ProcureCon INSIGHTS

AI ADOPTION AND ITS TRANSFORMATIVE IMPACT ON PROCUREMENT

A Comprehensive Analysis of Current Adoption and Future Potential

Sponsored by: Avetta

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EXECUTIVE SUMMARY

Artificial intelligence is moving beyond its initial implementations in the procurement function. Given current levels of investment, it has become a strategic imperative for most organizations.

This report examines the current state of AI adoption across organizations and their procurement departments. Notably, it reveals that there is already widespread implementation across the function's key focus areas, including supplier management, spend analysis, and more.

The findings demonstrate remarkably high satisfaction levels among procurement professionals who have implemented AI solutions, with organizations actively expanding their capabilities. However, many procurement teams have the opportunity to expand their use of AI, focusing beyond specific tactical applications to a more comprehensive form of strategic integration.

The findings demonstrate remarkably high satisfaction levels among procurement professionals who have implemented AI solutions.

FOREWORD FROM THE PRODUCER

Artificial intelligence applications in procurement are evolving, becoming a vital driver of success in our industry. The findings in this report demonstrate the remarkable progress procurement professionals have made—moving from experimentation to strategic adoption, all while navigating real-world challenges and opportunities.

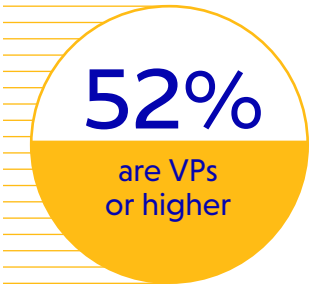
At ProcureCon, we see these same themes echoed on our main stage and in conversations with leaders shaping the future of procurement. In addition to AI, each conference showcases a rich diversity of topics that reflect the complexity and innovation in our field.

I invite you to explore the insights in this report. I also invite you to join us at the next ProcureCon—where innovation meets action, and the brightest minds in procurement come together to build what's next.

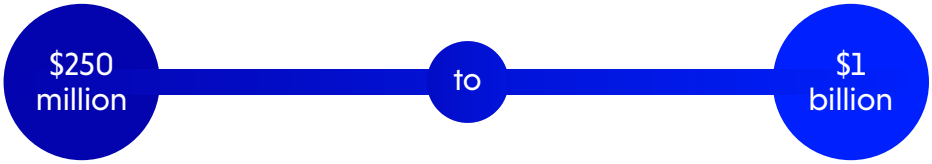
Mike Dunlap
Head of Content and Growth
ProcureCon North America

ABOUT THE RESPONDENTS

The respondents are primarily supply chain (42%) and procurement (39%) leaders, with 52% holding VP, senior VP, or C-level roles. They represent companies across a range of industries, including manufactured goods; medical devices, telecommunications, electronics, and high-tech; chemicals, plastics, and polymers; and the pharmaceutical industry. The companies have dollars under management ranging from less than $250 million to $1 billion or more.



The respondents represent companies with annual revenues ranging from:



KEY INSIGHTS

Among the respondents:

43% describe their AI implementations as "advanced" or "innovative"

92% express satisfaction with their AI solutions

59% use AI for specific initiatives rather than full integration

77% have implemented AI in supplier discovery and selection

55% have realized cost savings and spend reduction from AI

88% will increase AI investments over the next 12 months

90% lack strong confidence in evaluating the ROI of AI

35% say lack of proven examples is their biggest AI roadblock

Unified Solutions for a Globally Resilient Supply Chain

> "Currently, most firms view risk from a traditional sense: compliance, capability, coverage. While this has enabled hiring firms to execute on projects, it will require an update to both how they view risk and how they communicate around it."
>
> **-Verdantix**

New supply chain challenges are converging and growing, including an increased reliance on contractors, supplier diversification, new ESG regulations, and third-party cyber security concerns. Holistic supply chain risk mitigation is key to building resiliency.

Read Avetta's white paper to learn:

- How integrating procurement and HSE mitigates risk
- Key challenges and opportunities of unified supply chain risk management
- Five key risk indicators that are often overlooked.

