



Perspective

Deloitte Flash for Construction

From reactive to proactive

Welcome to The Deloitte Flash for Construction—A quick read from Deloitte designed to provide you with insights into today's business issues related to construction. Our current Flash highlights **How AI Agents Are Enabling Continuous, Proactive Execution Across Capital Programs.**

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THE ISSUE:

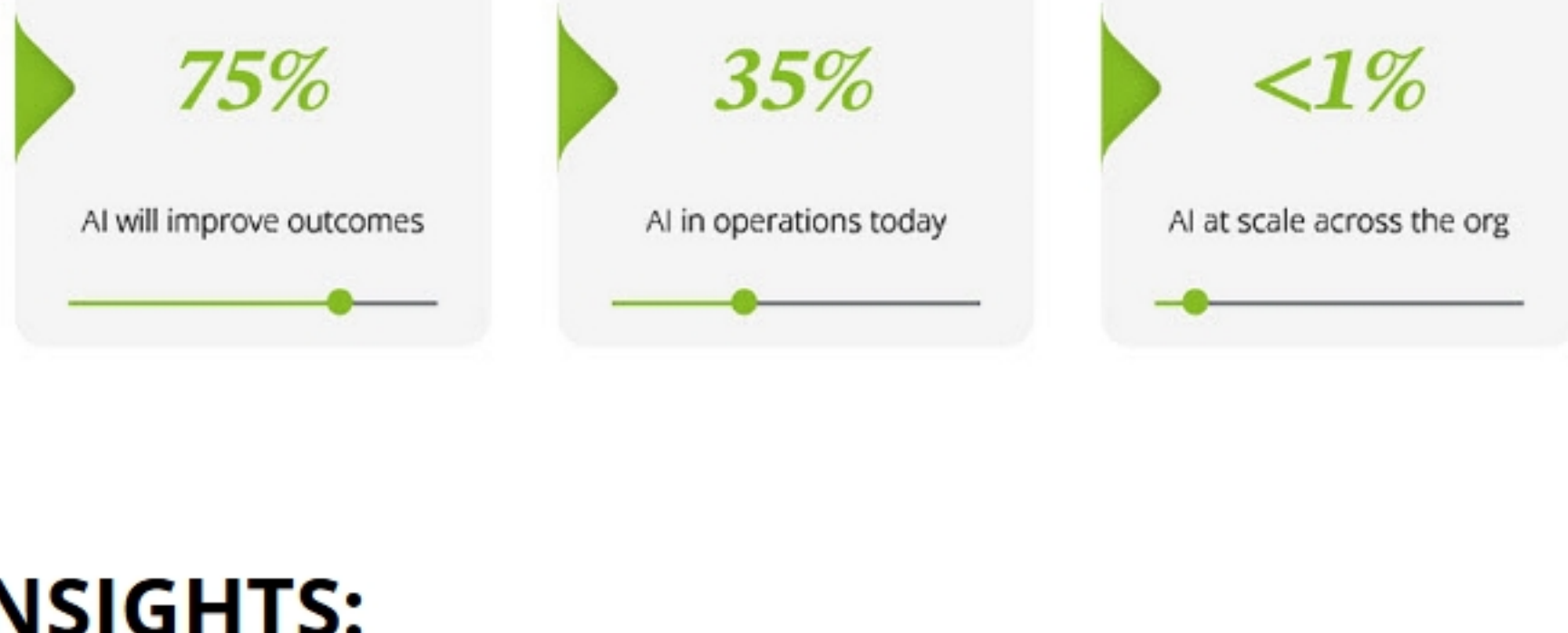
Despite meaningful advances in digital tools, many capital programs continue to operate within a fundamentally reactive project controls model. Information is processed faster, but not necessarily earlier or in a way that improves decision-making. Teams remain burdened by high volumes of submittals, change events, and schedule updates that require constant manual intervention to interpret, reconcile, and act upon. In environments with hundreds of active contracts and distributed field activity, this human-in-the-loop-for-every-decision approach can create latency, limit scalability, and constrain timely decision-making.

While AI-enabled tools have improved task-level efficiency by accelerating contract review, RFI drafting, and data summarization, they largely depend on user initiation. A team member must still frame the query, interpret the output, and determine next steps. This interaction model, while valuable, reinforces a reactive posture and does not fully address the growing complexity and velocity of program-level data.

AI agents represent a structural shift from this paradigm. By continuously monitoring conditions, applying predefined rules and learned patterns, and initiating actions autonomously, agentic workflows can reduce reliance on manual prompts and enable more proactive program management. The distinction is operationally significant. Almost 75% of construction leaders believe AI will positively impact cost and efficiency, yet 65% are not currently using AI tools in operations, highlighting a persistent gap between conviction and execution.¹

Market trends reinforce this inflection point. The global AI in construction market is projected to grow from \$6 billion in 2026 to \$35.5 billion by 2034.² However, fewer than 1% of organizations surveyed by the Royal Institution of Chartered Surveyors (RICS) have fully embedded AI at scale,³ with most efforts remaining in pilot phases. As a result, many programs continue to optimize isolated tools rather than deploying integrated, autonomous workflows where AI can drive compounding value. Organizations that transition earlier to agentic models are positioning themselves to enhance decision velocity, reduce operational friction, and improve outcomes across the portfolio.

