PLATFORM

SEPTEMBER 10, 2025

Active Risk Management in Construction

By David Bowcott

Construction organizations are awash in data yet make many risk decisions with lagging indicators and intuition. Active Risk Management is a practical operating model that turns data into day-to-day steering. It rests on three pillars: **(1) a rigorous Risk Data Architecture** anchored by a RMIS; **(2) project level Operational Risk Scores** generated from field technologies; and **(3) Risk Retention Decision Making** that blends historical loss experience with forward-looking risk signals to optimize insurance terms, captive success, and project behaviors.

1) RISK DATA ARCHITECTURE: THE FOUNDATION

Active risk management starts with a single, governed source of truth for incidents and claims—your Risk Management Information System (RMIS)—and a schema that makes analysis trivial.

Core data model. The RMIS captures all incidents and claims with standardized root cause descriptors and links every record to enterprise data tags:

- Project number and project description
- Project type (e.g., hospital, bridge, residential tower)
- Project delivery model (e.g., DBB, DB, CM/GC, IPD)
- Region / division / branch
- Project manager
- Insurance policy type (builders risk, wrap-up liability, professional liability, environmental liability, subcontractor default insurance)

Why this matters. With these tags, an Active Risk Manager can instantly pivot: where are losses emerging by project type? Which branches drive severity? Do certain delivery models correlate with specific root causes? Answers move from anecdote to evidence.

Implementation essentials:

- **Taxonomy first.** Define and enforce the root cause vocabulary and data tags before ingestion. Make completion mandatory in workflows.
- **Interoperability**. Connect RMIS to project systems (PM platforms, IoT, reality capture) via APIs to prepopulate tags and minimize manual entry.
- **Data quality & governance.** Establish owners, validation rules, and monthly data quality scorecards. Dirty data is the silent risk.
- **Company wide adoption.** The technology you utilize to capture risk data needs a very intuitive interface to ensure this data is captured consistently and company wide. Full view versus partial view is essential.
- **Usability.** Provide self-serve dashboards with saved views by tag (e.g., "Hospitals—Wrap Up Liability—Ontario—2023–2025").

This foundation turns incidents/claims into an operational signal—fast enough to act, structured enough to learn.

2) OPERATIONAL RISK SCORES: FORWARD-LOOKING PROJECT SIGNAL

Lagging data tells you what happened. Operational Risk Scores (a Construction Risk Score) tell you what is likely to happen next, using live project telemetry.

Inputs. The score is computed from specific data points that reflect adherence to risk reducing practices captured by field technologies, including (illustrative):

- **Project Management** (Daily Logs, RFIs, Submittals, Meetings, etc.) tech adoption rate, on time closure rates, consistent documentation quality
- **Quality & Safety** (Incidents, Inspections, Punch Items, etc.) frequency rates, complete documentation details, resolution timelines

- **Financials** (ERP systems, Budgets, Contracts, Invoices, Payments, etc.) consistent record keeping, on time payments, change orders impact
- **IoT device activations/alerts** (e.g., environmental, security, equipment)
- **Reality capture scans** frequency/coverage and unresolved deviations

Start with proven statistical/ML models that predict risk from a standard set of KPIs; evolve toward broader custom set of KPIs that reflect your company's unique tech stack. Critically, weights are context aware: the data points driving operational risk and insurance risk are related but unique; the model assesses every KPI for its impact to several context specific risks (Schedule, Cost, General Liability, Workers Comp, etc.) - safety inspection rigor may correlate most strongly with Workers Comp and Wrap Up Liability performance.

Filtering and comparability. Use the same data tags as the RMIS (project number/description, project type, delivery model, region/division/branch, project manager, insurance policy type) to slice scores consistently across the enterprise. That lets leadership ask, "*What is our risk score for hospital projects in the Prairies under IPD?*"—and get an answer on demand.

Closed-loop action:

- **Drill-down diagnostics.** Every score decomposes into its drivers. If a project's score is dragged down by weak RFI performance, the risk manager sees it, calls the PM, and fixes the behavior—this week, not after a claim.
- **Thresholds & alerts.** Define red/amber/green bands and automatic nudges to the field when a driver metric breaches a key risk threshold.
- **Learning system.** Postmortems provide end to end assessment of risk and operational performance to identify KPIs to improve so the same weakness is less likely to recur.

Operational Risk Scores convert technology into a control knob for execution—making risk prevention measurable and manageable.

3) RISK RETENTION DECISION-MAKING: WHERE TO KEEP RISK AND WHERE TO TRANSFER IT

With RMIS (the past) and Operational Risk Scores (the near-future), the organization can finally align risk finance with risk performance.

Principle. Retain the good risks, transfer the untenable ones. Projects, branches, delivery models, and policy types with consistently high Operational Risk Scores—and clean RMIS histories—are candidates for higher retentions or a single parent captive; low scoring segments warrant lower retentions and more transfer.

How it works:

- **Segment by tags.** Build loss triangles and severity/frequency distributions by project type, delivery model, branch, and policy type. Overlay each segment's current Operational Risk Score.
- **Optimize retentions.** Use stochastic models (or pragmatic stress tests) to set captive layers/retentions where expected loss cost and volatility are attractive—for that segment.
- **Dynamic purchasing.** Adjust insurance buying (limits, deductibles, wrap structures) annually or even quarterly, guided by segment scores and emerging loss signals.
- **Value feedback loop.** Share captive "dividends" or budget credits with high-scoring segments; tie PM incentives to sustained score improvement and loss avoidance.

Result. Risk capital follows demonstrated performance, lowering total cost of risk (TCOR) while rewarding the behaviors that prevent losses.

MAKE RISK A MANAGED PROFIT CENTER

Active Risk Management reframes risk from an insurance procurement cycle to a daily operating system. With a robust Risk Data Architecture, you see where and why incidents occur. With Operational Risk Scores, you see problems early enough to change them. With score-informed retention, you profit from superior execution by keeping the risks you manage well and transferring the ones you don't—yet.

For the construction risk community and the Csuite, the mandate is clear: build the data backbone, instrument the work, and let forward-looking scores steer both field behavior and risk finance. The payoff is lower TCOR, fewer claims, safer jobsites, and a durable competitive edge. In a market where margins are thin and volatility punishes the unprepared, Active Risk Management is not a future state; it's the operating model of firms that plan to win.

Questions? Contact:

David Bowcott, Executive Vice President
Construction Industry Group
dbowcott@platforminsurance.com
416-566-5973

ABOUT PLATFORM

PLATFORM is a national, privately owned Canadian brokerage specializing in insurance, surety, sub-default insurance and benefit solutions. We are driven by industry at the heart of everything we do. Our team blends sophisticated expertise with strategic thinking, ensuring that our tailored solutions meet and exceed client expectations.

www.platforminsurance.com

info@platforminsurance.com

416-434-4322

PLATFORM