

CMiC

 PREMIER PARTNER



SMARTMARKET BRIEF

AI FOR CONTRACTORS

Awareness, Use and Impact of Artificial Intelligence
for Project and Company Management

DODGE
CONSTRUCTION
NETWORK



ABOUT THIS RESEARCH

Artificial Intelligence (AI) has evolved from an emerging curiosity to a practical tool that is transforming how industries operate, make decisions and compete.

Construction is now at an inflection point. While AI adoption in the industry remains in its early stages, the technology's potential to address longstanding challenges—from labor shortages and thin margins to project complexity and data overload—has captured the attention of contractors across all market segments.

To help the industry understand the current status of AI in construction, Dodge conducted a survey of 235 US general and trade contractors in September and October 2025. The research findings published in this report:

- Assess contractors' perspectives on AI's future impact on construction.
- Benchmark current awareness and usage of commercially available AI functionality for project management and company management.
- Identify the expected benefits and features that matter most to contractors.
- Examine organizational readiness and barriers to AI adoption.
- Explore interest in emerging AI capabilities for project and company management.
- Highlight key factors influencing AI solution selection.

The report also includes an interview with Erin Roberts, Global Leader of the Engineering & Construction Sector for EY, a widely respected thought leader in the construction industry.

Dodge thanks CMiC for supporting this research and for their commitment to helping contractors harness the power of AI to improve performance and competitiveness.

TABLE OF CONTENTS

- 1 Introduction**
- 2 Message From CMiC**
- 3 Key Findings**
- 5 Overall AI Trends in Construction**
- 15 AI Functionality for Project Management**
- 21 Thought Leader Interview:
*Erin Roberts, Global Leader of the Engineering & Construction Sector, EY***
- 25 AI Functionality for Company Management**
- 31 Methodology**
- 32 Contacts & Resources**

Message From CMiC

Within the construction industry, the vast amounts of data generated every day, from project schedules to cost reports to subcontractor communications, have historically served only as a system of record. For years, much of this information has remained unused, locked in disconnected systems or buried in spreadsheets. AI in construction is changing that reality, enabling teams to deliver better project outcomes, accelerate decision-making and improve margins.

For more than 50 years, CMiC has partnered with general and specialty contractors to bring business value through cutting-edge technology. We've helped customers streamline operations, strengthen their competitive position and stay ahead of the technology curve. Since launching NEXUS, the first AI-powered construction ERP, we've seen customers achieve results that would have been unthinkable just a few years ago.

New research from Dodge Construction Network confirms just how powerful those



results can be. Contractors using AI-enabled functions report effectiveness levels between 50% and 100% over previous methods. Automated proposal generation shows a 92% effectiveness rating; contract risk review is at 86% and progress tracking from site photos reaches 92%. These aren't just incremental gains; they are transformative shifts in performance.

The true impact of AI lies in how it elevates construction professionals: Project managers are shifting their focus from administrative tasks to strategic decision-making. Finance teams are shifting from historical reporting to predictive insights. Operations leaders are applying data-driven intelligence to drive superior project delivery. AI enhances human expertise; it does not replace it.

Yet the research also highlights a significant gap. While 32% to 34% of contractors are aware of AI capabilities, actual adoption is much lower. Most non-users cite practical barriers: the need for a clearer understanding of how AI works, access to software with these capabilities, internal approval, or resources to evaluate options. These obstacles, while real, are nonetheless solvable.

Another key finding is the central role of data quality. In this study, 24% of contractors with high-quality data see AI effectiveness ratings significantly above those with moderate data quality. While AI built on fragmented, inconsistent data produces fragmented

results, AI built on unified, high-quality data from integrated platforms becomes transformative.

For contractors using NEXUS, AI is already embedded in daily operations. Users are generating queries using natural language, delegating time-consuming tasks to more than 25 AI agents and using sentiment analysis to surface potential project issues before they escalate. Teams using our next-generation ERP are seeing how AI converts project and financial data into measurable bottom-line impact.

Beyond our own platform, this report offers valuable guidance to any contractor evaluating AI. It quantifies what early adopters are achieving, identifies the barriers holding others back and highlights the capabilities contractors value most. Whether organizations are exploring AI for the first time or expanding existing solutions, the findings offer a clear roadmap.

The trajectory is unmistakable: Construction AI transformation is accelerating rapidly. Contractors who invest strategically in AI today, supported by strong data foundations and integrated platforms, will set the industry standard tomorrow.

Gord Rawlins

President & Chief Executive Officer

Key Findings

Most contractors believe AI will significantly impact construction, and many are aware of AI-enabled functionalities available in commercial software. Although current usage is still low, interest is high and benefits are meaningful.

This and the following page provide a summary of the key findings, organized by major themes. More detail on each is available in the body of the report.

CONTRACTORS' PERSPECTIVE ON THE OVERALL AI TREND

OPTIMISM RUNS HIGH ABOUT AI'S FUTURE

Most contractors (87%) believe AI will have a meaningful impact on construction, with a significant share forecasting extensive industry transformation.

CONTRACTORS PREDICT NUMEROUS TRANSFORMATIVE IMPACTS FROM AI

Contractors who foresee AI having a transformative impact believe it will:

- Elevate the role of a project manager from an administrative task-doer to a strategic decision-maker, driven by AI's ability to provide predictive insights and automate time-consuming tasks.
- Enable insights into the quality of project delivery to achieve best-of-class performance.
- Facilitate predictive analysis from continuous data instead of reacting to historical data and trends.
- Optimize scheduling, cost control and human-centric leadership.

SEVERAL KEY BENEFITS ARE EXPECTED FROM AI-ENABLED SOLUTIONS

85% of contractors identify reducing time spent on repetitive tasks as a critical benefit they expect from AI, followed closely by mining data in order to learn from past projects (75%) and improving their decision-making by providing insights they might not have arrived at on their own (73%).

ACCURACY AND INTEGRATION ARE AMONG TOP EXPECTED FEATURES OF AI-ENABLED SOLUTIONS

Reliably delivering highly accurate outputs (85%) and integrating easily with existing tools and systems (82%) are top features contractors want from any AI-enabled solution, as well as flexible output formats (78%) and a natural language interface (77%).

AI WILL ENABLE NEW BUSINESS OPPORTUNITIES

Contractors believe AI will drive their growth by giving them the ability to do more projects with the same resources and develop new business models for existing services that are augmented by AI. They also see its ability to help them partner more effectively with other companies to do more complex projects.

THE COMPETITIVE ADVANTAGE FROM AI INCREASES WITH COMPANY SIZE

While 72% of contractors believe AI capability will provide their company with a competitive advantage, this belief rises sharply to 86% among large contractors.

CONCERNS REVOLVE AROUND ACCURACY AND SECURITY

Contractors' top concerns about using AI relate to the accuracy of AI output (57%) and the security of company data (54%). Implementation costs and internal resistance to change are also cited by more than one third of respondents. Only 21% express concern about job displacement.

QUALITY OF CONTRACTORS' EXISTING DATA PRESENTS A CHALLENGE

Only 26% rate their current data quality as high, with 58% acknowledging it's merely moderate, representing a significant hurdle for effective AI analysis of a company's existing data.

Key Findings

Most contractors believe AI will significantly impact construction and many are aware of AI-enabled functionalities available in commercial software. Although current usage is still low, interest is high and benefits are meaningful.

ORGANIZATIONAL READINESS FOR AI

CONTRACTORS' LEVEL OF COMMITMENT TO PREPARING FOR AI VARIES WIDELY

Over half of companies are exploring AI and piloting use cases, trying to improve their data and preparing staff for AI-related roles. However, somewhat fewer are allocating budget (40%) or creating implementation teams (38%).

FEW CONTRACTORS ARE ADAPTING WORKFLOWS FOR AI

Only 19% report they are adapting legacy workflows for an AI environment. Half (51%) are evaluating it but haven't started yet.

AWARENESS AND USE OF COMMERCIALLY AVAILABLE AI-ENABLED FUNCTIONALITY

AWARENESS OF AVAILABLE AI FUNCTIONALITY IS INCONSISTENT

Between about 20% and 50% of contractors report being aware that each of the 13 specific activities for project management and 11 for company management studied in this research can be conducted with currently available AI-enabled functionality in commercial software products.

USAGE OF AVAILABLE AI FUNCTIONALITY VARIES SIGNIFICANTLY

Certain AI-enabled functions, such as new business opportunity evaluation and proposal generation and contract risk review are being used by over half of the companies who are aware of their availability. However, others still show relatively low engagement, despite awareness.

USERS OF AI-ENABLED FUNCTIONALITY STRONGLY PREFER IT TO FORMER METHODS

Between 50% and 100% of the contractors using each of the 24 AI-enabled functions studied report meaningfully better results than their former methods. This powerfully positive finding validates the effectiveness of AI and suggests that its usage by contractors is poised to grow significantly.

INTEREST IN ADOPTING SPECIFIC AI-ENABLED FUNCTIONALITIES

INTEREST IN AI IS STRONG DESPITE LIMITED CURRENT USE

Most contractors who are aware of but not yet using AI-enabled functions are interested in doing so, but are either still evaluating, awaiting better tools or seeking internal approval to adopt and implement these solutions.

CONTRACTORS IDENTIFY MOST APPEALING NEW AI-ENABLED FUNCTIONS

Contractors express the highest levels of interest in adopting these potential new AI-enabled functionalities:

PROJECT MANAGEMENT:

- *Automated constructability analysis during design phases to flag potential field issues*
- *Intelligent permit and regulatory submission with automatic compliance checking*
- *Autonomous project optimization (i.e., AI continuously adjusts schedules, resources and workflows in real time based on changing conditions)*
- *Predictive quality control using sensor data and ML (machine learning) models to prevent defects before they occur*

COMPANY MANAGEMENT:

- *Dynamic pricing optimization based on market, capacity and risk factors*
- *Automated contract creation, authorization and management*
- *Predictive business risk assessment integrating economic, regulatory and operational factors*
- *Intelligent opportunity identification and bid-no-bid decision support*

Overall AI Trends in Construction

Introduction

This section of the report focuses on:

TRANSFORMATIVE IMPACT OF AI

- The degree to which contractors believe that AI will have a transformative impact on the construction industry.
- Aspects of the construction industry that contractors believe will be most notably transformed and in what ways.

EXPECTED BENEFITS AND FEATURES

- The specific benefits contractors believe they will receive from using AI.
- The most important features of AI-enabled tools and solutions for contractors.