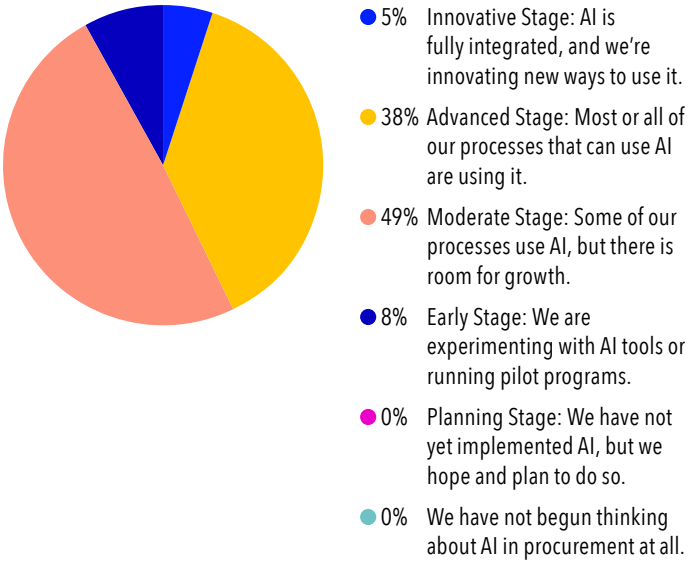
Avetta

Download the White Paper

THE CURRENT STATE OF AI IN PROCUREMENT

Organizations today are at varying stages of AI maturity within their procurement functions. The majority are still in the early phases, focusing on experimentation and pilot projects.

How would you describe the current stage of AI implementation within your procurement organization?



According to the survey, 8% of organizations are in the initial stages of AI implementation, where efforts are limited to small-scale trials and basic process automation. This group is just beginning to explore how AI can be applied to procurement, often testing the waters before committing to broader adoption.

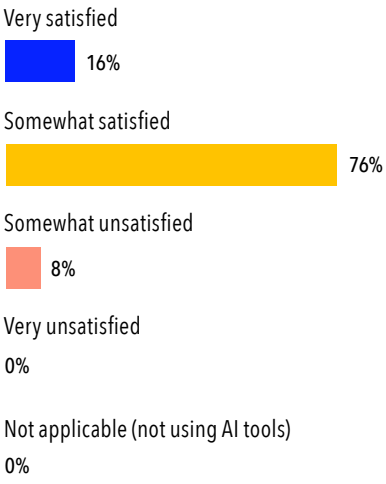
A much larger segment, 49%, has progressed to moderate implementation. These organizations have moved beyond isolated pilots and are deploying AI selectively across certain procurement processes. This stage features a shift from theoretical exploration to practical, real-world applications.

Notably, 38% of organizations have reached an advanced stage of AI adoption. In these companies, AI supports most of the procurement processes where it is applicable. This level of integration demonstrates that it is possible to embed AI deeply within procurement operations, resulting in more consistent and impactful outcomes.

Currently, only 5% fully implement AI, where the technology is seamlessly woven into all procurement activities and drives continuous improvement and innovation.

Levels of Satisfaction with AI

How satisfied are you with the AI solutions you currently use in procurement?



Satisfaction with AI solutions in procurement is notably high. An impressive 92% of respondents report being satisfied with their AI tools, with most (76%) somewhat satisfied. This widespread satisfaction indicates that AI is generally meeting or exceeding expectations in procurement settings.

However, there is still room for improvement, as only a small portion of users (16%) report being very satisfied.

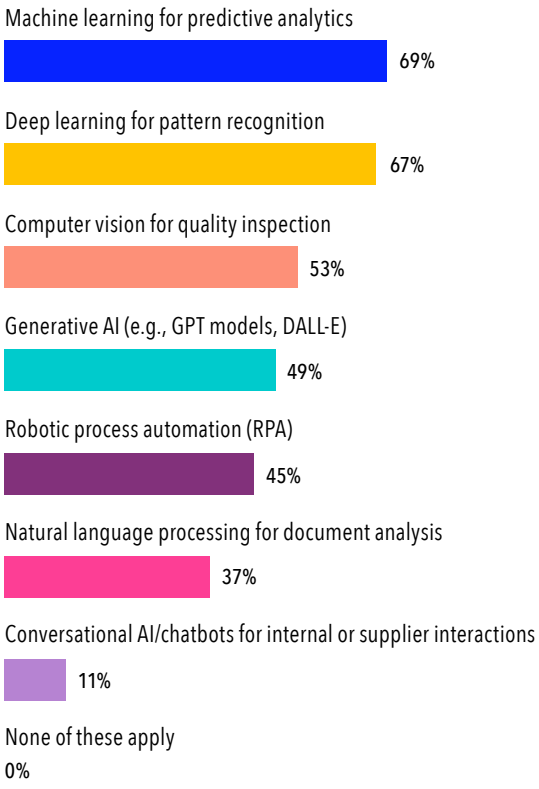
You said you are "somewhat unsatisfied" or "very unsatisfied" with your procurement department's AI solutions. Which of the following challenges are you experiencing with your current AI solutions or your attempts to integrate them?

