Capgemini invent

Make or Buy paradigm in AI

Key Considerations for Decision Makers

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01 Executive Summary

In the last two to three years, AI has been widely recognized as the technology that will radically change the way we will work in future.

Nearly every company is exploring how AI can reshape its purchasing processes, unlock efficiencies, and elevate decision-making. Many organizations have already identified relevant AI use cases and initiated early projects or pilots. At the same time, the market for AI procurement solutions is expanding at high speed: a broad landscape of vendors now offers specialized tools, covering everything from automated supplier evaluation to negotiation support and predictive analytics.

As part of our advisory work, we are frequently asked to help organizations determine which AI use cases are most relevant, feasible, and value-generating for their specific procurement context. However, one critical question is far too often overlooked: Should the organization build an in-house solution or is it more effective to leverage a solution already available on the market? This question can be use case specific, e.g. what problem does the company try to solve, but must also be aligned with the long term AI strategy. This Make-or-Buy decision has significant implications for cost, speed, scalability, data governance, and long-term capability building, yet it is seldom addressed in a structured manner.

The challenge is further amplified by the fact that companies vary widely in their level of AI readiness. Some have established data platforms, AI teams, and governance frameworks, while others are only beginning their AI journey. Likewise, the maturity of available vendor solutions differs across use cases: certain topics are well covered by off-the-shelf products, whereas others still require tailored development efforts. A systematic approach is therefore essential to evaluate not only the potential of a use case, but also the right implementation path.

To address this gap, this White Paper introduces a Decision Model designed to support procurement organizations in making informed, strategic Make-or-Buy choices for AI solutions. We begin by comparing the advantages and limitations of both approaches, highlighting key considerations such as cost structures, innovation speed, integration complexity, and long-term flexibility. Building on this, we present a practical Decision Matrix that guides organizations through the evaluation process, helping them assess their internal capabilities, market availability of solutions, and the specific requirements.

02 Starting Point: AI in Procurement Today

At the recent Procurement Strategy Summit 2025, AI was the dominant theme, with leaders across industries acknowledging its inevitability and debating how to move from pilots to full-scale adoption.

Discussions centered on the challenge of turning isolated proof-of-concept projects into enterprise-wide solutions that deliver measurable value. This reflects a broader trend: AI in procurement has evolved from niche use cases to being embedded in operational processes. Established solution providers now offer AI-driven capabilities, startups promote agentic workflows, and most organizations have gained hands-on experience through pilots designed to test feasibility, ROI, and integration complexity.

Building on this momentum, AI is now being applied across a range of procurement activities. In tail spend management, AI helps identify and consolidate low-value purchases, often overlooked due to their volume and complexity. Supplier analysis is another key area, where AI enables near-real-time insights into supplier performance, financial health, and compliance risks. In negotiations, AI-driven tools support dynamic pricing strategies and simulate negotiation scenarios. Risk management benefits from predictive models that flag potential disruptions in supply chains, from geopolitical events to ESG compliance issues.

The solution provider market for AI in procurement is equally diverse. SAP, Coupa, and Ivalua are embedding AI into their procurement modules, offering seamless integration with existing enterprise systems. At the same time, a vibrant ecosystem of startups is emerging, delivering niche solutions with specialized capabilities, such as AI-powered contract analytics or autonomous sourcing bots. Between these extremes lie platform providers that offer AI toolkits tailored for procurement, like IBM Watson Supply Chain, Amazon Web Services (AWS) with SageMaker, ChatGPT Agent, and Google Cloud's Vertex AI. These platforms enable companies to build, customize, and scale AI models for use cases like spend classification, supplier scoring, and demand forecasting - often with low-code interfaces and pre-trained models.

This evolving landscape presents both opportunities and challenges for procurement leaders. The decision to build or buy AI solutions hinges on understanding this status quo - what's available, what's working, and where the gaps lie.

03 Make or Buy – The Dilemma

As AI technologies mature and procurement functions face increasing pressure to deliver strategic value, the decision to make or buy AI solutions has become increasingly pivotal.

Companies must decide whether to build custom AI solutions tailored to their unique needs or to purchase off-the-shelf tools that promise faster deployment and lower upfront investment.

This decision is crucial today due to several converging factors: the rapid evolution of AI capabilities, the growing availability but also fragmentation of specialized procurement tools, and the increasing demand for data-driven decision-making. Organizations are also grappling with talent shortages in AI and data science, making internal development more challenging. At the same time, external solutions are becoming more sophisticated, offering plug-and-play functionality with minimal integration effort.