NEW OPPORTUNITIES AND COMPETITIVE ADVANTAGE

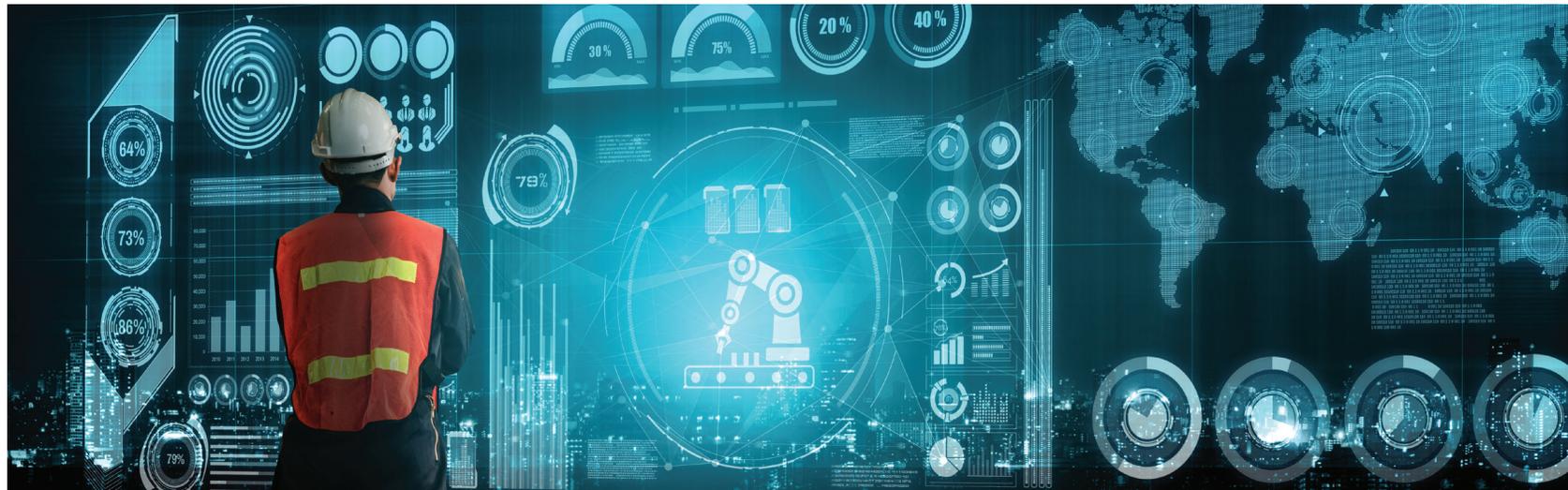
- What new opportunities contractors believe AI-enabled functionalities will make possible for their companies.
- The degree to which contractors believe that AI capability will create a competitive advantage for their company.

TOP CONCERNS

- Contractors' concerns about using AI-enabled functionalities, including assessment of the quality of their current data for effective use by AI.

ORGANIZATIONAL PREPAREDNESS

- The level of commitment each respondent's company currently has to eight specific activities critical to AI preparedness.
- The degree to which contractors are actively adapting legacy workflows to function effectively in an AI-enabled environment.



Overall AI Trends in Construction

Future Impact of AI in Construction

AI is rapidly entering the construction industry—often embedded in software contractors already use. But because this technology is still evolving, a clear understanding of what it can realistically accomplish and how it will ultimately impact construction is still developing.

HOW IMPORTANT WILL AI BE TO THE FUTURE OF CONSTRUCTION?

Respondents were asked to identify which of the four statements shown in the chart at right best represents their current prediction about how important AI will be in the construction industry.

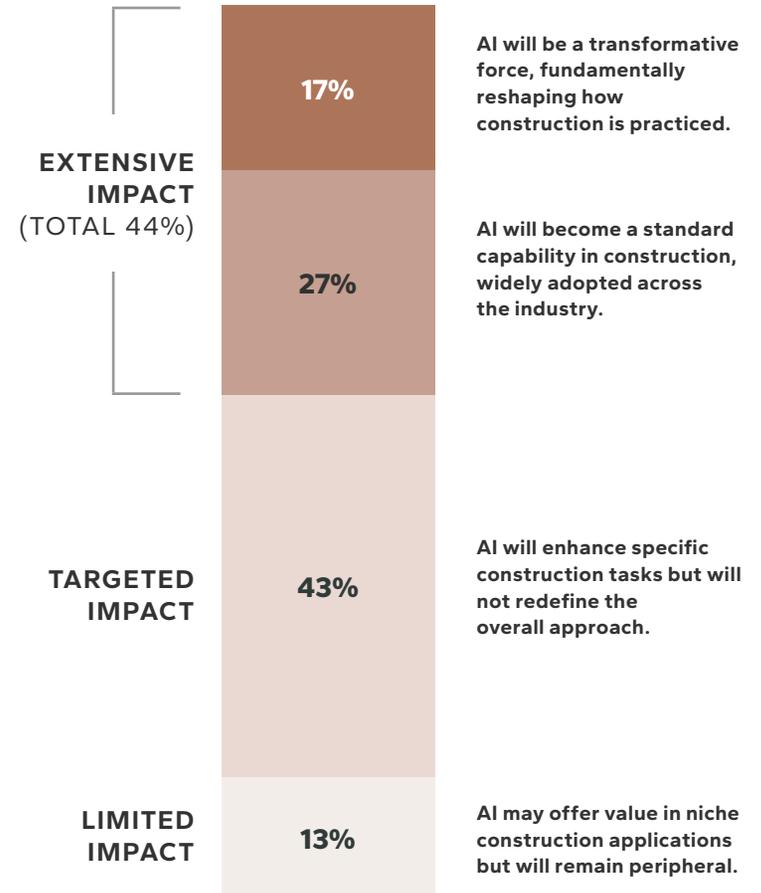
- All contractors agree AI will offer some level of value, with a large majority (87%) predicting it will have a meaningful impact on the construction industry.
- Nearly half (44%) predict AI will exert an extensive impact, becoming a standard capability across the industry. A significant share of those respondents go further to say AI will fundamentally reshape the practice of construction.

VARIATIONS AMONG RESPONDENTS

Responses are consistent between GCs and trades and across size ranges of companies, reinforcing the industry-wide perspective shown in the chart.

Interestingly, contractors who primarily do heavy/civil/non-building projects are more bullish on the prospects for AI, with 23% predicting a transformative impact versus just 14% of their peers who construct buildings.

Contractors' Perspective on the Future Importance of AI
Percentages Agreeing With Each Forecast



Overall AI Trends in Construction

The Voice of the Contractor About the Transformative Power of AI

WHAT WILL BE THE BIGGEST IMPACT OF AI?

All respondents were asked to share what they believe will be the biggest impact of AI. Below are selected responses from the among the 17% of respondents shown on the previous page of this report who believe that AI will exert a transformative force.

PROJECT MANAGEMENT

“The most transformative impact of AI on project management will be the elevation of the project manager’s role from an administrative task-doer to a strategic decision-maker, driven by AI’s ability to provide predictive insights and automate complex tasks, thereby improving project outcomes and overall organizational performance. This shift will allow project managers to focus on high-level strategic thinking and human-centric leadership, while AI handles data analysis, risk prediction and resource optimization.”

“I think AI will enable our project management department to organize data in a more timely and accurate fashion. I believe a more automated approach to things like change orders, RFI’s and items that require follow up will help ensure things are not falling through the cracks.”

PRODUCTIVITY

“I am highly anticipative of leveraging AI tools to remove a lot of the repetitive nature of items that come across my desk. Tools that can link engineering, project management and production can formulate output and data instantly, providing insight to the overall project. All of this occurring in moments. This will ease the individual project effort and allow for more work with the same team.”

QUALITY AND COMPETITIVENESS

“Our gaining the ability to better understand our quality of project delivery and how to improve our work in the future. Also, expect to gain from use of market data to make our company a best-of-class contractor.”

PREDICTIVE ANALYSIS

“The End of Guesswork: From Reactive to Proactive and Predictive Management. Today, managers often rely on historical data, spreadsheets and experience to make decisions. This is inherently reactive. AI Transformation: AI will provide a continuous, predictive understanding of the entire business ecosystem. Example: Instead of a quarterly review showing a key project is over budget, an AI system would have predicted the budget overrun months in advance, flagging the specific risks.”

“Ability to turn data into proactive decision-making. AI will enable teams to predict risks, forecast costs and optimize schedules with a level of accuracy that goes far beyond traditional tools. By automating repetitive administrative tasks such as document tracking, bid management and reporting, project managers will be able to focus more on strategic oversight and collaboration.”

Overall AI Trends in Construction

Most Important Expected AI Features and Benefits

WHAT CONTRACTORS EXPECT FROM AI

As with many innovations, the ultimate value and effectiveness of AI will be unique for each company using it.

To benchmark current industry thinking, respondents were asked about the potential importance of each of the benefits and solution features shown in the chart at right. The percentages reflect how many contractors believe each would have either high or very high importance to their company.

TOP EXPECTED BENEFIT RELATES TO AUTOMATING MUNDANE TASKS

While all five benefits score highly, reducing repetitive tasks notably leads.

ACCURACY OF AI OUTPUT IS A CRITICAL FEATURE

While again, each of the feature options score strongly, reliable outputs tops the list. This is echoed later in these findings when contractors are asked about their top AI-related concerns (see page 11).

VARIATIONS AMONG RESPONDENTS

GCs feel more strongly about the importance of each of these benefits and features, averaging 81% across all nine versus just 72% among trades.

Similarly, large companies average 87% compared with 78% for midsize companies and just 73% for small ones.

Top Expected Benefits of AI-Enabled Solutions

Reducing the time I spend on repetitive or mundane tasks

85%

Learning from my company's data and past projects to improve (e.g., forecasts, processes, outcomes)

75%

Making it easier to share data across teams or functions at my company

73%

Helping me make better decisions by providing insights I might not arrive at on my own (e.g., risk analysis, resource optimization)

73%

Automating workflows with AI that I currently do manually

72%

Top Expected Features of AI-Enabled Solutions

Reliably delivering a high level of accuracy in its outputs

85%

Integrating easily with the tools and systems I already use

82%

Producing outputs in formats that are useful to me (e.g., text, tables, charts, summaries)

78%

Ability to communicate with an AI easily and naturally (e.g., using plain language)

77%

Overall AI Trends in Construction

New Business Opportunities Enabled by AI

INCREASING PRODUCTIVE CAPACITY OF EXISTING RESOURCES TOPS THE LIST OF AI-ENABLED BUSINESS OPPORTUNITIES

Having AI capabilities may enable many new business opportunities. From those shown below, respondents were asked to select the ones they expect their company to experience over the next five years.

- Over half (55%) expect to be able to do more projects with the same resources, especially large companies (64%).

- More GCs (36%) than trades (27%) expect to offer new business models for AI-augmented services.
- Conversely, more trades (41%) than GCs (30%) expect to leverage AI to partner with other companies on complex projects. A similar difference occurs between heavy/civil/non-building companies (40%) and their building-focused peers (30%), perhaps reflecting the complexity of projects in those sectors.

