

Agentic AI Buyer's Guide

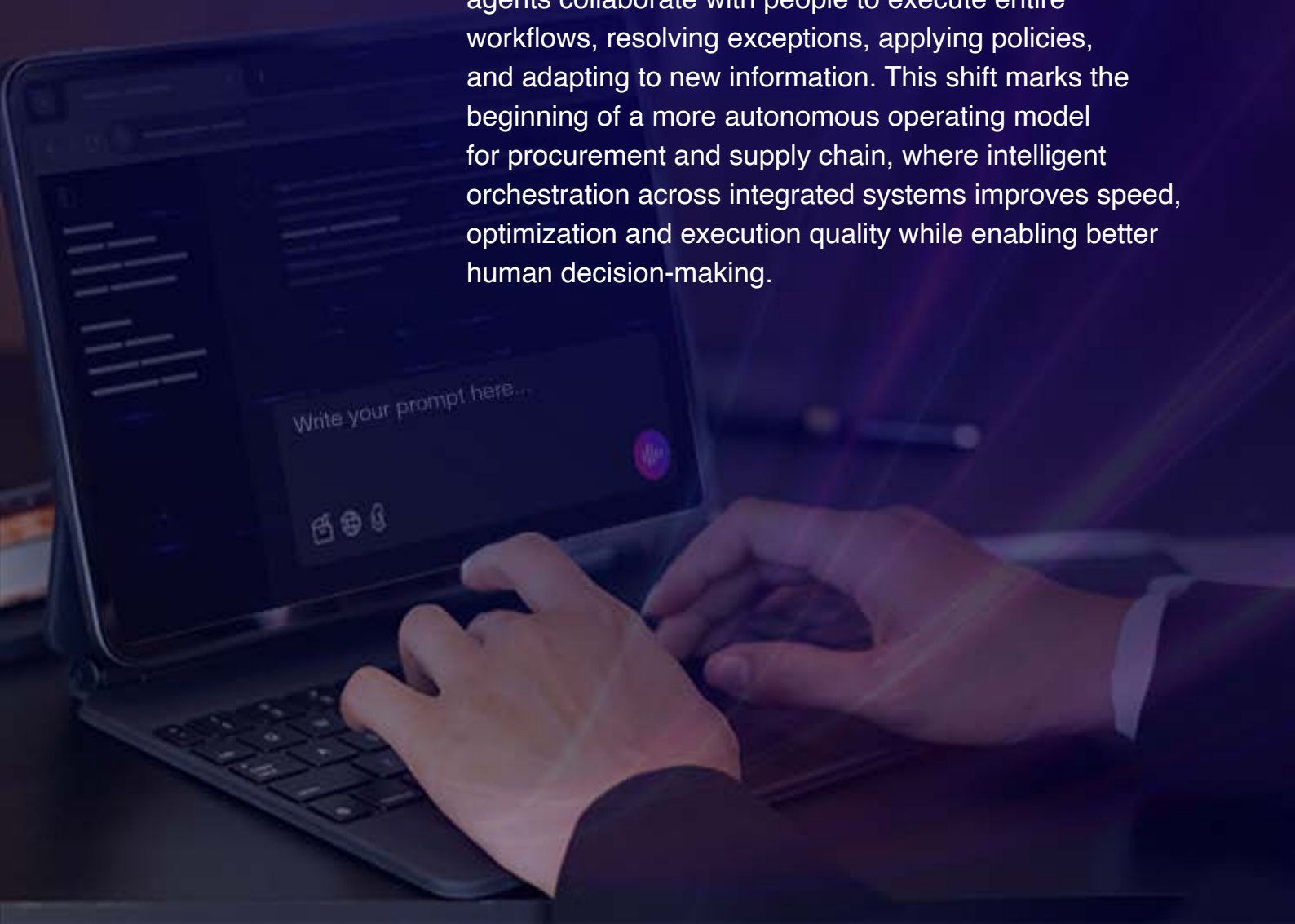
How to Evaluate Enterprise-Ready Agentic AI for Procurement and Supply Chain

Executive Summary

Procurement and supply chain teams operate under increasing pressure: shifting demand, volatile costs, supply disruptions, regulatory scrutiny, and the need to make faster decisions with fewer resources. Traditional systems and automation tools help standardize work, but they cannot interpret nuance, respond to change, or coordinate complex processes end-to-end.