Among the 8% who are dissatisfied, the main issue is limited functionality or capabilities, cited by 75% of this group. In each case, half of dissatisfied respondents also struggle with security or privacy concerns and a lack of transparency in AI decision-making.

This feedback highlights the need for AI solutions to evolve and address a broader range of procurement challenges. Organizations also need systems that provide documentation on how they arrive at specific outputs and what data they used to do so.

AI Technologies in Use

Which of the following types of AI technologies does your organization currently use in its procurement function?



When it comes to the types of AI technologies in use, machine learning for predictive analytics leads the way, with 69% of organizations leveraging it for tasks such as demand forecasting and supplier performance prediction. Deep learning for pattern recognition is also widely adopted, at 67%, helping teams identify trends and anomalies in large datasets.

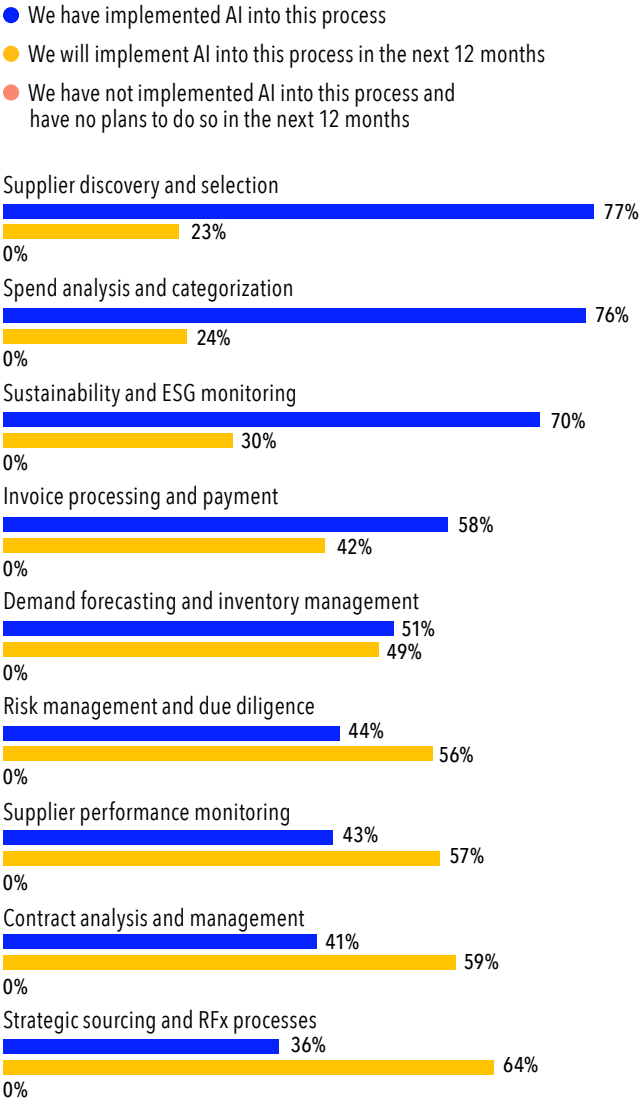
Computer vision, used for quality inspection, is employed by 53% of organizations, showing that AI applications are expanding beyond traditional data analysis.

More than one-third of the respondents (37%) use natural language processing for document analysis. Contract review and document management have been well-established as use cases for AI technology, so this finding could suggest there is still untapped potential at most organizations.

Conversational AI and chatbots, at just 11% adoption, remain the least utilized, suggesting that procurement teams have yet to fully embrace AI-driven communication tools.