Contractors' Perspective on Potential New AI-Enabled Business Opportunities

Percentages Identifying Each as Likely for Their Company to Experience Over the Next Five Years

High Expectations

Moderate Expectations

Low Expectations

Ability to do more projects with the same resources	55%
Enhanced reputation for being innovative	37%
New business models for existing services that are augmented by AI	34%
Ability to partner more effectively with other construction companies on complex projects	33%
Improved employee attraction/retention	28%
New service offerings	17%
Ability to expand geographically	14%
We do not expect significant new opportunities	14%

Overall AI Trends in Construction

Degree to Which AI Capability Will Provide a Competitive Advantage

MOST CONTRACTORS BELIEVE THAT AI CAN CREATE A COMPETITIVE ADVANTAGE FOR THEIR COMPANY

Respondents were asked to what degree they believe that deploying AI will contribute to a greater competitive advantage for their company over the next five years.

The chart at right shows the percentage of all respondents who have a high or very high level of belief (29%) and those that express a moderate level (43%). Findings are also shown divided by company size and company type.

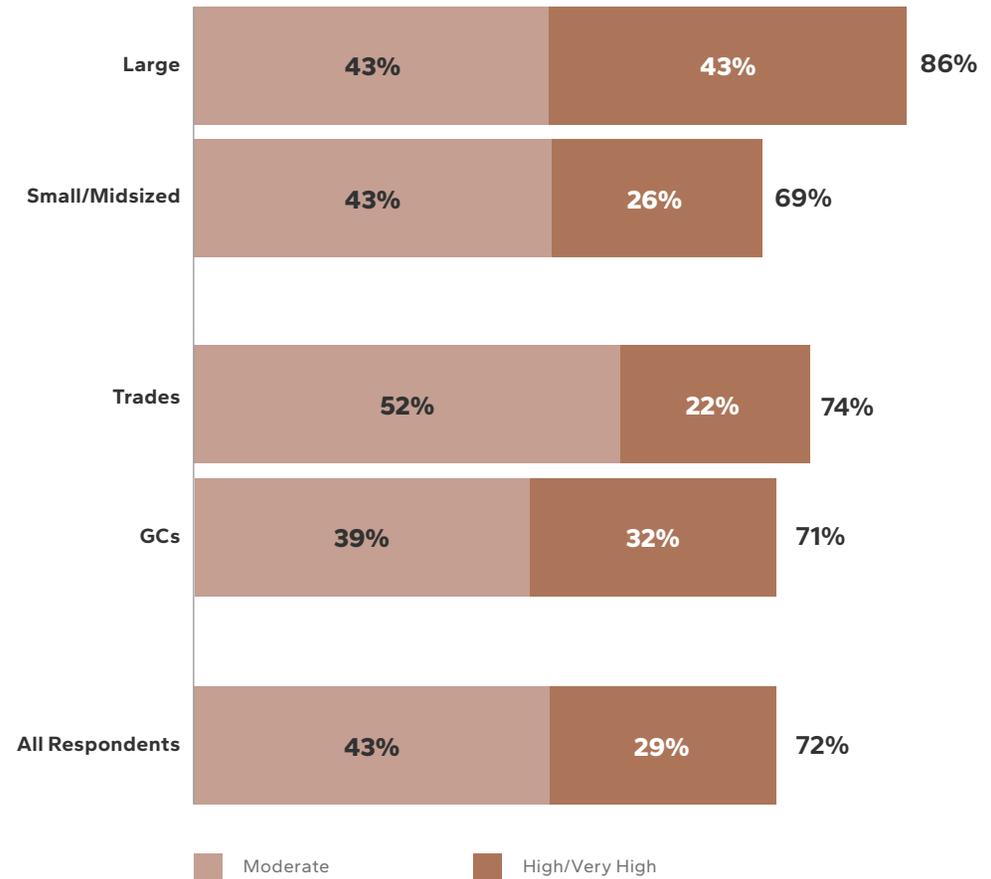
VARIATION BY COMPANY SIZE

Markedly more large contractors (86%) believe AI will create a competitive advantage than their small/midsized peers (69%). The gap is most evident at the high/very high belief level (43% versus 26%). This may reflect a keener focus among large contractors on leveraging technology capabilities for competitive positioning as well as promoting a culture of innovation at their companies.

VARIATION BY COMPANY TYPE

While trades (74%) are slightly ahead of GCs (71%) for the combined categories, far more of the latter group (32% versus 22%) express a high/very high level of belief. This may be because GCs frequently compete on the strength of their management skills, while trades are evaluated more often on their cost, craft quality and labor resources.

Contractors' Perspective on the Competitive Advantage of AI
Percentages Believing AI Will Provide a Moderate or High/Very High Level of Competitive Advantage



Overall AI Trends in Construction

Top Concerns About AI

OUTPUT RELIABILITY AND DATA SECURITY TOP THE LIST OF CONTRACTORS' CONCERNS ABOUT AI

The chart below shows how many contractors are concerned about each of seven possible AI-related issues.

VARIATIONS AMONG RESPONDENTS

The responses are generally consistent between GCs and trades as well as between heavy/civil/non-building contractors and those primarily working on buildings. However, as shown in the table at right, company size reveals striking differences.

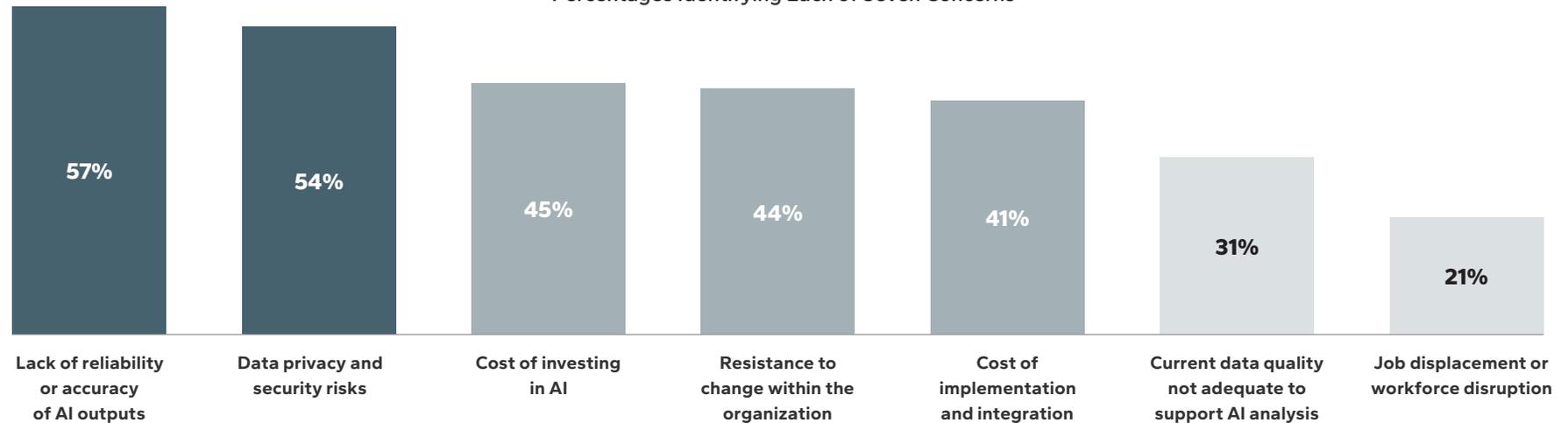
- Not surprisingly, cost is a greater concern to smaller companies.
- Large contractors' reliability and data quality concerns may relate to their general trend toward deeper engagement and planned reliance on AI than their smaller peers.

Top Differences in Concerns Between Large and Small/Midsize Contractors

	Small/ Midsize	Large
Lack of reliability or accuracy of AI outputs	54%	69%
Cost of investing in AI	49%	26%
Resistance to change within the organization	42%	50%
Cost of implementation and integration	45%	24%
Current data quality not adequate to support AI analysis	27%	48%

Contractors' Top Concerns About Adopting AI-Enabled Solutions

Percentages Identifying Each of Seven Concerns



Overall AI Trends in Construction

Current Quality of Construction Companies' Data

FEW CONTRACTORS HAVE DATA THAT IS OPTIMIZED FOR AI

Respondents were asked to rate the quality of their company's data that would benefit from analysis by an AI-enabled solution. As shown below:

- 58% say their current data is generally reliable but has some gaps and inconsistencies. Unfortunately, these deficiencies are likely to impact AI's ability to produce reliable outputs, which is contractors' top AI-related concern (see previous page).
- About one quarter (26%) believe their current data is very good or excellent (i.e., ready for AI).

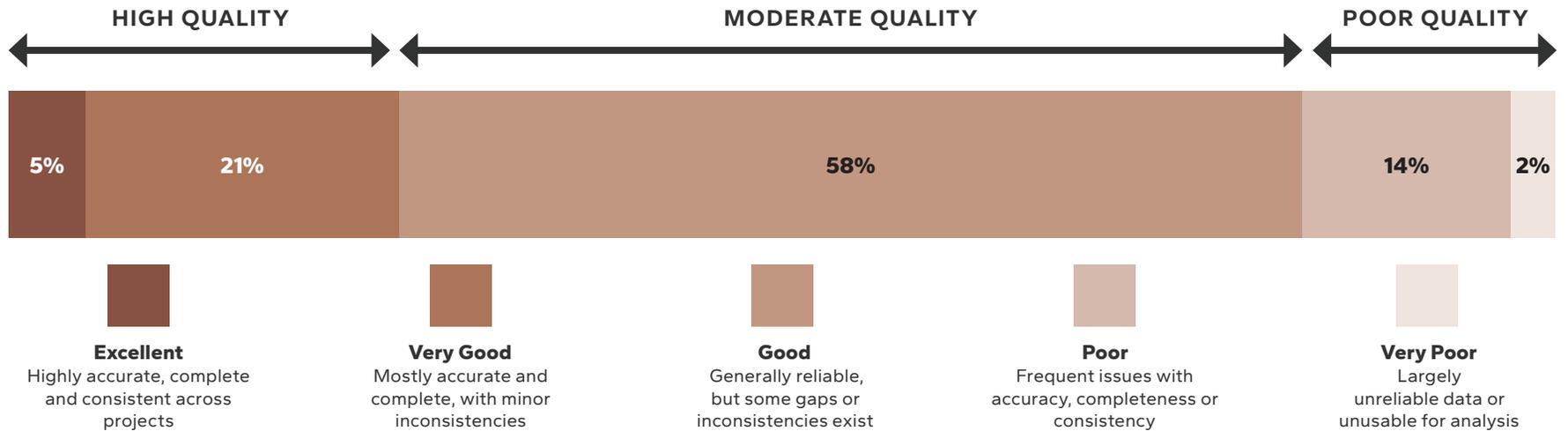
VARIATIONS AMONG RESPONDENTS

Data quality variations among contractor subgroups are shown in the table below. Interestingly, more civil contractors report both high- and poor-quality data, creating an unusual barbell profile.