As a result, organizations still rely heavily on manual intervention, disconnected workflows, and reactive problem-solving. The gap between what teams need and what their systems can deliver is widening.

Agentic AI closes this gap by enabling systems that can reason, decide, and act based on domain-specific understanding. Instead of supporting tasks, intelligent agents collaborate with people to execute entire workflows, resolving exceptions, applying policies, and adapting to new information. This shift marks the beginning of a more autonomous operating model for procurement and supply chain, where intelligent orchestration across integrated systems improves speed, optimization and execution quality while enabling better human decision-making.



Why Agentic AI Matters Now

Although procurement and supply chain teams may have adopted modern platforms, much of the daily work remains:

- manual and repetitive
- dependent on rule-based or manual routing
- slowed by bottlenecks and approvals
- spread across disconnected systems
- informed by inconsistent or incomplete data
- vulnerable to errors, delays, and visibility gaps

These issues persist because traditional automation can standardize tasks but cannot interpret nuance, resolve exceptions, or coordinate work end-to-end.

Agentic AI addresses these limitations by enabling systems that plan, decide, and act within defined guardrails, continuously optimizing execution while managing risk. Organizations gain:

- dynamic workflow in real-time orchestration
- continuous optimization of processes and outcomes
- flexibility
- scalability
- transparency
- much better customer experience
- faster cycle times
- fewer handoffs and delays
- reduced operational and compliance risk, with stronger auditability
- improved decision quality
- more time for strategic work
- greater resilience during disruption

This shift is foundational for enterprises pursuing autonomy, optimization, and resilience across procurement and supply chain operations.

What Agentic AI Should Deliver

Agentic AI is much more than an assistant or embedded intelligence. Modern, enterprise-ready systems should deliver five core capabilities:

1. Autonomous Decision-Making

Agents interpret context, apply business rules, evaluate constraints, and either recommend or execute actions based on domain-specific understanding rather than generic reasoning. Decisions must be explainable and traceable.

2. End-to-End Orchestration

Agents coordinate work across sourcing, categories, contracting, buying, suppliers, risk, and planning, eliminating manual routing and ensuring consistent execution.

3. Real-Time Adaptation

Agents adjust to changing demand, supplier issues, risk signals, and market conditions. This can include escalation, reprioritization, or re-planning without manual intervention.

4. Continuous Learning

Agents improve and optimize through outcomes, user feedback, and exposure to new data.

5. Enterprise-Level Scalability and Governance

Agents must operate at scale with embedded governance, security, auditability, and policy controls, including guardrails such as permissions, approval thresholds, and decision policies that ensure autonomous actions remain aligned with enterprise risk and compliance requirements.



How Agentic AI Works

Agentic AI platforms vary in maturity, but buyers evaluating enterprise-ready systems should expect certain architectural patterns that enable autonomous execution. These typically include three layers that work together to support governed autonomy across procurement and supply chain.

1. Assistant Layer

A single conversational interface that spans sourcing, contracting, buying, suppliers, and risk. Users can ask questions, request actions, or initiate work from one place, rather than navigating multiple systems or workflows. This interaction model helps users transition from traditional, structured interfaces such as dashboards and spreadsheets to more intuitive, prompt-driven engagement, improving adoption and day-to-day usability.

2. Orchestration Layer

A network of autonomous agents that collaborate to complete multi-step tasks. These agents apply business rules, resolve exceptions, coordinate across systems, and escalate when human judgment is required. This is where true end-to-end execution occurs.