Integration of AI in Procurement Processes

In which of the following procurement processes has your organization implemented AI, and in which will you implement it in the next 12 months?



AI implementation across procurement processes varies.

Supplier discovery and selection is the most common application, with 77% of organizations using AI to analyze supplier capabilities and performance. This is followed closely by spend analysis and categorization at 76%, where AI helps automate classification and uncover savings opportunities.

Strategic sourcing and RFx processes lag, with only 36% implementation, reflecting the continued need for human expertise in complex negotiations and relationship management.

This pattern indicates that procurement teams are prioritizing AI in areas where it delivers immediate, measurable value, while more nuanced processes still rely heavily on human judgment.

Practitioner Perspectives

"I think of AI like a rainstorm. When it starts, you have three choices: You can stay inside and do nothing, you can rush outside and get drenched, or you can go out with an umbrella, taking a planned, stepwise approach. That's what I'm doing with AI: moving forward step by step, preparing for the challenges, because there's no manual or undo button if things go wrong."

Procurement Leader

THE IMPACT OF AI ON PROCUREMENT KPIs

Which of the following benefits has your organization realized since it began implementing AI in procurement?

Cost savings and spend reduction represent the most common realized benefits. Specifically, 55% of organizations are experiencing these outcomes.

This finding aligns with procurement's primary mandate to deliver financial value to organizations. AI's ability to identify savings opportunities, optimize supplier selection, and reduce maverick spending directly contributes to bottom-line improvements.

Sustainability improvements have been realized by 54% of organizations implementing AI in procurement. This nearly equal emphasis on sustainability alongside cost savings reflects the growing importance of environmental, social, and governance (ESG) considerations in procurement decisions. AI can analyze supplier sustainability credentials and optimize sourcing decisions to support environmental goals.

One important takeaway from these results is that procurement can use AI to pursue multiple objectives simultaneously. With the right implementations, organizations can achieve cost savings while also identifying opportunities for sustainability.

Ultimately, AI frees humans from tedious activities, granting them more time to focus on strategic objectives.

Practitioner Perspectives

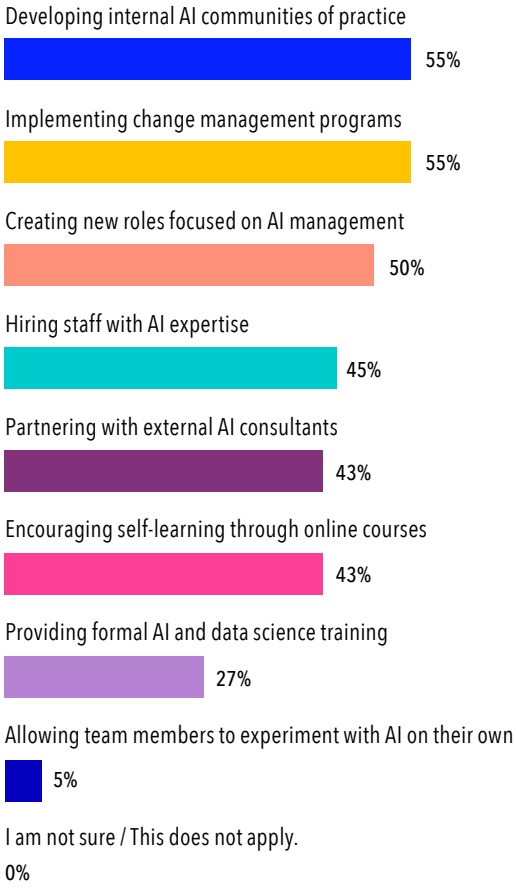
"Studies show people spend nearly two hours each day just searching for information. My goal is to cut that time in half—so instead of two hours, it's just one. That saves five hours a week, 20 hours a month, and 250 hours a year for each person. If you have a team of 100, that's 25,000 hours saved every year. But it's not just about saving time—having the right information when you need it truly empowers people."

Procurement Leader

Staff Preparation

Organizations are taking proactive steps to prepare their workforce for AI adoption.

Which of the following steps is your organization taking to prepare procurement staff for increased AI adoption?