Typical questions companies face include:

- Do we have the internal capabilities to build and maintain solutions based on AI models? How about capabilities to ensure data security & compliance?

- What is the impact on business that we try to achieve? Do we want to improve existing processes, or gain a competitive advantage through better information?

- How quickly do we need results, and what is our tolerance for experimentation and potential failure?

This make-or-buy decision is not binary, and hybrid versions, i.e. buying foundational tools while building strategic layers on top, do exist. However, the key in approaching AI in companies lies in aligning the decision with business goals, technical capabilities, and the maturity of the procurement function.
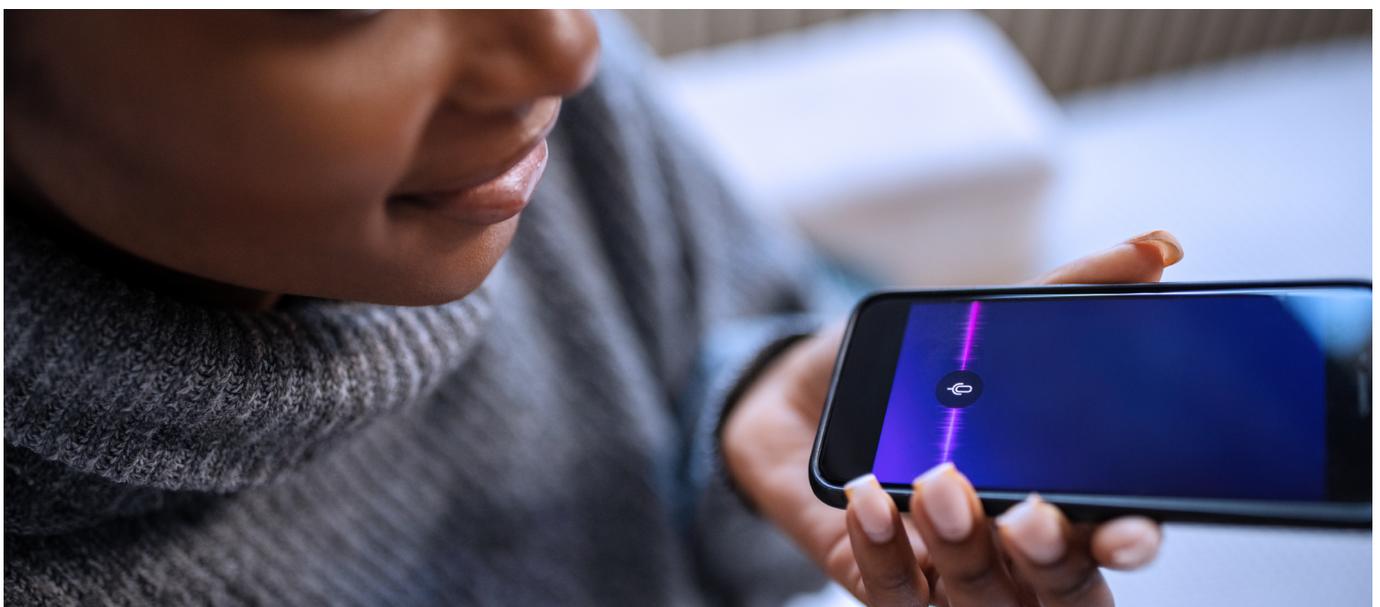
04 Option 1: Buy – Use Existing AI Solutions

For many organizations, buying & deploying an existing AI solution is the most pragmatic path to introducing into procurement. No dedicated AI teams are required, and no competing in the AI talent market is necessary.

Companies can select from a wide range of vendors and deploy an existing solution as a standard solution implementation. This offloads the complexity, risk, and need for expertise to the vendor.

Many companies already use established procurement software such as Coupa, Ivalua or SAP that offer out of the box, easily integrateable AI capabilities into the existing workflows. Deploying these capabilities can be fairly quick, shortening time to value, and enabling procurement teams to realize benefits, such as cost savings, efficiency gains, and improved decision-making, much faster.

In addition, utilizing the AI capabilities of established software providers also limits the AI governance risk. AI solutions from established vendors are thoroughly tested and centrally monitored.

Bugs and issues can be raised with the solution provider, and limited training for employees is required.

On the other hand, utilizing existing AI software solutions also comes with disadvantages. A key limitation is lack in customization. Off-the-shelf tools are designed to serve a broad market, which means they may not fully align with a company's unique procurement processes, data structures, or strategic goals. Companies that deploy existing AI solutions need to rely on the vendors' AI roadmap and ability to deliver. This vendors' roadmap might not be fully aligned with the company's own ambitions and direction.

