Intuitive™
DATA ANALYTICS

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Predicting Cost Overruns Before They Blow the Budget



The Problem

Budgets That Quietly Slip Until It's Too Late

Construction projects run over budget more often than not — industry data consistently shows the majority of commercial projects exceed their original budget, often by 10–20% or more. The warning signs are usually there weeks before the overrun becomes visible: change order velocity, subcontractor pay app patterns, material price volatility, RFI response delays, weather-driven schedule slips. But that data lives across disconnected systems — project management software, accounting, field reports — so by the time the monthly cost report shows red, the damage is already done.

Project managers end up explaining overruns after the fact instead of catching the combination of factors that predicted them weeks earlier.

The Solution

Intelligent Correlation Analysis with IDA

IDA turns scattered project data into an early-warning system for budget risk.

Instead of waiting for the monthly cost-to-complete report, IDA continuously analyzes hundreds of variables across active projects — change order frequency, subcontractor performance history, material cost trends, schedule variance, RFI turnaround — to flag which projects (and which cost codes within them) are trending toward overrun before it's locked in.

IDA doesn't replace your project managers' judgment — it gives them a ranked, early view of risk, so they can act while there's still room to course-correct.

Key Capabilities

Correlation Engine
Detects subtle combinations of schedule, cost, and field data that predict overrun risk — even across disconnected PM and accounting systems.

Machine Learning (Random Forest)
Scores active projects by overrun risk and clusters them by likely root cause (labor, materials, scope creep, subcontractor delay).

Validation Playground
Lets project controls teams test and tune risk models visually, no data science team required.

Ranked Insights
Surfaces the top cost codes or trades driving risk on each project, so intervention targets the real driver.

Human + Machine Intelligence
Combines predictive scoring with PMs' and superintendents' field knowledge, so flagged risk gets the right judgment call before action.

The Results: Data-Driven, Proactive Project Controls

Tangible Outcomes

Early Intervention
Flags at-risk projects and cost codes weeks before the overrun shows up on a monthly report.

Targeted Action
Routes risk to the right owner — procurement, scheduling, subcontractor management — based on the actual driver.

Smarter Decisions
Leadership gets a portfolio-wide view of which projects, trades, or PMs carry the most budget risk.

Protected Margins
Catching overrun risk early preserves contingency instead of burning through it reactively.

The Takeaway

IDA shifts construction cost management from after-the-fact reporting to proactive, predictive project controls. By revealing ***why*** a project is trending over budget — not just confirming it after the fact — IDA helps contractors protect margin that used to disappear into change orders and closeout disputes.

Cost Overrun Risk — By the Numbers

10-20%	25-35%	4-6 Weeks	15-20%
average budget overrun on commercial construction projects industry-wide	reduction in unmitigated overruns with early risk flagging	earlier risk detection vs. standard monthly cost reporting	improvement in contingency fund utilization