Respondent Subgroup	Company Type		Company Size			Project Type	
	GCs	Trades	Small	Midsize	Large	Non-Building	Buildings
High Data Quality	27%	18%	22%	23%	29%	26%	19%
Poor Data Quality	13%	18%	20%	12%	12%	16%	6%

Current Quality Level of Contractors' Data to Use for AI Analysis

Percentages Identifying Each of Five Current Data Quality Levels



Overall AI Trends in Construction

Degree of Commitment to Preparing Their Organization for AI

Successfully implementing AI requires organizational readiness across multiple dimensions.

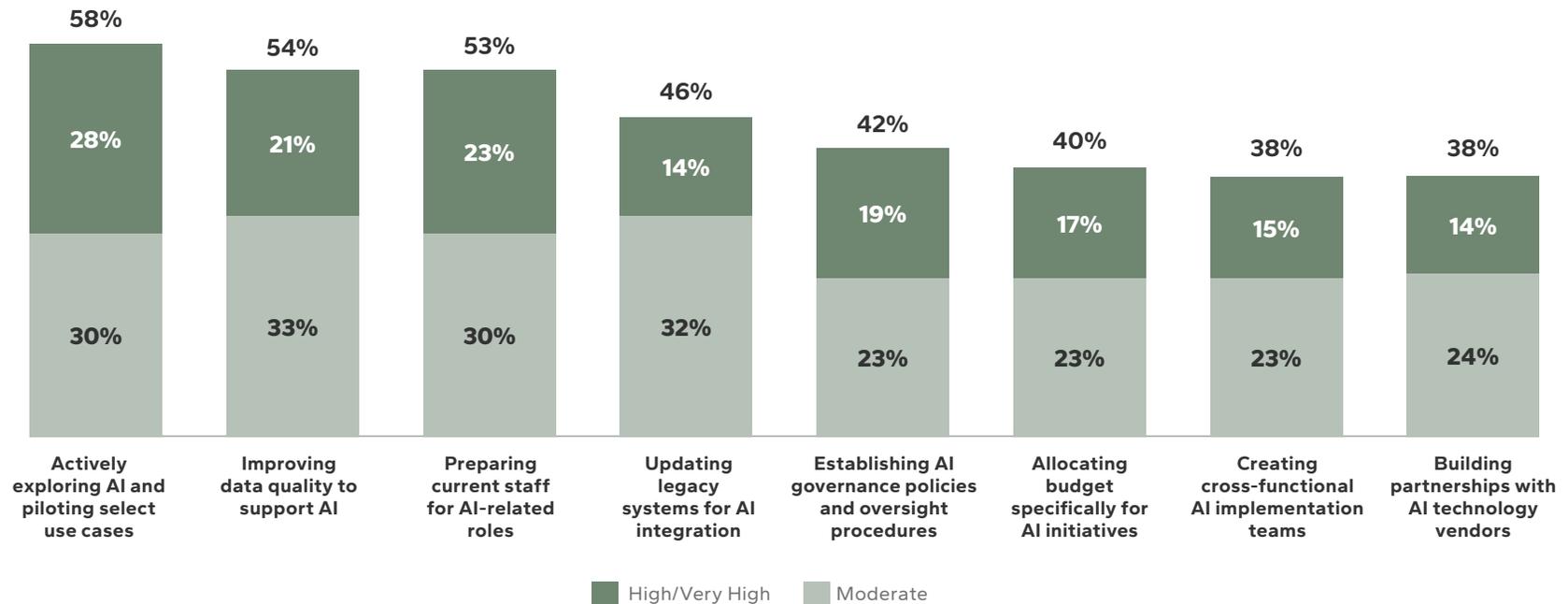
Respondents were asked about their company's level of commitment to each of eight activities in the next five years that would contribute to success with AI. The chart below shows those reporting both moderate and high/very high levels of commitment.

ORGANIZATIONAL COMMITMENT IS MIXED

While over half are exploring AI, improving their data and preparing staff to some degree, on average, only 19% of respondents report high/very high commitment across these eight activities.

- Again, company size matters, with 38% of large contractors committing at the highest levels versus only 15% of small/midsize ones.
- GCs (21%) outpace trades (15%) at the highest levels of commitment, while responses are nearly equal between building and civil contractors.

Contractors' Levels of Commitment to Organizational Preparedness for AI
Percentages Identifying Moderate and High/Very High Levels of Commitment Over the Next Five Years



Overall AI Trends in Construction

Adapting Current Workflows to Accommodate AI

FEW CONTRACTORS ARE ACTIVELY MODIFYING THEIR CURRENT WORKFLOWS FOR AI

Respondents were asked to select which of the statements shown in the chart at right best represents how their company is planning to adapt existing workflows to accommodate AI tools or capabilities in the next five years.

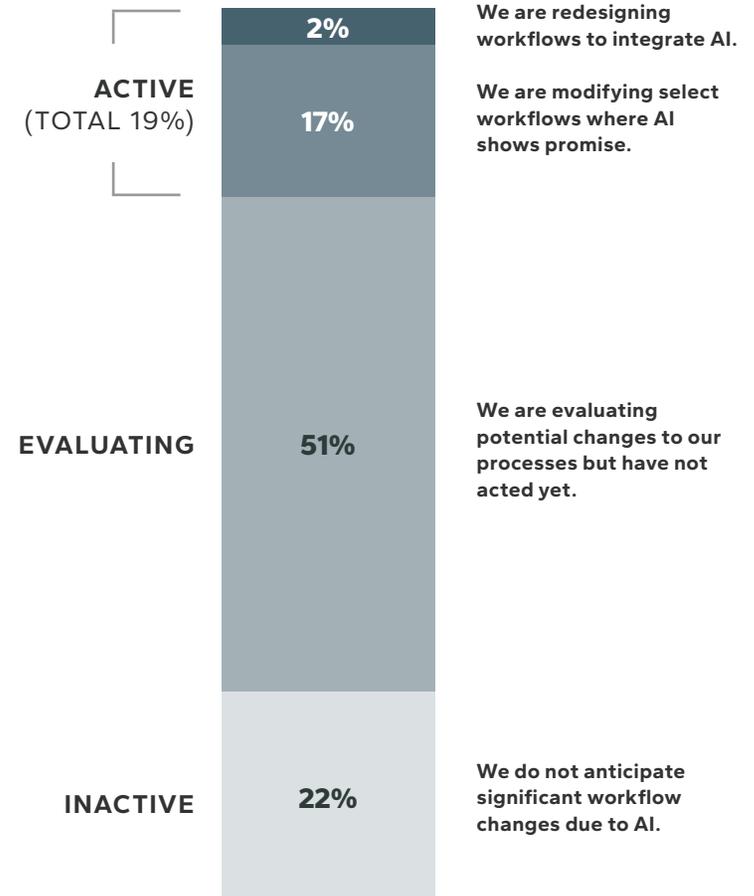
- While half (51%) are evaluating it, fewer than 1 in 5 contractors (19%) say they are actively addressing this.
- Almost one quarter (22%) do not yet anticipate that AI will have a meaningful impact on their workflows.

VARIATIONS AMONG RESPONDENTS

There are several notable differences between some subgroups and also between those who responded in certain ways to previous questions in this section of the report.

- Company size has the most dramatic influence, with 43% of large contractors falling in the active category and only 13% of small/midsize ones doing so.
- 38% of contractors who believe AI will provide a meaningful competitive advantage (see page 10) are in the active category compared with just 10% of all others.
- In another clear division, 30% of contractors who believe AI will have a significant impact on construction (see page 6) are in the active group, while only 10% of the others are.
- Along those same lines, 29% of contractors with high-quality data (see page 12) are in the active category versus just 17% of those with moderate- or poor-quality data.
- Active GCs (20%) slightly outnumber active trades (15%), while primary project type exerts no meaningful influence.

Contractors' Approach to Adapting Workflows for AI
Percentages Agreeing With Each Statement



AI Functionality for Project Management

Introduction

The table at right shows 13 AI-enabled functionalities for project management that are currently available in commercial software products in the US.

This section of the report examines:

AWARENESS AND USE OF AVAILABLE AI-ENABLED FUNCTIONALITIES FOR PROJECT MANAGEMENT

- How many contractors are aware of the existence of each of these AI-enabled functionalities.
- Among those who are aware, how many are using each functionality.
- Among those using them, how many believe the AI-enabled functionalities are more effective than their traditional project management methods.
- Among those who are aware of the AI-enabled functionalities but not using them, the chief reasons for deferring.

INTEREST IN POTENTIAL NEW AI-ENABLED FUNCTIONALITIES FOR PROJECT MANAGEMENT

- The level of interest across seven AI-enabled functionalities for project management that may be entering the commercial market in the near future.
- Factors that will have a strong influence on contractors' selection of AI-enabled solutions for project management in the future.

AI-ENABLED FUNCTIONALITIES FOR PROJECT MANAGEMENT ACTIVITIES THAT ARE CURRENTLY AVAILABLE IN COMMERCIAL SOFTWARE

1. Automated progress tracking using site photos/videos

2. Automated quantity takeoffs

3. Managing change orders and approvals

4. Managing document access and version control

5. Managing invoicing and payments on specific projects

6. Managing project budgets

7. Managing project resources

8. Managing project schedules

9. Managing subcontractor prequalification

10. Managing the invitation-to-bid processes

11. Managing vendors and trade partners

12. Safety risk assessment and monitoring

13. Tracking and documenting labor activity and incidents

AI Functionality for Project Management

Awareness and Use of Commercially Available AI Functionality for Project Management