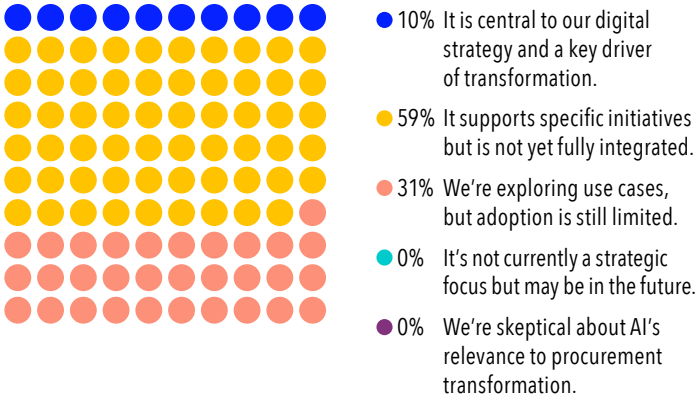
Developing internal AI communities of practice ranks as the top preparation strategy, employed by 55% of respondents. These communities facilitate knowledge sharing, best practice development, and peer learning about AI applications in procurement.

Change management programs are equally prioritized, with 55% of organizations implementing these initiatives. This focus on change management recognizes that successful AI adoption requires cultural transformation alongside technological implementation. Half of the organizations are creating new roles focused on AI management, indicating the need for dedicated expertise to guide AI initiatives.

Procurement and supply chain leaders understand AI adoption is as much about people as technology. These preparation strategies recognize that successful AI implementation requires both technical skills and cultural acceptance.

Strategic Alignment

How does AI align with your overall procurement strategy and digital transformation goals?



AI integration remains predominantly tactical across organizations, with 59% using AI to support specific procurement initiatives without full integration. Organizations are implementing AI tactically, in isolated use cases, rather than developing comprehensive AI strategies. This is likely to establish viable use cases and proof of ROI before additional investment.

Almost one-third of the organizations (31%) are still exploring use cases with adoption, likely because they are still determining where AI can deliver the most value. This result reflects the complexity of procurement processes and the need for careful evaluation before full implementation, as spending on technology for technology's sake can result in a low ROI.

Moving from tactical applications to strategic integration requires organizational commitment and comprehensive planning.

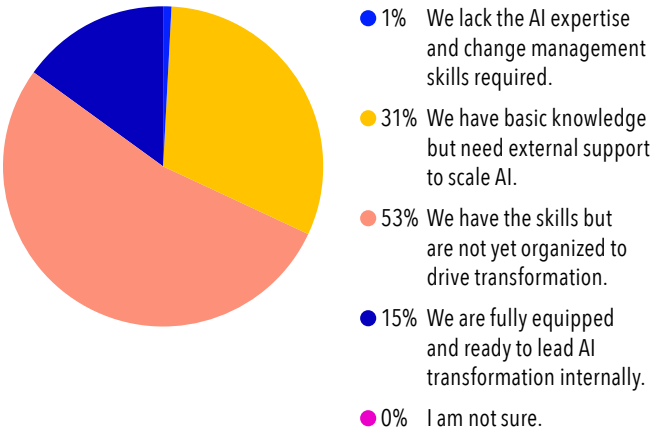
Most respondents (53%) claim they possess the skills to support enterprise-wide AI transformation but lack organizational structure to drive transformation. Although procurement teams have developed AI knowledge, they need better coordination and leadership to scale initiatives.

31% of organizations acknowledge they have basic knowledge but require external expertise to scale AI. This reflects most peoples' rudimentary understanding of AI, but it also means many teams don't yet understand its full potential for the function. Thankfully, only 1% of respondents completely lack AI expertise and change management skills.

The readiness assessment reveals that procurement teams are building AI competencies but need better organization and external support to maximize AI's impact. The low percentage of organizations completely lacking AI expertise suggests that procurement is actively developing these capabilities.

Team Readiness

Which of the following best describes your internal team's readiness to support enterprise-wide AI transformation in procurement?



