the 7-Step Vendor Vetting Framework, applied to BIM coordination

Coordination diligence adds one hard requirement to every step: a per-model price is real only when the resolution rate behind it survives a re-run of detection against the coordinated federation. The funnel below is representative of a 25–60-seat VDC coordination search.

FIG. 3 — THE 7-STEP FRAMEWORK AS A BIM-COORDINATION FUNNEL

	STEP	WHAT IT ELIMINATES IN A COORDINATION SEARCH	FIELD REMAINING
1	**Requirements definition**	Detection-first scoping: fixes the real-clash-precision floor, the resolution-rate target, the field-RFI ceiling, and the burndown cadence the pod must meet by discipline and LOD	1,000+
2	**Market mapping**	Detection mills: pods that bill clash counts and per-model runs and treat resolution and field RFIs as the client's problem, and generalist floors with no VDC or discipline-lead depth	~44
3	**Capability screening**	Pods without the machinery: discipline-lead review, platform proficiency (Navisworks/Revit/BIM 360 and peers), a federation-and-resolution workflow, and coverage across your trades	~13
4	**Compliance & security audit**	Weak governance: model-IP and CDE data protection, access controls on the common data environment, drawing-set confidentiality, SOC 2 scope covering the coordination stack	~7
5	**Operational diligence**	The re-run: re-detect against a coordinated federation for true precision and how many "resolved" clashes cleared; read the field-RFI log; interview on how they resolve a multi-trade conflict	4–6
6	**Competitive RFP & negotiation**	Per-model pricing: finalists bid against real-clash-precision floors, resolution-rate targets, and field-RFI ceilings — all carrying credits for conflicts that reach the field	2–3
7	**Transition & launch governance**	Cold start: the pod calibrates against your templates, clash rules, and CDE on a sample federation before it owns live coordination, with the resolution floor certified before steady state, PITON-Global embedded buyer-side	1

Field-remaining counts represent a 25–60-seat VDC coordination search, PITON-Global engagements 2024–26.

The standing guarantees hold: **vendor neutrality** — PITON-Global operates no coordination pods, resolves no clashes, and takes no placement economics, so the shortlist reflects audited resolution performance, not inventory; **right-sizing** — pods for whom your program is a flagship account. Six to ten genuinely qualified providers, delivered within 48–72 hours, free to the buyer, competing through a fully transparent, fair, comprehensive, and highly competitive RFP.

SECTION 06 · ANONYMIZED CASE STUDY

Re-basing the pod on clash resolution: a 45-seat VDC coordination rebuild, reconstructed

Engagement BC-067 is a US general contractor and design-build firm — coordinating roughly 90 model federations a year across commercial and healthcare projects — that had offshored BIM coordination to a per-model detection shop. The model price was excellent; the coordination was not: clash reports ran to five figures at ~40% real-clash precision, resolution at release sat near 76%, field RFIs from coordination were high, and two projects had taken change orders on conflicts the model should have caught. The VDC director wanted the arbitrage without the false positives and the field rework. Identifying details are anonymized under NDA.

SELECTION (WEEKS 0–8, RE-RUNS)

Requirements fixed a 90% real-clash-precision floor, a 96% resolution-rate target, and a field-RFI ceiling, with a mandatory discipline-lead review and burndown cadence. Mapping produced 44 claimants; the machinery screen — discipline-lead review, platform proficiency, federation-and-resolution workflow, trade coverage — left 13; the model-IP-and-CDE-security audit left 7. Blind re-runs against a coordinated federation shortlisted 5. A Manila pod won priced against precision and resolution, with a re-run written into the reporting spec.

TRANSITION (MONTHS 2–6, CALIBRATED FIRST)

The pod calibrated against the firm's templates, clash rules, and CDE on a sample federation before owning live coordination; the resolution floor was certified in month 3. The federation-and-burndown loop fed weekly coordination from day one. By month 6 real-clash precision reached 91%, resolution at release hit 96%, coordination field RFIs fell 67%, and clash-free milestones held on schedule. PITON-Global chaired the coordination review board to steady state.

TABLE 3 — BC-067 FIRST-YEAR VALUE BUILD-UP (US$)

VALUE COMPONENT	YEAR 1	BASIS
Labor arbitrage on the 45-seat coordination pod	$1.58M	84.4k productive hrs × ($28.20 − $9.50)
Field rework & change orders avoided	$0.92M	Conflicts resolved in model vs. built and torn out
False-positive triage hours removed	$0.30M	Engineer hours no longer chasing non-issues
Schedule protection value	$0.22M	Milestones held; idle-crew and delay days avoided
Gross value created	**$3.02M**	
Less: engagement & transition costs	($0.48M)	Calibration, CDE integration, burndown-loop build; advisory fee $0 (provider-paid model)
Net value ÷ cost = first-year ROI	**6.3×**	$3.02M ÷ $0.48M

Figures rounded; precision, resolution, and RFI effects audit-verified. Method in Methodology & notes.