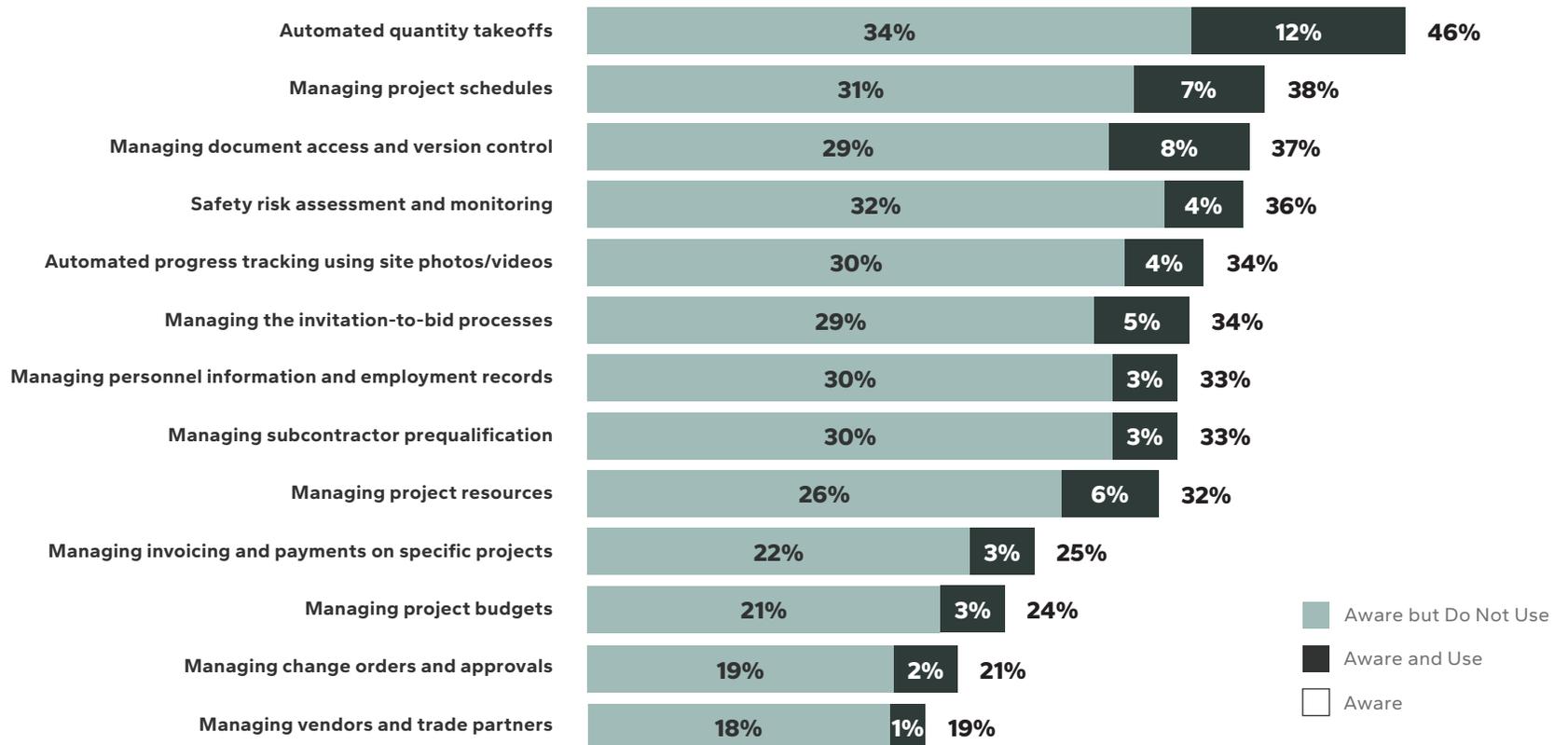
AUTOMATED QUANTITY TAKEOFFS LEADS IN BOTH AWARENESS AND ADOPTION

Contractors with project management responsibilities (versus company management roles) were asked whether they are aware that AI-enabled functionality is currently available for each of 13 project management activities. Those reporting awareness were then asked if their company currently uses it.

AWARENESS SIGNIFICANTLY OUTPACES ACTUAL USE

Awareness ranges from 19% to 46% across the 13 functions, averaging 32%. However, actual use lags considerably. On average, only 5% of all contractors are using each function, meaning that an average of 27% are aware but not yet using them. The reasons for this gap are explored on page 18.

Contractors' Levels of Awareness and Use of Available AI Functionality for Project Management Activities
Percentages Citing Awareness of Availability and Use



AI Functionality for Project Management

Effectiveness of Commercially Available AI Functionality for Project Management

AI IS HIGHLY EFFECTIVE FOR PROJECT MANAGEMENT

The contractors who report using AI-enabled functionality for each project management activity were asked to rate its effectiveness compared with their previous method(s) for that activity. The chart at right shows the percentages rating high or very high effectiveness.

- From half to nearly all of the AI users for each activity rate its comparative effectiveness as high or very high (average 72%).
- On average, 81% of AI users from the subgroup that reports having high-quality data (see page 12) rate AI as effective compared with just 70% of those with moderate-quality data. This demonstrates the direct relationship between data quality and AI performance.
- Company size matters here also, with large- and midsize contractors averaging 80% versus just 64% among small companies.
- GCs (average 76%) outpace trades (average 68%) while there is no meaningful difference between non-building civil and building contractors.

CLEAR EVIDENCE OF THE EFFECTIVENESS OF AI FOR PROJECT MANAGEMENT

These strongly positive effectiveness ratings validate AI's value for project management. As awareness spreads and more contractors experience these benefits firsthand, adoption is likely to accelerate significantly.

Percentage of Contractors Rating AI as Highly or Very Highly Effective for Project Management Activities Compared With Their Previous Method(s) for Each Activity



AI Functionality for Project Management

Reasons Contractors Are Not Using Available AI Functions for Project Management

Every respondent who is aware of, but not using, each of the project management AI functions studied was asked to select all of the applicable reasons (shown in the table below) for not using it. The color coding identifies percentage groupings in 10 percentage-point tiers. The average for each reason is shown on the bottom row.

NON-USER INTEREST SUGGESTS READINESS TO ADOPT

Although some are concerned about the accuracy of AI outputs, most either need more information, better tools, internal approval or more internal support. Encouragingly, very few do not believe AI would be better than their current methods.

Reasons for Not Using Available AI Functionality for Project Management Activities
Among Contractors Who Are Aware of the Availability of Each Function

	30% or More	20% to 29%	10% to 19%	Less Than 10%	I do not believe AI would be better than current method(s)	I do not sufficiently trust the results AI would produce	I need to better understand how AI works before considering usage	I am interested but my current software does not have AI capabilities for these functions	I am interested but my company has not approved AI usage for these functions	I am interested but have not had resources to evaluate AI properly
Automated quantity takeoffs		24%	17%	3%	3%	24%	17%	14%	28%	14%
Managing project schedules		15%	15%	8%	8%	15%	15%	27%	19%	15%
Managing document access and version control		22%	26%	0%	0%	22%	26%	13%	17%	13%
Safety risk assessment and monitoring		13%	31%	3%	3%	13%	31%	6%	25%	16%
Automated progress tracking using site photos/videos		11%	21%	11%	11%	11%	21%	18%	25%	11%
Managing the invitation-to-bid processes		12%	24%	4%	4%	12%	24%	24%	20%	8%
Tracking and documenting labor activity and incidents		10%	31%	0%	0%	10%	31%	17%	17%	21%
Managing subcontractor prequalification		7%	28%	3%	3%	7%	28%	17%	21%	17%
Managing project resources		19%	14%	10%	10%	19%	14%	33%	19%	5%
Managing invoicing and payments on specific projects		5%	21%	5%	5%	5%	21%	16%	37%	11%
Managing project budgets		35%	18%	6%	6%	35%	18%	18%	12%	12%
Managing change orders and approvals		31%	0%	0%	0%	31%	0%	19%	38%	13%
Managing vendors and trade partners		13%	25%	6%	6%	13%	25%	25%	13%	13%
AVERAGES		17%	21%	5%	5%	17%	21%	19%	22%	13%

AI Functionality for Project Management

Interest Level in Potential New AI-Enabled Project Management Functionalities

Respondents in project management (versus company management) roles were asked to rate how valuable seven potential new AI-enabled functionalities would be to their company.

INTEREST VARIES ACROSS POTENTIAL NEW AI-ENABLED FUNCTIONS FOR PROJECT MANAGEMENT

The table at right shows the percentages seeing value (moderate, high or very high) in seven potential new AI-enabled functions for project management. The average is 77%, suggesting broad industry interest.

VARIATIONS AMONG RESPONDENTS

- Large contractors average 82% versus just 75% from small- and midsize companies. This aligns with other findings in this report indicating larger contractors' greater AI engagement.
- Contractors who report having high-quality data (see page 12) average 89% compared with only 60% of those with poor-quality data. This suggests that confidence in AI's potential correlates directly with the quality of data available to feed it.
- Not surprisingly, respondents believing that AI will have a significant impact on construction (see page 6) average 82%. The rest average 73%, which, while lower, still expresses an encouragingly positive attitude about these new functionalities despite their less optimistic overall view of AI.
- GCs are only slightly more positive (79%) about these new AI functionalities than trades (73%), and there is no statistical difference between non-building civil and building contractors.

Percentage of Contractors Who Believe That Potential New AI-Enabled Functionalities for Project Management Would Be Valuable
Based on Ratings of Potential Value for Each Activity

PROJECT MANAGEMENT: Potential Value of New AI Functionalities	% Who See Value
Automated constructability analysis during design phases to flag potential field issues	81%
Intelligent permit and regulatory submission with automatic compliance checking	80%
Autonomous project optimization (AI continuously adjusts schedules, resources and workflows in real time based on changing conditions)	79%
Predictive quality control using sensor data and machine learning models to prevent defects before they occur	78%
Real-time labor productivity optimization and crew rebalancing recommendations	75%
Dynamic weather forecast-responsive scheduling with automatic contingency plan activation	72%
AI-powered conflict resolution for disputes in the field between trades, schedules or design issues	72%

AI Functionality for Project Management

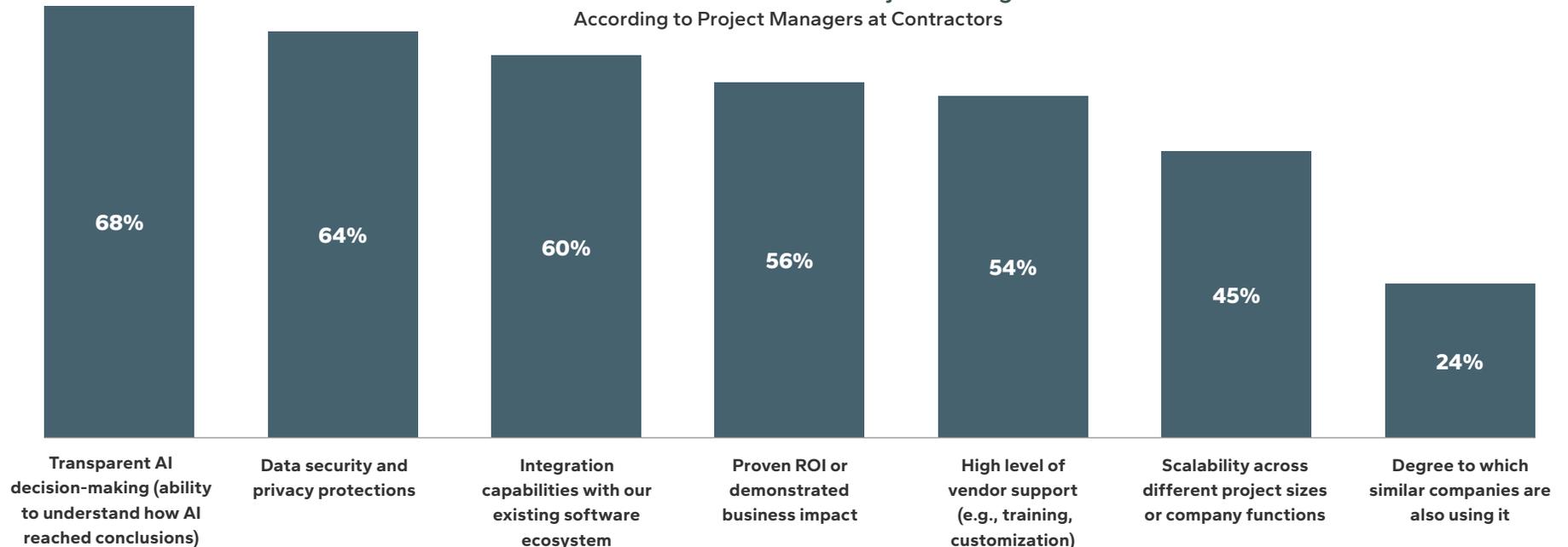
Factors Influencing Future Selection of AI-Enabled Solutions for Project Management

TRANSPARENT DECISION-MAKING IS THE TOP PRIORITY

From the options shown in the chart below, respondents with project management responsibility were asked to select the ones they believe will have a strong influence on their selection of AI-enabled solutions in the coming years.

