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In association with **Coupa**



BUILT FOR DISRUPTION: HOW
TO SECURE MODERN SUPPLY
CHAINS IN THE AGE OF AI

ACROSS INDUSTRIES, THE VALUE IS LEAKING. THE PIPES ARE YOUR SUPPLY CHAIN. AI IS THE PLUMBER.

The leaks show up as expedites, excess inventory, supplier risk, and slow response times. They rarely come from one big breakdown. More often, small decision gaps are repeated across planning, sourcing, logistics, and execution.

The enduring challenge of ensuring a reliable supply for operations is “constant variability.” Teams must make high-stakes trade-offs across the supply chain every day.

AI can help narrow the decision gaps by helping teams detect issues earlier, evaluate scenarios faster, and act with greater consistency. But results depend on using the right AI for each decision, backed by strong data, governance, and support for adoption.

WHY DELOITTE AND COUPA

Deloitte brings the strategic lens – defining where AI creates real operational value across the supply chain. Coupa brings the execution – embedding agentic AI directly into workflows to turn insight into action.

In this paper, Deloitte and Coupa define the scope of the challenge and the technology and practices that can help solve it.

Direct supply leaders are chasing AI outcomes

Digital transformation and AI have moved from experimentation to executive priority. In Deloitte’s work with industry leaders, we’ve found that AI is a top priority for **67%** of decision makers¹, and the intent is not to deploy standalone tools, but to build fit-for-purpose, stakeholder-adopted, future-proofed processes that span end-to-end. Organizations are increasingly focused on integrated operating models and next generation capabilities that can be developed incrementally while still delivering measurable performance improvements along the way.

On the procurement front, industry leaders are investing roughly **26%** more into technology¹ and show a strong preference for best-of-breed solutions that can be integrated into the broader ecosystem. When asked where they would allocate additional budget, technology rises to the top, with GenAI frequently cited as the number one priority.

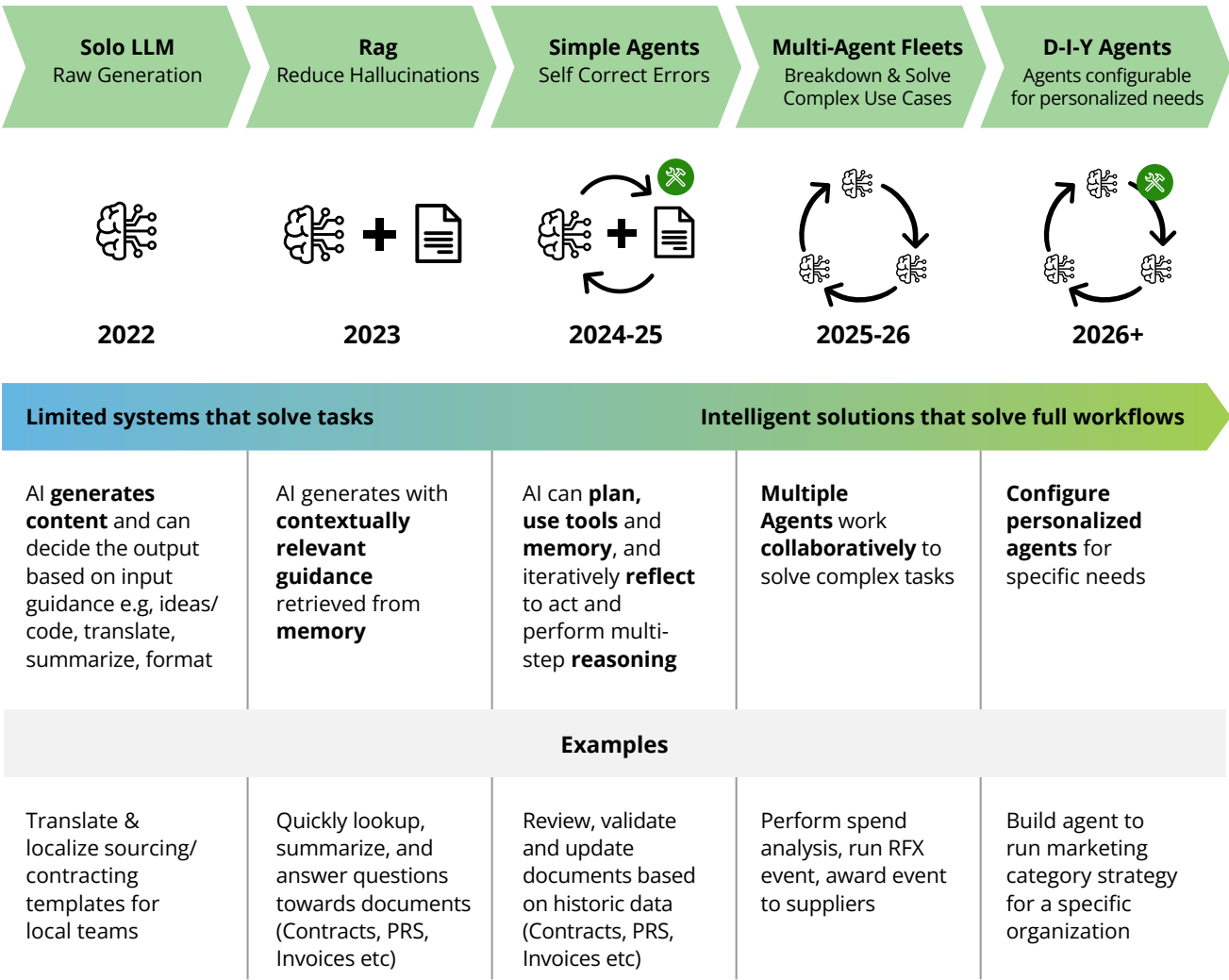
In direct supply environments, the focus is on outcomes, not possibilities. The value of AI is measured in line continuity, expedite reduction, inventory risk reduction, and faster scenario decisions under constraints. In other words, AI earns its place when it helps teams protect production, respond to variability faster, and make better trade-offs across cost, service, inventory, and risk.