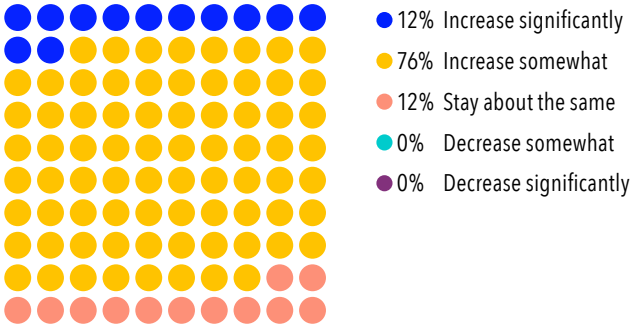
Practitioner Perspectives

"From what I've seen, AI isn't magic. It's simply a tool, like the Internet. These technologies are meant to support us and make the most of our skills as procurement professionals."

Value Generation Leader

ONGOING AI INVESTMENT AND IMPLEMENTATION STRATEGIES

How will your organization's investments in AI for the procurement function change over the next 12 months?

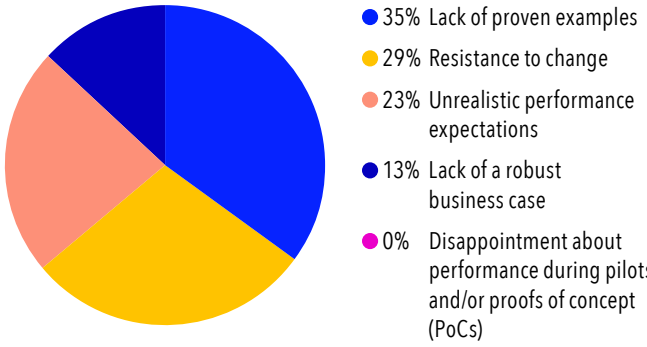


Investment confidence in procurement AI is exceptionally high, with 88% of organizations planning to increase AI investments over the next 12 months. This strong investment commitment demonstrates that procurement leaders view AI as essential for future competitiveness. The investment breakdown shows 76% will increase investments somewhat, while 12% will increase significantly.

Organizations that have achieved success with AI pilots are preparing to scale these initiatives across procurement, and perhaps the rest of the business. AI has moved beyond the role of experimental technology and is now a critical component of procurement efforts.

Implementation Roadblocks

In your experience, which of the following has been the biggest roadblock for implementation and user adoption of AI solutions?



Nonetheless, roadblocks to full implementation remain.

More than one-third of the respondents (35%) say they struggle with a lack of proven examples of how to use AI technology. The absence of this data creates uncertainty, which hinders adoption.

Procurement teams can use storytelling, visibility, and measurable outcomes to address this issue. Clear use cases provide legitimacy, while measurable results encourage further investment.

Resistance to change affects 29% of organizations, reflecting the natural human tendency to maintain familiar processes. This resistance indicates that change management remains critical for successful AI adoption. Unrealistic performance expectations create barriers for 23% of organizations.

The roadblocks reflect both technical and cultural challenges to AI adoption. Addressing these barriers requires a combination of education, proven success stories, and setting realistic expectations. Nonetheless, the prevalence of these challenges suggests that AI adoption in procurement is ready to mature.

ROI Evaluation

How confident are you in your organization's ability to evaluate the ROI of AI tools in procurement?

Despite growing adoption, confidence in evaluating AI ROI remains low, with 90% of respondents expressing only somewhat confident and 5% not very confident. This confidence gap suggests that organizations lack established methodologies for measuring AI's financial impact. The inability to accurately assess ROI creates challenges for justifying continued AI investments.

The low confidence in ROI evaluation indicates that procurement teams need better tools and frameworks for measuring AI's value. Without clear ROI metrics, organizations may struggle to optimize AI investments or demonstrate AI's contribution to business outcomes.

This confidence gap represents a significant opportunity for developing standardized AI ROI measurement approaches. Organizations that can accurately measure AI's impact will be better positioned to optimize their AI strategies and investments.

Investment Priorities

Which of the following are your organization's top three priorities when considering AI investments in procurement?