Another concern is the reliance on external vendors for growth, without building up own knowledge or experience with building AI capabilities. Without dedicated AI teams, POCs and self-build solutions, companies will be locked in on external vendors, and no internal understanding of AI can be developed.

Typical Vendors and Ecosystems

The market for AI in procurement is diverse. Large enterprise software providers like SAP and Ivalua offer AI-enhanced procurement modules that integrate seamlessly with broader ERP systems. Coupa provides a cloud-native platform with embedded AI capabilities for spend analysis, supplier insights, and risk management.

Beyond these giants, a growing number of startups are delivering niche AI solutions. These include tools for autonomous sourcing, contract intelligence, and predictive supplier scoring. Startups often bring agility and innovation but may lack the robustness and support infrastructure of larger vendors.

Choosing the right vendor requires a careful evaluation of functionality, integration capabilities, data governance, and long-term strategic fit. While buying AI solutions can accelerate adoption, companies must remain vigilant about aligning vendor offerings with their procurement vision and operational realities.

04 Option 2: Make – Deploy your own AI solutions

The alternative approach to deploying an existing AI solution from an established solution provider is to develop the AI solution within the company.

There are multiple ways of developing AI-based solutions in-house. Within this paper, we will not be able to discuss all these possibilities, nevertheless, here are some key guidelines for your understanding:

- Building an AI based solution first requires a clear understanding of the expected scope & value. This is crucial to define the target architecture & technology to be used.

- A typical "AI stack" (architecture of the AI solution) consists of several layers, e.g. data layer, feature layer, model layer, and more. These layers can be understood as building blocks for the solution.

- A competitive market exists that specializes in providing these building blocks. Most known companies for these building blocks are OpenAI, Anthropic, and Google with their Large Language Models.

- Due to these building blocks, deploying an AI based solution can be relatively fast, in some cases quicker than deploying an existing procurement solution from an established procurement provider.

- Deploying your own AI based solution does not mean independence from external solution providers but rather defining and setting up the infrastructure yourself.

For organizations with advanced digital maturity and a strong innovation agenda, developing proprietary AI solutions in-house can be a strategic move. This approach offers a high degree of flexibility and control, enabling companies to tailor AI capabilities precisely to their procurement needs and long-term goals.

The most significant advantage of building internally therefore is the ability to create customized solutions. Unlike off-the-shelf

tools, in-house development allows companies to design AI solutions that reflect their specific procurement processes, data structures, and business needs. Companies can fill existing gaps and improve data and process quality. Especially in highly competitive environments, this can lead to a noticeable business advantage.

Another key benefit is control over data, processes, and intellectual property. Organizations retain full ownership of their data pipelines, model architectures, and training methodologies. This not only enhances data security and compliance but also ensures that sensitive procurement insights remain within the company's domain. Moreover, the ability to iterate and refine models based on internal feedback loops fosters continuous improvement and innovation, as well as technological readiness.

However, the "make" option comes with considerable challenges. First and foremost is the higher complexity. Building AI solutions requires a multidisciplinary team of data scientists, machine learning engineers, procurement experts, and IT architects. It also demands robust infrastructure for data storage, processing, and model deployment.

Another major hurdle is the need for internal AI expertise. Recruiting and retaining skilled talent in AI and data science is difficult and costly, especially in competitive labor markets. Without the right capabilities, organizations risk delays, underperformance, or failure to scale their solutions effectively.

Another key factor to consider is the need for maintenance and AI Governance. Running costs for AI models are typically higher than traditional software costs and monitoring and retraining is required. Companies that develop their own AI based solution also need to invest in security and compliance. Deploying AI comes with additional security risks and compliance requirements that need to be understood, monitored, and managed.

05 Decision Dimension: When does which Approach Make Sense?

It is important to consider the above-mentioned advantages and disadvantages of each approach when evaluating the use of AI solutions for procurement use cases.

To help companies to make a clear decision on the approach to select, we have developed a 10-question decision model. This framework will help organizations to reduce bias and ensure that decisions are based on measurable criteria rather than intuition. It also enhances transparency by documenting the reasoning behind each choice, making it easier to communicate and justify decisions to stakeholders. Furthermore, the model promotes consistency by applying the same framework across different use cases, creating a standardized process that supports comparability and repeatability.