The evolution of agentic AI and emerging archetypes

Enterprise AI is evolving from tools that generate content into **agentic systems** that can execute meaningful work. The progression moves from solo LLMs that produce raw outputs, to retrieval-augmented generation (RAG) that grounds responses in trusted sources, to simple agents that can plan, use tools, and self-correct. From there, organizations begin deploying **multi-agent fleets** that collaborate to solve complex, cross-functional problems, ultimately reaching a future where agents can be configured to meet the specific needs of each business.

Evolution of Agentic AI



For direct procurement and supply chain teams, this evolution is especially relevant because ensuring supply for production depends on end-to-end workflows, not isolated insights. Decisions must account for constraints, trade-offs, and fast-changing conditions across suppliers, sites, logistics, and inventory. As AI becomes more agentic, it can shift from answering questions to helping teams coordinate actions, accelerate scenario-based decision making, and execute with greater consistency.

Agentic AI Across the Supply Chain

Use cases span the full supply chain lifecycle. In our research with customers and industry leaders, we've identified three practical archetypes that reflect increasing levels of business impact: **system provider agents** that improve execution within a single application, **use case agents** that orchestrate work across multiple connected processes, and **decision intelligence agents** that synthesize signals across the network to guide enterprise-level decisions.

Many early wins come from agents that remove friction in planning and sourcing workflows, but the biggest resiliency gains emerge when AI supports scenario-driven decisions.

SUMMARY OF AGENTIC ARCHETYPES



System Provider Agents

Speed execution inside a system

Agents specifically designed for an individual system and likely offered by that system provider.



Use Case Agents

Reduce latency between planning, procurement, logistics

Agents that bridge 2-3 systems to solve a problem that spans multiple stages of the supply chain.