3. Extensibility Layer

Tools that allow teams to build new agents or adapt existing ones for specific domains, categories, regions or workflows, including agents that can operate across an enterprise ecosystem of systems and data sources. This ensures the system can evolve as processes change, without heavy re-engineering.

How the Pieces Fit Together

The assistant layer interprets intent, the orchestration layer carries out the work, and the extensibility layer enables continuous adaptation. Combined, these layers allow organizations to move beyond task automation toward governed autonomy across procurement and supply chain operations.

What Agentic AI Is Not

Agentic AI is often confused with other forms of enterprise automation. To evaluate platforms effectively, it is important to distinguish agentic systems from adjacent technologies.

Agentic AI is not:

- a chatbot or conversational assistant that only retrieves information
- a workflow engine that automates predefined steps
- an RPA bot that executes tasks without context or reasoning
- an LLM wrapper that responds to prompts but cannot take action
- a rules-based system that cannot adapt when conditions change

True agentic AI goes beyond assistance or task automation. It enables intelligent agents to interpret context, collaborate and execute work autonomously within governed controls to work toward the best outcomes.

4

Agentic AI Maturity Framework

Organizations evaluating AI platforms often encounter a wide range of capabilities, from simple assistants to systems that can execute complex work autonomously. This framework outlines three levels of maturity to help buyers distinguish between incremental improvements and true agentic intelligence.

Level 1 — Assisted Intelligence

AI provides recommendations, answers questions, and summarizes information. These systems support users but rely on people to make decisions, route work, and execute actions. Most copilots and embedded LLM features fall into this category.

Level 2 — Coordinated Intelligence

AI enhances workflow automation by interpreting intent, applying rules, and completing predefined steps. These systems can streamline processes but remain limited to task-level execution and require substantial human oversight when conditions change.

Level 3 — Autonomous Orchestration

Intelligent agents plan, decide, and act across multiple systems and functions. They collaborate to execute multi-step workflows, resolve exceptions, enforce policies, and adapt to new information, all within defined governance controls. This is the maturity level required to deliver meaningful autonomy in procurement and supply chain.

Core Buying Criteria

Below are the evaluation areas that matter most when selecting an agentic AI platform, along with what to look for and why it matters.

Evaluation Area	What to Look For	Why It Matters
Autonomous Decision-Making	- Agents that reason over constraints and business rules - Explainable decisions with traceability - Ability to execute or escalate actions - Human-in-the-loop controls for decisions requiring judgment or approval	- Reduces manual work and bottlenecks - Ensures policy-aligned decisions - Improves consistency and accuracy - Builds trust in autonomous operations
Multi-Agent Orchestration	- Cross-functional workflow orchestration - Multi-step system coordination - Autonomous exception resolution - Workflow acceleration	- Eliminates delays and inefficiencies - Removes dependency on human routing - Strengthens execution quality - Enables scalable, reliable autonomy
Domain-Specific Intelligence	- Procurement and supply chain contextual understanding - Category, supplier, and risk insights - Contract and clause comprehension	- Improves accuracy in real-world scenarios - Reduces errors and misinterpretation - Enhances trust in autonomous outcomes - Highlights the limits of general-purpose AI in handling procurement and supply chain complexity, reinforcing that not all agents are created equal

Evaluation Area	What to Look For	Why It Matters
Intelligent Data Fabric	- Unified, normalized data across systems - Structured + unstructured data handling - Real-time synchronization - Contextual data enrichment	- Ensures accurate agent reasoning - Reduces manual data consolidation - Enables cross-functional visibility
Unified AI Assistant	- Single conversational interface for all processes - Ability to guide, summarize, take action - Persona-based experience	- Improves adoption and ease of use - Reduces training requirements - Accelerates task initiation
Open, Extensible Architecture	- LLM-, system-, and cloud-agnostic - API-first integration - External data connectivity	- Future-proofs AI strategy - Reduces lock-in - Supports hybrid environments
Governance & Controls	- Guardrails and decision policies - Approval thresholds - Role-based permissions - Explainable agent behavior	- Ensures safe, compliant autonomy - Reduces operational and regulatory risk - Builds trust in agent decisions
Human + AI Collaboration	- Intentional handoffs that balance agent autonomy with human judgment - Human-in-the-loop decision checkpoints - Ability to override or refine actions	- Enhances trust and adoption - Improves decision quality - Ensures autonomy with control