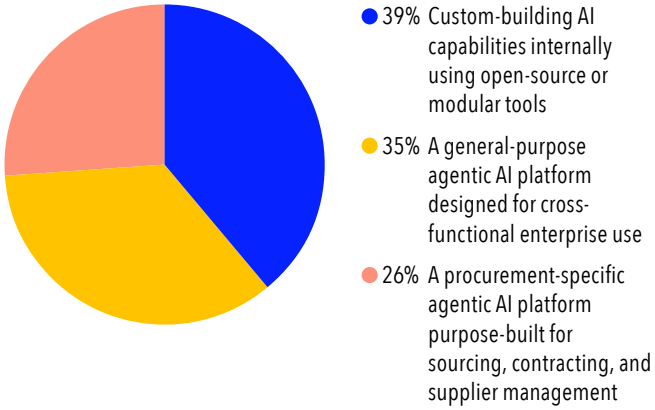
Increasing operational efficiency ranks as the top priority for AI investments, selected by 59% of organizations. This priority reflects procurement's focus on process improvement and productivity gains. AI's ability to automate routine tasks and streamline workflows directly addresses efficiency objectives.

Improving data visibility and reporting follows at 54% priority, indicating that organizations view AI as essential for better decision-making. Enhanced data visibility enables more informed procurement decisions and better supplier management. Enabling predictive analytics and forecasting ranks third at 42% priority.

The investment priorities demonstrate that procurement teams are focusing on foundational capabilities that support broader transformation. Efficiency improvements and data visibility create the foundation for more advanced AI applications.

Approaches to Implementation

Which approach would most increase your confidence in adopting AI in procurement?



Organizations show divided preferences for AI implementation approaches. 39% prefer custom-building AI capabilities internally using open-source tools. This preference for internal development reflects the desire for customized solutions that address specific procurement needs. General-purpose agentic AI platforms designed for cross-functional enterprise use appeal to 35% of respondents.

Procurement-specific agentic AI platforms purpose-built for sourcing, contracting, and supplier management attract 26% of organizations. This preference for specialized solutions indicates that some procurement teams value domain-specific functionality over general-purpose capabilities.

The diverse preferences suggest that no single AI approach satisfies all procurement needs. Organizations are evaluating AI solutions based on their specific requirements, technical capabilities, and strategic objectives.

Practitioner Perspectives

"We spend so much time on tasks that are necessary but that we don't enjoy—many of which could be automated. People are getting tired of handling these small, repetitive jobs. If we automate those tasks, our teams can focus on what really matters: negotiations, strategy, and category management."

Technology Sourcing Leader

CONCLUSION: NAVIGATING THE AI-DRIVEN FUTURE OF PROCUREMENT

The survey findings reveal that AI has moved beyond experimental technology to become a strategic imperative for procurement organizations. The high satisfaction rates, strong investment commitments, and broad implementation across processes demonstrate that AI is delivering tangible value to procurement functions.

However, the predominantly tactical nature of current implementations and low confidence in ROI evaluation suggest that procurement teams have a significant opportunity to expand AI's strategic impact. Organizations that can move beyond isolated use cases to comprehensive AI strategies will gain competitive advantages in cost management, supplier relationships, and operational efficiency.

The future of procurement will be defined by organizations' ability to integrate AI seamlessly into their operations while maintaining the human expertise required for complex decision-making. Success will require balancing technological capabilities with human judgment, developing robust change management strategies, and creating clear frameworks for measuring AI's impact.

KEY SUGGESTIONS

- **Develop comprehensive AI strategies beyond tactical implementations:** Organizations should move from isolated AI use cases to integrated strategies that transform entire procurement functions.
- **Invest in change management and workforce development:** Successful AI adoption requires equal attention to technology implementation and cultural transformation through training and support programs.
- **Establish clear ROI measurement frameworks:** Organizations need standardized ways to evaluate AI's financial impact and optimize investment decisions.
- **Focus on foundational capabilities first:** Prioritize operational efficiency and data visibility improvements that create the foundation for more advanced AI applications.

ABOUT THE AUTHOR

ProcureCon INSIGHTS

ProcureCon Insights, the industry research and digital publishing arm of ProcureCon, delivers cutting-edge data and analysis on trends, challenges, and opportunities in the procurement and supply chain management sectors. Through comprehensive research reports, webinars, and thought leadership initiatives, we empower senior-level procurement leaders to make informed strategic decisions and stay ahead in the rapidly evolving procurement landscape.

Our deep industry intelligence not only informs procurement leaders but also connects innovative solution providers with key decision-makers, fostering a dynamic ecosystem that drives the future of procurement and sourcing in the business world.

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