The questions in the model cover three essential dimensions. Strategic factors ensure that decisions align with long-term organizational goals and support overall business direction. Operational factors address the practical challenges of implementing the solution effectively, focusing on aspects that influence execution and integration. Financial and risk factors provide both quantitative and qualitative grounding for sound decision-making, helping organizations balance cost considerations with reliability and sustainability.

The decision model is based on existing scientific research combined with our practical consulting experience from AI implementation projects. They capture both long-term strategic considerations, such AI leadership ambitions as well as short-term operational needs like integration and speed of deployment. By scoring each question and weighting them according to organizational priorities, companies can build a decision matrix that highlights whether building or buying is the most suitable option. This model serves as a decision-support tool that adapts to different contexts and helps organizations make informed, transparent, and strategically aligned choices.
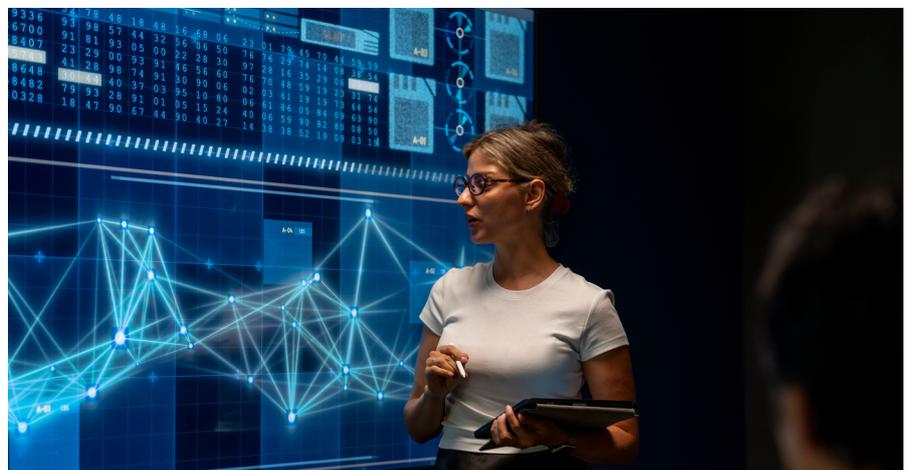
06 Current Market Situation and Strategic Recommendations

6.1 Where is the Market Heading?

The AI market in procurement is evolving rapidly, driven by technological maturity, increasing data availability, and growing pressure on procurement teams to deliver strategic value. The trend is moving away from isolated pilots and toward scalable, integrated AI ecosystems. Vendors are expanding their offerings to include end-to-end solutions, while startups continue to innovate in niche areas such as autonomous sourcing, ESG risk detection, and generative contract analysis.

A key shift is the rise of hybrid models, where companies combine vendor solutions for operational efficiency with custom-built AI for strategic differentiation. This approach allows organizations to balance speed and flexibility while maintaining control over critical data and processes.

Another emerging focus is AI governance. As AI becomes embedded in core procurement workflows, companies are investing in frameworks to ensure ethical use, compliance, and transparency. This includes model monitoring, bias mitigation, and alignment with regulatory standards.

Finally, the role of data teams and procurement IT is becoming central. These functions no longer support roles. They are strategic enablers of AI adoption. Their ability to manage data quality, infrastructure, and integration will determine how effectively organizations can scale AI across procurement.

6.2 Strategic Recommendations for Decision-Makers

Establishing an AI Governance Model in Procurement

AI governance is essential to ensure responsible, effective, and scalable use of AI in procurement. A governance model should include:

- Clear ownership and accountability for AI initiatives across business and technical teams.

- Ethical guidelines for data usage, model transparency, and bias mitigation.

- Lifecycle management of AI models, including versioning, retraining, and performance monitoring.

- Compliance controls aligned with regulations such as GDPR, ISO 27001, and industry-specific standards.

Scientific literature emphasizes the importance of embedding governance early in the AI journey. If external consulting firms are involved, governance frameworks should be adapted to reflect their methodologies and integration strategies. The Capgemini AI Evaluation Model, for instance, provides a structured way to assess readiness, prioritize use cases, and align AI with business transformation goals.

The Role of Procurement IT and Data Teams

Successful AI adoption in procurement depends heavily on the collaboration between procurement, IT, and data teams. Procurement defines the business needs and use cases; IT ensures integration with enterprise systems and infrastructure; and data teams manage the quality, accessibility, and governance of data. This triad must work together to:

- Identify and prioritize AI opportunities.

- Ensure data readiness and interoperability.

- Support model development, deployment, and monitoring.

- Maintain compliance and security standards.

Building cross-functional teams and fostering a shared understanding of AI's potential and limitations is key to long-term success.