Evaluation Area	What to Look For	Why It Matters
Scalability & Time-to-Value	- Proven enterprise scale - High-volume transaction capacity - Deployments measured in weeks	- Accelerates impact - Reduces implementation cost - Ensures performance at scale
Unified Visibility & Analytics	- Cross-functional insights (spend, suppliers, risk, contracts) - Predictive and prescriptive analytics - Real-time data access	- Improves decision-making - Enables proactive risk management - Strengthens planning and strategy
Extensibility	- Ability to build or modify agents - Low-code/no-code configuration - Adaptable workflows	- Reduces IT dependence - Accelerates innovation - Ensures long-term flexibility



How to Evaluate Agentic AI Vendors

Selecting an agentic AI platform requires more than reviewing feature lists or scripted demos. The goal is to determine whether a vendor can deliver true autonomous orchestration, not just assistance or task automation. The most effective evaluations focus on real-world complexity, cross-functional execution, and the safeguards required for enterprise use.

6.1 Request an End-to-End Orchestration Demonstration

Ask the vendor to demonstrate a full, multi-step workflow, not isolated actions, that spans intake, sourcing, contracting, and purchasing. The system should:

- coordinate multiple agents
- reason over policies and constraints
- resolve exceptions without manual routing
- show clear, traceable decision paths

6.2 Test Real-World Domain Understanding

Use real examples — clauses, supplier issues, category nuances, policy conflicts — and ask the vendor to process them live. Look for:

- accurate interpretation
- context-aware recommendations
- appropriate risk escalation
- consistent application of business rules

6.3 Validate Integration and Data Readiness

Ask the vendor to demonstrate how the platform connects to your ERP, supply chain systems, and external data sources. Look for:

- real-time data flow
- normalization of structured and unstructured data
- contextual enrichment
- bi-directional updates across systems

6.4 Assess Governance and Autonomy Controls

Request a live demonstration of how the platform enforces:

- approval thresholds
- decision policies
- guardrails for sensitive actions
- user permissions
- audit trails and explainability

Ask to see how an agent behaves when a policy conflict occurs.

6.5 Evaluate Extensibility and Adaptability

Ask how new agents are created, modified, or scaled. Look for:

- low-code/no-code agent creation and import/export of other agents
- adaptation to categories or workflows
- rapid iteration without heavy services

6.6 Observe Human + AI Collaboration

Request scenarios showing real-time collaboration between agents and users:

- agent recommendations needing approval
- judgment-based task handoffs
- override and refinement of agent actions

6.7 Ask About Time-to-Value and Operational Experience

Strong vendors should demonstrate:

- deployment measured in weeks
- prebuilt procurement & supply chain capabilities
- experience operating at enterprise scale



Final Thoughts

Agentic AI represents more than an incremental improvement to existing procurement and supply chain systems. It marks a shift from task automation to autonomous orchestration, enabling organizations to operate with greater speed, precision, and resilience.

The right platform will:

- coordinate work end-to-end across sourcing, contracting, buying, suppliers, and risk
- adapt to changing conditions in real time
- improve decision quality and compliance
- provide governed autonomy grounded in transparency and control
- scale with the enterprise through an open, extensible architecture

By focusing on domain intelligence, data quality, extensibility, and robust governance, organizations can confidently adopt agentic AI and build a foundation for faster, smarter, and more resilient supply-side operations. The platforms that meet these criteria will define the next era of enterprise performance, enabling a future where autonomous execution and human oversight work hand in hand.





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