The adoption journey



INSIGHTS:

Agentic AI enables a shift from task-level efficiency to continuous, program-level execution by embedding intelligence directly into core delivery workflows. Rather than relying on periodic reviews and manual intervention, organizations can deploy agents to monitor conditions, apply rules, and surface issues in real time, compressing decision cycles, improving consistency, and allowing teams to focus on higher-value judgment. The greatest impact is emerging in workflows where data is structured, rules are definable, and outcomes are measurable.

Understanding the distinction between tools and agents:

The difference between generative AI tools and AI agents is architectural. Tools react, producing outputs when prompted. Agents are proactive, pursuing defined objectives, continuously monitoring inputs, and initiating actions. For example, rather than waiting for a reviewer to assess subcontractor billing against a schedule of values, an agent can continuously evaluate submissions, flag inconsistencies, and route findings for review. The human remains accountable for decisions; the agent removes the delay in identifying issues. At scale, this shift from reactive to proactive execution is what differentiates agentic workflows.⁴

High-impact workflows for agent deployment:

- Schedule monitoring and lookahead analysis**
Traditional schedule reviews are periodic and backward-looking. Agents enable continuous lookahead by ingesting live progress data, identifying float erosion, and flagging risks before they impact the critical path.
- Change order processing and pattern recognition**
Change management remains one of the most resource-intensive and risk-prone processes. Agents can ingest change events, cross-reference contract scope and historical pricing, and flag inconsistencies or duplication for review. Their ability to reference large volumes of prior change events enables faster processing, stronger documentation consistency, and pattern recognition that no individual reviewer can maintain at scale.
- Safety and compliance monitoring**
Field data is abundant but underutilized in real time. Agents can process daily reports, observations, and inspection data to identify leading risk indicators and trigger early interventions. Industry implementations report incident reductions of up to 40%–50%,⁵ while Deloitte's 2026 Engineering & Construction Outlook highlights safety analytics and computer vision as leading areas of AI adoption.⁶
- Procurement and supply chain monitoring**
Procurement risk often materializes faster than traditional reporting cycles capture. Agents can track supplier performance, delivery commitments, and commodity exposure continuously, flagging emerging risks before they impact cost or schedule. In volatile materials markets, earlier visibility provides meaningful leverage in planning and negotiation.

Operational impact and readiness: Early deployments show measurable cycle time compression across core workflows (i.e., change order reviews reduced from 8–12 days to 2–3 days, schedule variance detection from weeks to days, and compliance reporting moving toward near real-time).⁷ Realizing this value requires disciplined execution. Leading organizations start with targeted workflow audits to identify high-probability use cases, invest in data infrastructure to support reliable inputs (with 52% of AEC professionals still using paper in design phases),⁸ and embed governance and human oversight from the outset. The risk of moving without these foundations is material.⁹ Organizations that align deployment with clear use cases, strong data, and defined controls are capturing early advantages in decision speed, cost management, and program performance.

AI Tools vs AI Agent



HOW DELOITTE CAN HELP:

Deloitte's Infrastructure & Real Estate team brings deep experience across project controls, construction advisory, and data-enabled transformation to help organizations adopt agentic AI in a disciplined, value-focused manner. We support clients in translating emerging AI capabilities into practical, governed workflows that enhance program performance while maintaining accountability and control. Deloitte can help:

- Assess readiness and prioritize use cases** by evaluating existing workflows, tools, and data infrastructure to identify high-value, low-risk starting points for agent deployment
- Integrate program controls and data environments** to enable real-time visibility across cost, schedule, risk, and compliance functions
- Design governance and oversight frameworks** that support transparent, auditable AI-assisted decision-making aligned with stakeholder expectations
- Enable adoption through change management** by equipping project teams with the training, processes, and structures required to operate effectively alongside agentic workflows
- Develop and deploy tailored AI solutions** aligned to program-specific needs, with a focus on scalable, sustainable capabilities owned by the organization

With the right combination of domain experience, technical capability, and governance discipline, Deloitte helps capital program owners move from fragmented pilots to integrated, outcome-driven AI adoption. For more information, please contact one of our leaders to discuss how these capabilities can be applied across your program portfolio.

Cycle time reduction



¹ "Slate 2025 Construction Intelligence Study" [Is Construction Ready for AI? Industry Survey Report - Slate Technologies](#), Slate Technologies, 2025.

² "AI in Construction Market Size, Share, and Industry Analysis" [Fortune Business Insights](#), 2026.

³ "RICS artificial intelligence in construction report 2025" [RICS](#), Royal Institution of Chartered Surveyors.

⁴ Deloitte's 2026 State of AI in the Enterprise report found that 23% of enterprises are already using agentic AI at least moderately, with nearly 74% expected to reach that level within two years. "The State of AI in the Enterprise: The Untapped Edge" [Deloitte AI Institute](#), 2026.

⁵ "AI in Construction Site Safety: Top Innovations for Protecting Workers" [ABC Carolinas](#), 2025.

⁶ Michelle Meisels et al. "2026 Engineering and Construction Industry Outlook" [Deloitte Insights](#), 2025.

⁷ Cycle time ranges reflect emerging industry benchmarks and practitioner-reported deployment data across capital project environments. Figures are directional and not attributable to specific client engagements.

⁸ "AEC Technology Outlook 2026: How AEC Firms Are Building Smarter" [Bluebeam](#), 2025.

⁹ Gartner projects that over 40% of agentic AI projects will be canceled by the end of 2027 due to escalating costs, unclear business value, or inadequate risk controls. "Gartner Predicts Over 40% of Agentic AI Projects Will Be Canceled by End of 2027" [Gartner](#), 2025.