07 Conclusion & Outlook

AI is no longer a distant concept. It is a practical enabler for procurement transformation. Organizations face two primary paths: buying existing AI solutions or building proprietary AI capabilities in-house.

The decision between those two possibilities is not a one-size-fits-all approach as it depends on strategic priorities, organizational capabilities, and long-term vision.

When deciding between building AI solutions in-house or purchasing them from established vendors, organizations must weigh flexibility against speed and risk. Buying AI capabilities from leading software providers offers clear advantages: rapid deployment, minimal training requirements, and reduced governance risk thanks to robust vendor testing and centralized monitoring. These solutions allow companies to leverage proven technology without the complexity of developing and maintaining their own AI infrastructure.

However, this convenience comes at the cost of customization and strategic autonomy. Off-the-shelf tools often lack alignment with unique procurement processes and data structures, and companies remain dependent on vendors' roadmaps and innovation pace. Conversely, building AI solutions internally provides unmatched control over data, processes, and intellectual property, enabling tailored functionality and fostering internal expertise. Yet, this approach demands significant investment in talent, infrastructure, and ongoing governance, making it a viable option primarily for organizations with strong digital maturity and innovation ambitions.

Capgemini helps organizations navigate this complexity by combining strategic advisory with hands-on implementation expertise. We support clients in assessing their digital maturity, defining AI ambitions, and applying structured decision frameworks to select the right approach - make, buy, or even a hybrid form. For companies opting to buy, Capgemini ensures vendor selection aligns with long-term goals and manages integration, governance, and change management. For those choosing to build, we provide end-to-end support: from designing AI architectures and leveraging leading technology stacks to establishing governance models and scaling solutions sustainably. This holistic approach enables organizations to accelerate AI adoption while minimizing risk and maximizing business value.

08 Guiding questions for self-evaluation

To support your organization in defining a pragmatic and value-driven approach to applying Artificial Intelligence in Procurement, we have developed the following set of ten guiding questions. They are designed as a self-assessment to help decision-makers reflect on internal & external capabilities and focus on the intended value to achieve.

Performance of external solutions

How do you evaluate the performance and capabilities of externally existing solutions. To what degree do these solutions cover your needs?

Full coverage	Mostly covers
Partially covers	Does not cover

Strategic Alignment & criticality of ownership

How strategically important is it for you to own the AI solution? Owning the solution allows to adapt to changing needs and maintain a competitive edge, while not relying on external providers.

Think about the long-term strategic value of owning the solution, including control over innovation, responsiveness to change, and differentiation from competitors.

Very high	High
Moderate	Low

Importance of customization & flexibility

How important is the ability to customize and adapt the solution to your specific needs?

Here the focus lies on the operational importance of tailoring the solution to fit internal processes, user requirements, and integration needs.

Critical	Important
Moderately important	Not important

Existing competitive advantage & technical expertise

To what extent does your organization possess the technical expertise, internal resources, and the strategic ambition to build the AI solution in-house? This requires having a dedicated team, established development guidelines, data governance frameworks, and a clear understanding of how this contributes to long-term competitive advantage.

Fully equipped
Partially equipped
Limited capability
Not equipped

Integration complexity & ecosystem fit

Do you already use an external solution that offers the required additional AI capabilities? If not, how well can external solutions be integrated with your existing systems and ecosystem?

Please keep in mind that integration is required in both build and buy scenarios, however build tends to be more flexible and with less effort for integration into the existing ecosystem.

Seamlessly
Moderately well
With difficulty
Not feasible

Vendor reliability

How established and trustworthy are the vendors offering external solutions?

Highly reliable
Moderately reliable
Uncertain
Not reliable

Scalability & future proofing

If applicable to your situation, how effectively do external AI solutions support future scalability and evolving business requirements?

Highly effective
Moderately effective
Not effective
Not applicable

Scalability & future proofing

Additionally, how confident are you in the reliability and transparency of the vendor's roadmap for ongoing development and long-term support?

Very confident
Somewhat confident
Not very confident
Not applicable

Total cost of ownership

Have you already calculated a business case for the AI solution? If so, how does the total cost of ownership, including development, maintenance, and operations, compare between building internally and buying externally?

Building internally is significantly more cost-effective

Costs are roughly comparble

Buying externally is significantly more cost-effective

Uncertain

Security & compliance requirements

How high are your organization's security and compliance requirements for this solution?

Very high
High
Moderate
Low

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Capgemini Invent is an integral part of Capgemini, a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

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