Fifty-two percent arbitrage, forty-eight percent from avoided field rework, removed false-positive hours, and schedule protection — a typical split for the series, earned because the pod was re-based on clash resolution rather than detection volume. Every line traces to a diligence step: the precision floor to Step 1, the resolution-based pricing to Step 6, the discipline-lead-review workflow to Step 3's contract. The VDC director's line at the year-one review: "The model price barely moved. What moved is that the burndown hits zero — and the field stopped calling with conflicts we should have caught."

SECTION 07

The executive playbook: governance for the first 180 days

A coordination transition succeeds when the pod is measured and paid on resolution and precision — client in command throughout.

DAYS 0–30

Define resolution, contract on it

Set the real-clash-precision floor, the resolution-rate target, and the field-RFI and burndown-cadence thresholds with VDC leadership before launch, and document the federation and clash-rule standard by discipline and LOD. Contract against precision and resolution — never per model alone — with floors and ceilings carrying credits. Stand up the detection re-run as the program's arbiter of truth.

DAYS 30–90

Calibrate, prove the burndown

Calibrate the pod against your templates, clash rules, and CDE on a sample federation before it owns live coordination; certify the resolution floor and the discipline-lead-review loop. Switch on the weekly burndown from day one. Publish the coordination dashboard: real-clash precision, resolution rate at release, field RFIs, clash-free milestones, rework avoided.

DAYS 90–180

Own coordination, certify steady state

Hand live coordination to the pod only after it holds the precision floor and resolution target, always under discipline-lead review. Review the coordination board monthly with the field-RFI log and burndown trend on the table. Certify steady state on two release cycles at floor; hand over on documented criteria; keep the quarterly detection re-run standing.

THE FIVE FAILURE MODES WE ARE HIRED TO PREVENT

Paying per model while clashes go unresolved · exporting a report bloated with false positives · reassigning conflicts in the report instead of resolving them in the model · hitting a milestone with clashes still open · owning coordination before resolution is proven. All five are settled at selection and contract.

The coordination argument, in one sentence: a detected clash is a report line and a resolved clash is a conflict that never reaches the field, and a vetted Philippine pod delivers –59% cost per resolved clash with a 96%+ resolution rate, 90%+ real-clash precision, and coordination field RFIs cut by two-thirds — for buyers who re-run the detection instead of counting clashes logged, and compete the finalists through a fully transparent, fair, comprehensive, and highly competitive RFP. Anyone can detect a clash. We make sure you buy the pod that drives the model to a buildable zero.

METHODOLOGY & NOTES

How the numbers were built

Resolution and precision figures (Fig. 1, Table 2) derive from engagement instrumentation in PITON-Global engineering-support engagements, 2025–26. Real-clash precision and resolution rate are measured by re-running detection against the coordinated federation; field RFIs, clash-free milestones, and rework avoided are measured

against the client's pre-engagement baseline. The weak-vendor column is a composite of pre-engagement reporting reviewed in diligence, shown for contrast.

Cost-per-resolved-clash figures (Table 1) are fully loaded — wages, benefits and statutory charges, facilities, coordination-platform and CDE tooling, management and QA overhead including discipline leads, attrition-driven recruiting — divided by true clashes resolved in the model by release, with false positives and unresolved clashes excluded from the denominator; US comparators reflect fully-loaded in-house VDC cost. A resolved clash is a true conflict cleared in the model and confirmed on re-run.

The case study (BC-067) is anonymized under NDA; volumes and dates are generalized, figures rounded. Precision, resolution, and RFI effects are audit-verified; the rework-avoided line reflects field conflicts resolved in the model, and the schedule-protection line is a conservative estimate. ROI = net first-year value ÷ all engagement-related client costs. PITON-Global's advisory fee is provider-paid and appears at $0 in the client cost base; neutrality safeguards are documented at piton-global.com.

Market context draws on IBPAP reporting and PITON-Global's proprietary provider mapping (1,000+ operations; resolution and precision performance re-verified May 2026). Coordination supports, and never replaces, the design professional and engineer of record; all coordination runs under a licensed-engineer / VDC-lead review. Estimates and projections are PITON-Global analysis and should be cited as such. The full series is available at piton-global.com.

Would your provider's model price survive a detection re-run?

Thirty minutes with John will tell you. Free to buyers, strictly vendor-neutral — a resolution-verified shortlist within two to three business days.

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