- TRANSPARENCY:** Being able to understand how an AI-enabled solution produces its output will be the most important factor for potential adopters of project management solutions.
- DATA SECURITY AND INTEGRATION:** These rank second and third, reflecting contractors' need for AI solutions that protect sensitive project information and work seamlessly within existing technology ecosystems.
- ROI AND VENDOR SUPPORT:** Contractors seek confidence that AI investments will deliver measurable returns and that technology partners will provide training and customization for successful implementation.
- SCALABILITY AND MARKET PENETRATION:** Scalability across different project types and functions matters more than competitors' use of similar solutions, suggesting that focus on internal fit is a higher priority than just following market trends.

Factors That Would Influence the Selection of Future Project Management AI-Enabled Solutions
According to Project Managers at Contractors



Thought Leader Interview: Erin Roberts, EY



Erin Roberts
Global Leader,
Engineering & Construction
Sector, EY

What are the most effective ways that AI is currently being used for project and company management?

ROBERTS: About half of our clients have what I would consider to be a robust AI strategy, which includes some sort of governance, a data integrity model and have at least piloted some opportunities for its use.

[The opportunities they are testing so far] are very simple things. We see AI being deployed in bidding and proposal activities: they [can] avoid rewriting new proposals from scratch by letting the AI customize existing ones. We see [people using AI] to summarize one-thousand-page contracts or search for certain types of terms [in those contracts] that need to be approved by their legal department.

None of these little activities are big drivers of evolutionary change. Our customers are just

AI AGENTS FOR CONTRACTORS

“ I think we are going to see clients implementing a fully formed [AI] agent, and in the next two years.”

playing with AI and do not have a fully formed governance model, which is really important to be able to more fully deploy AI in the right way.

Can you explain what a fully formed governance model for AI would look like?

ROBERTS: Many large companies approach AI in a structured way which ensures that they leverage the power of all the available information but also protect their own data and avoid having their data available to teach other people's models. [Data security] has been a source of real concern for a company like mine. Having a robust closed environment allows us to freely use AI tools but not risk [the loss of data] confidentiality.

I find that many companies in the construction industry have individuals who have downloaded ChatGPT and are just doing stuff. We are talking to our clients about how to pursue this the right way by establishing a governance model.

What will you allow people access to? That typically means procuring your own open AI platform, and then facilitating access to your own data, your own network, in a way that makes the AI valuable. Then you do pilots and broadcast the use cases across the organization. This is a more thoughtful approach, as opposed to everyone on their phones and computers typing away and using all manner of things without that control in place.

How do you expect contractors' use of AI to change in the next two to three years?

EFFECTIVENESS OF AI AGENTS

“ An adaptive agent could track a late delivery of steel, update when the crew and the tower crane need to be there. The agent AI is going to be able to do that much faster, much more effectively than we as humans can do.”

ROBERTS: It is evolving fast. I think we are going to see clients implementing a fully formed agent, and in the next two years, it is going to be much more impactful.

The areas where it will be most fall into two big buckets. One is optimizing the asset itself, including optimizing fit-for-purpose design, design efficiency, sustainability, how and where assets are built, with what materials and all the rest. We see engineering firms planning for how AI can do that better than a human architect. Optimization of the asset is an area of tremendous opportunity.

Then, I think about what contractors do. [Their] process is built on information about materials, availability, location, quality, timeline crews, equipment, etc.

Thought Leader Interview: Erin Roberts, EY

All of these things have to be coordinated, and we've spent decades trying to build good information technology tools to help manage these processes and get ahead of them. But when your project management tool has 100,000 tasks in it, creating tools that can make predictions and adjustments to the process has been exceedingly challenging. We still see large construction projects go off budget and off schedule.

Having an adaptive agent [would link tools together to allow for] continuously updated staffing and scheduling. [For example,] it could track a late delivery of steel, update when the crew and the tower crane need to be there. The agent AI is going to be able to do that much faster, much more effectively than we as humans can do. The more efficiently contractors can coordinate, the more likely they are to get projects done on time, on budget and to become more profitable.

INTEROPERABILITY

“Your current best-in-class tools may not talk to each other, but the AI agent can talk to them all seamlessly, all the time.”

Those are the things I have great hopes for, but how they can be achieved is interesting. I am not necessarily prepared to say that our contractor

clients have the internal capabilities to design and implement all that themselves.

Do you think an external disruptor from outside the industry is needed?

ROBERTS: No it is more likely to be built into the tools they are already buying [from existing technology vendors].

If existing technology vendors are the most likely source, is there a risk of having many disparate programs with their own flavor of AI, perpetuating the silos in which the data already exists?

DATA QUALITY

“Our clients have not focused enough on preparing their data to be accessible for open AI tools to use.”

ROBERTS: It is an interesting dynamic. Fifteen years ago, everything was a single platform on premise, ERP, procurement, HR, everything all within one. And it cost \$100M to do something like that. These days, we have a proliferation of more best-in-class point solutions. But AI is frankly the answer for that proliferation. Your current best-in-class tools may not talk to each other, but the AI agent can talk to them all seamlessly, all the time.

We are having a conversation with a very large contractor who wants to do this. For a company like that, we start with governance, and the second important consideration is data. Our clients have not focused enough on preparing their data to be accessible for open AI tools to use. [Contractors need to] invest in their data to improve its quality by instituting a standardized process to capture data. You must have that in place before you can take advantage of AI. To do that, you need IT people with data architecture experience and the right platforms, and those are not cheap. You have to invest in building your data sets as data lakes, data warehouses, to really take advantage of the opportunity AI represents.

But once you get those two things in place, the value proposition really takes off. Your ROI becomes a lot more certain. The tools are more user friendly, especially with agentic AI's ability to allow users to just talk to it in natural language without knowing how to write a 700-word prompt. I think there will be a very quick evolution once we get past the data integrity piece.

Do you think large contractors have a major advantage, or can smaller ones also use AI to improve their competitiveness?

ROBERTS: As a big public accounting firm, we define large contractors as those with tens of billions of dollars in revenue, and those companies certainly have more resources to focus on governance and technology investments.

Thought Leader Interview: Erin Roberts, EY

ROI OF AI

“ Measuring ROI [of AI] is quite difficult, especially if you move too fast and you don't set up a structure to define what qualifies as success.”

But to be honest, I do not think they are further ahead than many of what we call the middle market firms, those with a half billion to 10 billion in revenue. There are many companies that size, and they are very innovative. In fact, many are more nimble than the larger companies, and they don't have a lot of overarching regulatory burden. Many midmarket firms have piloted different things and are farther down the road. We are seeing those companies grow really fast, and it is pretty amazing to watch.

[Smaller] contractors will benefit more from the use of AI in the tools that they license from others. That's where the value proposition comes through for them.

What are the top risks of how AI is being deployed in construction and what can be done to minimize them?

ROBERTS: ROI risk is one. Companies invest in time, tools and licenses [for new technologies, but] studies show that two out of three of these

types of pilots fail. In the last six months, there were so many failures of [AI] not doing what we thought it could do that people have paused their activities around it. So, companies are starting to think more about ROI risk because measuring that ROI is quite difficult, especially if you move too fast and you don't set up a structure to define what qualifies as success.

The other risk that I am frankly more concerned about is reputational risk, which includes reliance on unreliable outputs, data security leaks, loss of confidentiality and cyber risk. More powerful tools in the hands of the right people is OK, but they can also be used against you. Companies are constantly being attacked, minute by minute, so it is not really a question if [a bad actor] will get in, it is a question of when.

What do you recommend that your clients do about cyber risk? How can they balance the benefit versus the risk of using AI?

ROBERTS: Vigilance and not underestimating that risk. Our clients are very actively investing in cyber defense. They have active cyber teams, and some use [security] consultants.

The big point is to take it seriously and not think, 'Oh, the IT director's got it.' What does that risk look like? Are you monitoring and measuring it? Do you have it assessed by third parties? Are you getting [security] certifications? These are what need to be done to be vigilant, and it costs money. A \$1B contractor may spend \$250K-\$300K per year for a consulting firm to do a cyber-attack

RELIABILITY

“ Whatever errors we make due to inappropriate reliance on what the models tell us are going to be vastly less than what we have today, which is abundant human error every day, all the time. I'd bet on the AI for that one.”

assessment. It sounds like a lot of money, but [a bad actor] could lock up the whole company if they were to get in.

The issue of reliability can be a sticking point for contractors considering AI, either risking bad data or reducing productivity gains by having to verify outputs. Do you think that reliability issues are just an aspect of the maturing technology or something the construction industry has to manage in the longer term?

ROBERTS: I think it is the latter, a concern that is going to continue. Even in my firm, which audits what contractors do in their work, we have always had to rely on reviews and approvals to ensure we have a high-quality work product, no matter who puts it together. The idea of review is never going to go away, no matter what. So, the big game-changer is the improved auditability of the outcomes that come from agentic AI.

Thought Leader Interview: Erin Roberts, EY

TRANSPARENCY

“ Today, every sentence that comes out [of AI] has links back to where the data came from, so we can verify it.”

A year ago, if you asked it to prepare a paper or put a bid proposal together, it would provide what was requested, but it was difficult to determine [what the output was based on]. Today, every sentence that comes out has links back to where the data came from, so we can verify it.

I also think it is important to remember that 40% of the cost of a construction project is rework. AI can help drive that percentage down to 30, 20 or even 10%. Whatever errors we make due to inappropriate reliance on what the models tell us are going to be vastly less than what we have today, which is abundant human error every day, all the time. I'd bet on the AI for that one.

Traditionally, entry-level staff have learned the business by doing the tasks that many companies now use an AI to do. What impact do you think AI will have on preparing the next generation of the construction workforce?

ROBERTS: This is a really tough one. [Due to automation of processes], the value-oriented activities that I do today are much more

relationship-based problem solving, but how you solve problems is based on knowing enough about how to do [the work]. I think we will rely on schools and internal training programs to continue to upskill our young people.

With the reduction of menial, non-high-value work, young people are going to be leading and supervising earlier. That requires a different focus on leadership training and development that will have to be taken on by the contractors. I'm hopeful, but I'm nervous [about this issue] too.

The number of vendors making claims about using AI can be overwhelming for contractors seeking to invest. How do you recommend that contractors navigate that?

ROBERTS: Three years ago, if you polled a room of contractors about whether they have a person in charge of innovation at their organization, maybe one to two people would raise their hand. Now everybody has someone because they know it is nearly a full-time job [to guide innovation] because everything's coming so fast.

Having folks that can vet the ROI on the tools you want to deploy is vital to maintain a competitive edge or a company's value proposition to their clients. I don't think it is optional.

EMBEDDED AI FUNCTIONALITIES

“ What I hope is that the larger software providers continue to embed these tools in their systems.”

AI FOR CONTRACTORS

“ Get the COO focused on [using AI] for project delivery, but get the CFO focused on [using it] for the back office.”

What I hope is that the larger software providers continue to embed these tools in their systems so that companies do not have to [find individual bots for procurement, HR, training, etc.]. The software vendors need to keep up with the trends, and ... make this easier on everybody.

Anything we haven't discussed that is important to the topic of AI for construction?

ROBERTS: It is easy for contractors to focus on project delivery and all the tools at their disposal to improve safety, cost, efficiency and productivity, [but] there is also an entire group of people in the back office who do the books and an entire set of use cases for them. And frankly, the one thing you can control is your back office. So, wherever we can, we help clients solve problems in the back office, just normal, finance-related functions, accounts payable and accounts receivable. Get the COO focused on [using AI] for project delivery, but get the CFO focused on [using it] for the back office.

AI Functionality for Company Management

Introduction

Similar to the project management section of this report, the table at right shows 11 AI-enabled functionalities for company management that are currently available in commercial software products in the US.

This section of the report examines:

AWARENESS AND USE OF AVAILABLE AI-ENABLED FUNCTIONALITIES FOR COMPANY MANAGEMENT

- How many contractors are aware of the existence of each of these AI-enabled functionalities.
- Among those who are aware, how many are using each functionality.
- Among those using them, how many believe the AI-enabled functionality is more effective than their traditional method(s).
- Among those who are aware of the AI-enabled functionalities but not using them, the chief reasons for deferring.

INTEREST IN POTENTIAL NEW AI-ENABLED FUNCTIONALITIES FOR COMPANY MANAGEMENT

- The level of interest across nine AI-enabled functionalities for company management that may be entering the commercial market in the near future.
- Factors that will have a strong influence on contractors' selection of AI-enabled solutions for company management in the future.

AI-ENABLED FUNCTIONALITIES FOR COMPANY MANAGEMENT ACTIVITIES THAT ARE CURRENTLY AVAILABLE IN COMMERCIAL SOFTWARE

1. General ledger and financial reporting
2. Managing accounts payable and receivables
3. Payroll processing and tax compliance
4. Managing equipment and inventory
5. Managing personnel information and employment records
6. Managing employee contracts and benefits
7. New business opportunity evaluation and proposal generation
8. Automated client communications
9. Contract risk review and evaluation
10. Regulatory compliance and reporting
11. Vendor management and procurement

AI Functionality for Company Management

Awareness and Use of Commercially Available AI Functionality for Company Management

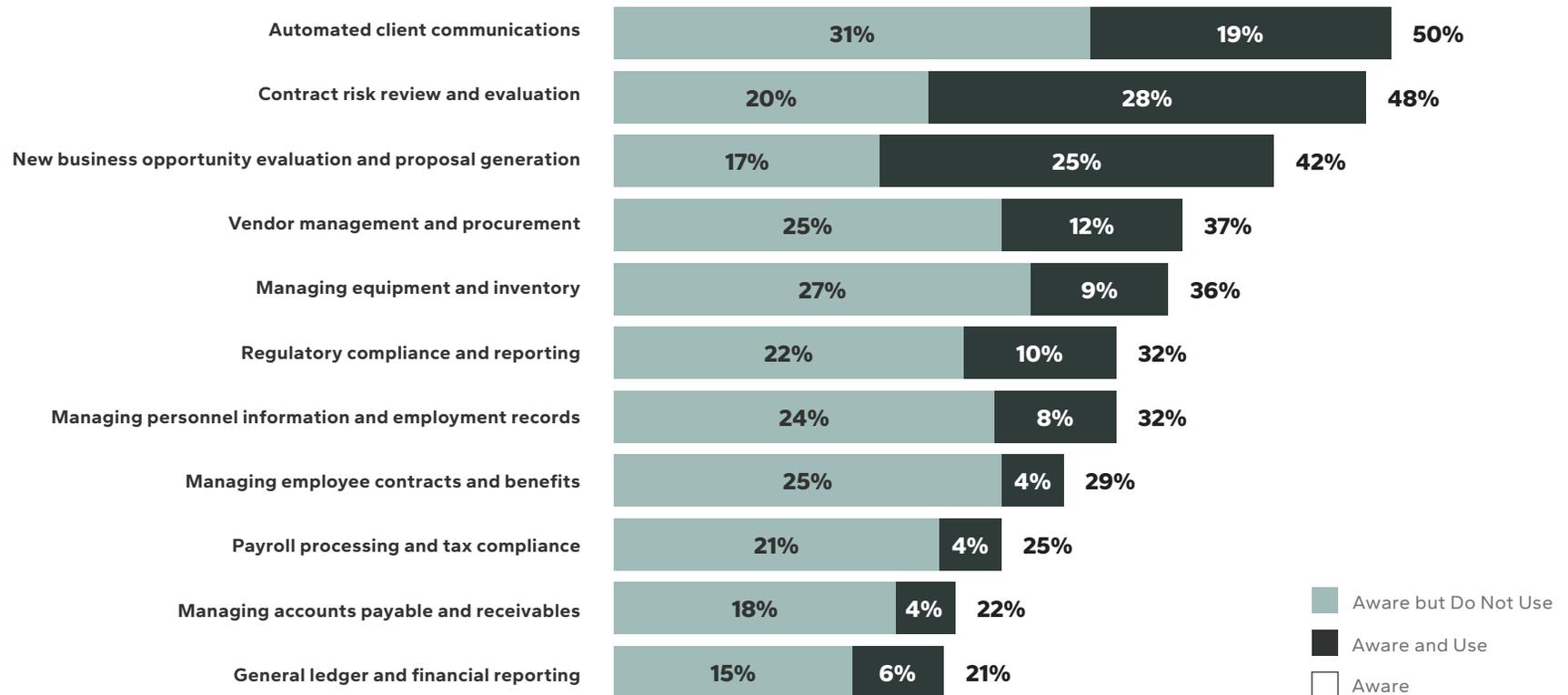
SEVERAL AI-ENABLED FUNCTIONALITIES FOR COMPANY MANAGEMENT SHOW BOTH STRONG AWARENESS AND USE

Contractors with company management (versus project management) roles were asked whether they are aware that AI-enabled functionality is currently available for each of 11 company management activities. Those reporting awareness were then asked if their company currently uses them.

AI FOR COMPANY MANAGEMENT SHOWS HIGHER ADOPTION THAN FOR PROJECT MANAGEMENT

While awareness of AI for company management is slightly higher than for project management (average 34% versus 32%), the share who are using AI is notably higher, exceeding half for both contract review and proposal generation. This engagement at the company level may help influence future adoption at the project level.

Contractors' Levels of Awareness and Use of Available AI Functionality for Company Management Activities
Percentages Citing Awareness of Availability and Use



AI Functionality for Company Management

Effectiveness of Commercially Available AI Functionality for Company Management

AI IS EXTREMELY EFFECTIVE FOR COMPANY MANAGEMENT

Contractors who report using AI-enabled functionality for each company management activity were asked to rate its effectiveness compared with their previous method(s) for that activity. The chart at right shows the percentages rating high or very high effectiveness.

- From 58% to 100% of the AI users for each company management activity rate its comparative effectiveness as high or very high. The average is 84%, notably more than the 72% for project management (see page 17).
- GCs average 89% compared with trades' average of just 74%. This gap is twice the size of the one for project management activities (76% and 68%, respectively), suggesting that GCs are finding great value in AI for company management.
- Interestingly, civil/heavy/non-building companies average 93%, suggesting potential for deeper AI use by that group.

VERY POWERFUL EVIDENCE OF AI'S EFFECTIVENESS FOR COMPANY MANAGEMENT

While project management effectiveness ratings are encouraging (see page 17), these company management results are truly exceptional. With three functions achieving perfect 100% effectiveness ratings and an 84% average across all 11 functions, the case for AI adoption in company management operations is compelling. These findings should accelerate adoption as word spreads about the substantial benefits current users are experiencing.

Percentage of Contractors Rating AI as Highly or Very Highly Effective for Company Management Activities Compared With Their Previous Method(s) for Each Activity



AI Functionality for Company Management

Reasons Contractors Are Not Using Available AI Functions for Company Management

Every respondent who is aware of, but not using, each of the company management AI functions studied was asked to select all of the applicable reasons (shown in the table below) for not using it. The color coding identifies percentage groupings in 10 percentage-point tiers. The average for each reason is shown on the bottom row.

MORE INFORMATION AND BETTER TOOLS ARE THE TOP NEEDS

The major obstacles relate to increased understanding and technology that supports AI. On average, only 9% have accuracy concerns and just 3% do not believe AI would be better than their current methods.

Reasons for Not Using Available AI Functionality for Company Management Activities
Among Contractors Who Are Aware of the Availability of Each Function

	I do not believe AI would be better than current method(s)	I do not sufficiently trust the results AI would produce	I need to better understand how AI works before considering usage	I am interested but my current software does not have AI capabilities for these functions	I am interested but my company has not approved AI usage for these functions	I am interested but have not had resources to evaluate AI properly
Automated client communications	10%	13%	33%	18%	15%	10%
Contract risk review and evaluation	0%	10%	34%	17%	28%	10%
New business opportunity evaluation/ proposal generation	8%	8%	44%	12%	16%	12%
Vendor management and procurement	3%	6%	41%	16%	16%	19%
Managing equipment and inventory	3%	9%	38%	18%	15%	12%
Managing personnel information and employment records	3%	3%	35%	23%	16%	13%
Regulatory compliance and reporting	0%	11%	36%	21%	11%	21%
Managing employee contracts and benefits	7%	10%	37%	27%	7%	10%
Payroll processing and tax compliance	0%	12%	32%	28%	16%	12%
Managing accounts payable and receivables	0%	5%	27%	41%	14%	9%
General ledger and financial reporting	0%	10%	30%	20%	20%	20%
AVERAGES	3%	9%	35%	22%	16%	14%

AI Functionality for Company Management

Interest Level in Potential New AI-Enabled Company Management Functionalities

Company management respondents were asked how valuable they believe eight potential new AI-enabled functionalities would be to their company.

INTEREST IS HIGH FOR NEW COMPANY MANAGEMENT AI FUNCTIONS

The table at right shows the percentages seeing value (moderate, high or very high) in nine potential new AI-enabled functions for company management.

The average is 76%, nearly identical to the 77% average for project management functions (see page 19) and confirming broad interest in additional AI-enabled functionalities.

VARIATIONS AMONG RESPONDENTS

- The average for GCs (78%) is higher than for trades (70%), driven primarily by keener interest in automated contract creation, market opportunity analysis, cash flow modeling and automated competitive intelligence. This makes sense because these functions typically apply more to GCs than to trades.
- Interestingly, company size is not a meaningful variance factor, suggesting that company management capabilities apply equally throughout the industry.
- The average among respondents who believe that AI will have a significant impact on construction (see page 6) is 90%, far exceeding the 65% average among those less optimistic about AI and notably greater than the 82% to 73% gap found for new project management functions (see page 19).

Percentage of Contractors Who Believe That Potential New AI-Enabled Functionalities for Company Management Would Be Valuable
Based on Ratings of Potential Value for Each Activity

COMPANY MANAGEMENT: Potential Value of New AI Functionalities	% Who See Value
Automated contract creation, authorization and management	92%
Predictive business risk assessment integrating economic, regulatory and operational factors	84%
Intelligent market opportunity identification and bid-no-bid decision support	79%
Dynamic pricing optimization based on market conditions, capacity and risk factors	76%
Predictive cash flow modeling with market condition integration for multi-project portfolios	76%
AI-driven talent acquisition and skills gap analysis for workforce planning	70%
Automated competitive intelligence and market positioning analysis	70%
Decentralized AR/AP financial system, leveraging AI on a blockchain general ledger	61%

Factors Influencing Future Selection of AI-Enabled Solutions for Company Management

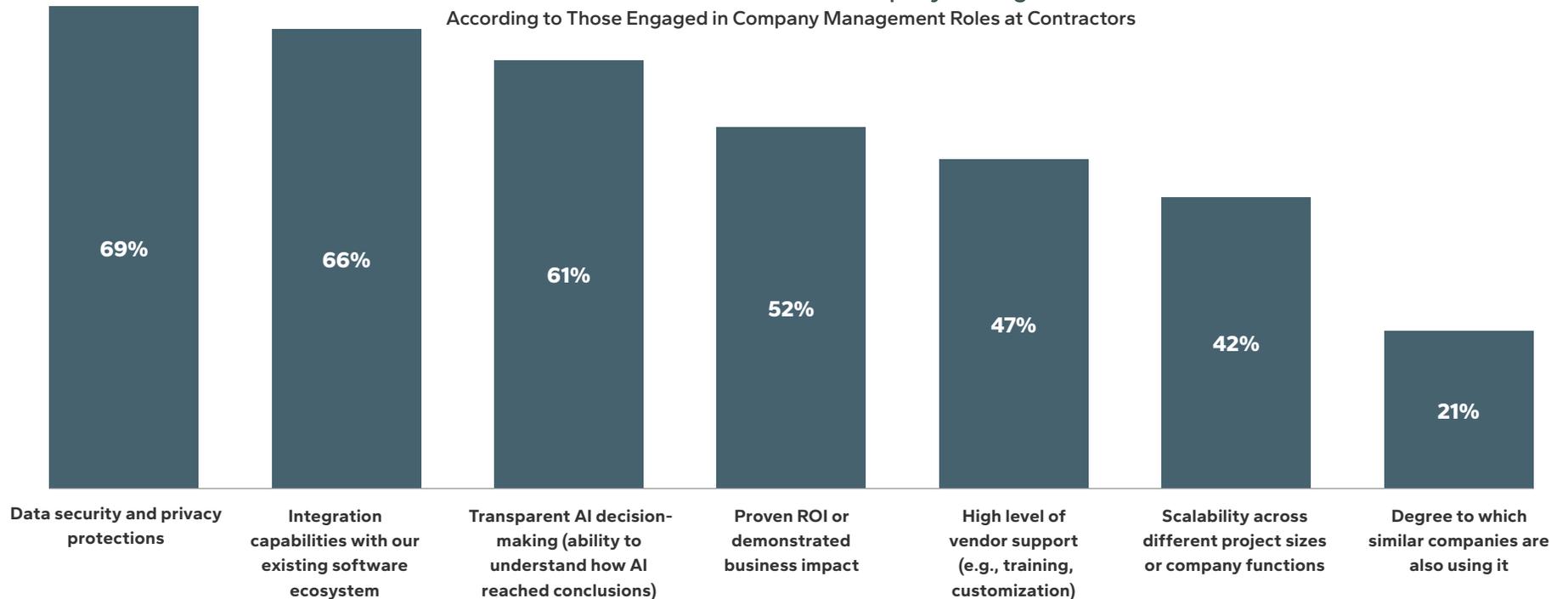
DATA SECURITY AND INTEGRATION ARE TOP PRIORITIES

From the options shown in the chart below, respondents with company management responsibility were asked to select the ones they believe will have a strong influence on their selection of AI-enabled solutions in the coming years.

- DATA SECURITY AND INTEGRATION:** While transparency ranks first for selection of project management solutions (see page 20), company-level managers prioritize data security and integration as selection factors. This likely reflects the confidential nature of financial, personnel and strategic business data as well as the need for internal interoperability with legacy systems.

- TRANSPARENCY:** Although ranking third, transparency is still important for most (61%) company managers although they understandably focus more heavily on security and integration from their enterprise-wide perspective.
- OTHER INFLUENTIAL FACTORS:** The remaining factors follow a similar priority order as for project management, suggesting a relatively consistent set of selection criteria for AI investments across key company functions.

Factors That Would Influence the Selection of Future Company Management AI-Enabled Solutions
According to Those Engaged in Company Management Roles at Contractors



Methodology

The research findings in this report are based on an online survey of 162 general contractors (GCs) and 73 specialty trade contractors (Trades) in the US. It was conducted in September and October 2025.

SURVEY RESPONDENTS

FAMILIARITY WITH TECHNOLOGY AT THEIR COMPANY

Each respondent had to be a primary or secondary decisionmaker about technology investments or a user of technology/manager of tech users at his/her company.

PRIMARY GEOGRAPHIC LOCATION (BY CENSUS REGION)

Northeast	13%
South	31%
Midwest	33%
West	23%

PRIMARY JOB/ROLE FOCUS

Project-Related Activities	35%
Company Management	21%
Roughly Equal Blends of Both	44%

SPECIALTY TRADES INCLUDED IN SURVEY

Concrete, Curtainwall, Demolition/Wrecking, Electrical, Fire Protection, HVAC, Interior Finishes/Millwork, Landscaping, Masonry, Mechanical, Painting and Coatings, Paving, Piles/Caissons, Plastering and Drywall, Plumbing, Roofing, Sheet Metal, Site Work/Excavation/Foundation, Steel Erection, Steel Fabrication, Thermal and Moisture Control, Utility, Wall/Ceiling

COMPANY PROFILES: GCs

ANNUAL REVENUE (BY THREE SIZE TIERS)

SMALL: \$25 Million to \$49 Million	34%
MIDSIZE: \$50 Million to \$274 Million	43%
LARGE: \$275 Million to Over \$1 Billion	23%

PRIMARY PROJECT TYPE

Heavy/Civil/Non-Building	23%
Buildings: Institutional	27%
Buildings: Commercial	30%
Buildings: Manufacturing/Industrial	9%
Buildings: Multifamily Residential	10%

COMPANY PROFILES: TRADES

ANNUAL REVENUE (BY THREE SIZE TIERS)

SMALL: \$25 Million to \$49 Million	42%
MIDSIZE: \$50 Million to \$274 Million	51%
LARGE: \$275 Million to Over \$1 Billion	7%

PRIMARY PROJECT TYPE

Heavy/Civil/Non-Building	11%
Buildings: Institutional	22%
Buildings: Commercial	49%
Buildings: Manufacturing/Industrial	10%
Buildings: Multifamily Residential	5%

Contacts & Resources

DODGE EDITORIAL TEAM

STEPHEN A. JONES leads Dodge's Industry Insights Research division and is the primary author of this report. He is active in numerous industry organizations and frequently speaks at industry events around the world. Before Dodge, Jones was a vice president with Primavera Systems (now part of Oracle). Prior to that, he was principal and a Board of Directors member with Burt Hill, a major A/E firm (now Stantec). He holds a BA from Johns Hopkins University and an MBA from Wharton. steve.jones@construction.com

DONNA LAQUIDARA-CARR currently provides editorial direction, analysis and content to Dodge's SmartMarket Reports. Prior to this position, she worked for nearly 20 years with Dodge's news-gathering team, where she gained detailed insight into the construction industry. She holds a PhD from Tulane University, an MA from Boston University and a BA from Middlebury College. donna.laquidara@construction.com.



Stephen A. Jones
Senior Director
Industry Insights



Donna Laquidara-Carr
PhD, LEED AP
Research Director
Industry Insights

ADDITIONAL RESOURCES



About CMiC:

As an industry pioneer, CMiC delivers complete and unified Financials and Project Management software solutions for construction and capital projects firms. CMiC's powerful software transforms how firms optimize productivity, minimize risk and drive growth by planning and managing all financials, projects, resources and content assets—from a Single Database Platform. With customers throughout North America and overseas, CMiC serves one-quarter of ENR's Top 400 Contractors and hundreds of small and mid-sized construction firms, from general and specialty contractors to heavy/highway and project owners. Over \$100 billion in construction revenue is handled by CMiC annually.

Learn more at: www.cmicglobal.com



Dodge Data & Analytics: Main Website: www.construction.com **Dodge Construction Central:** www.construction.com/solutions
Market & Competitive Intelligence: www.construction.com/solutions/business-intelligence **Sweets:** www.construction.com/solutions/sweets
SmartMarket Reports: www.construction.com/resources

DODGE CONSTRUCTION NETWORK

DESIGN AND CONSTRUCTION INTELLIGENCE

SmartMarket Reports™

Get smart about the latest industry trends.

Click on any cover for a free download



For more information on these reports and others, visit
www.construction.com/resources