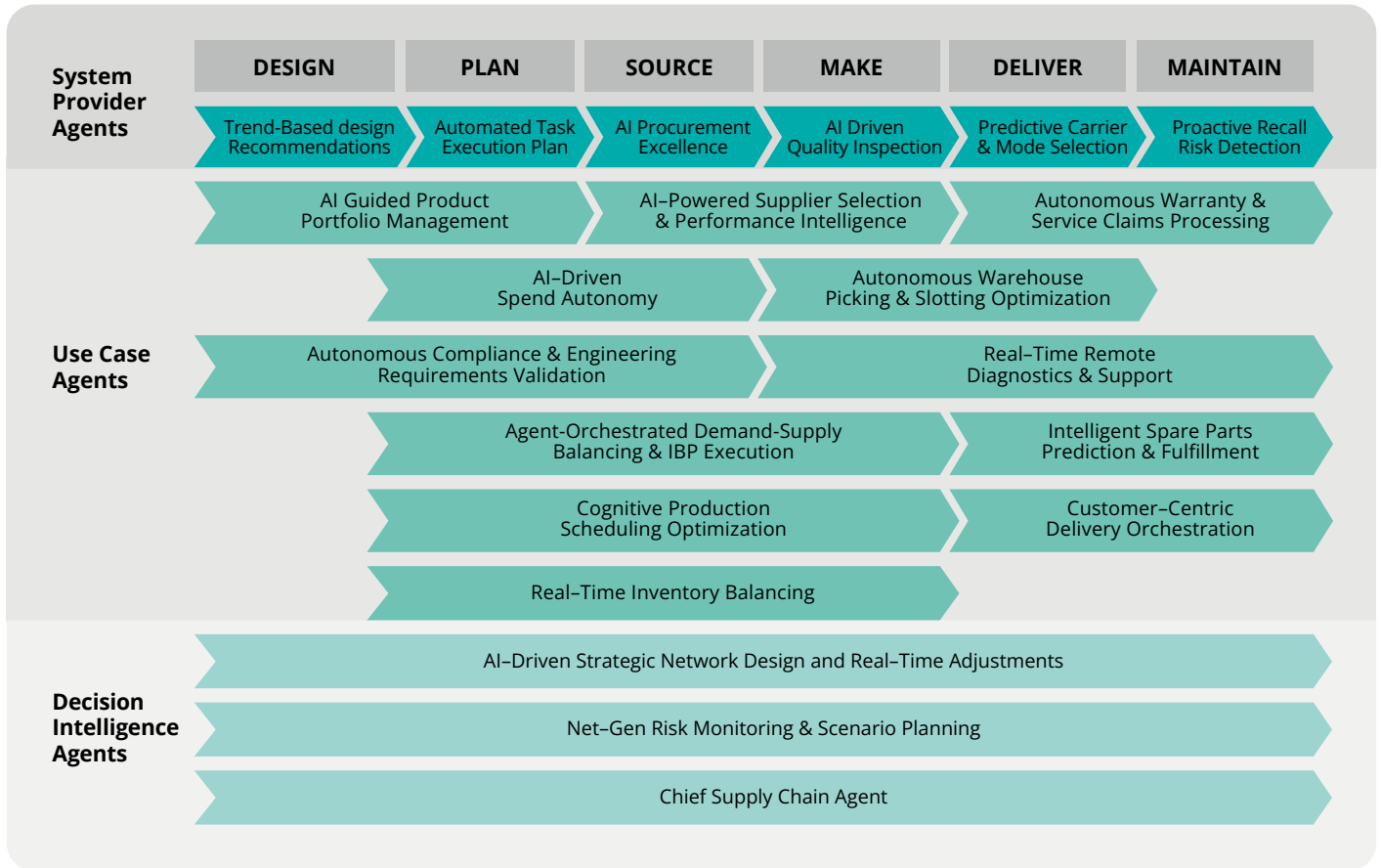
Decision Intelligence Agents

Improve scenario speed and decision quality under constraints

Agents that leapfrog across various systems to inform strategic, holistic decisions across the supply chain.



Illustrative supply chain agentic AI use cases from our library



THE AI TOOLS THAT CAN DELIVER OUTCOMES FOR DIRECT SUPPLY

Organizations creating an AI-powered direct procurement function²

2.6x greater ROI than their peers

31% fewer FTEs required to achieve results

19% lower cost as a percentage of spend

Deloitte's archetypes show how agentic AI is likely to create impact in direct procurement, now we'll move to the practical level. Let's take a closer look at the individual Coupa Navi™ agents Coupa has developed and how they work inside direct supply workflows to help teams move faster while protecting continuity of supply for production.



ANALYTICS

Analytics Agent

Aggregates data from all Coupa applications, eliminates silos, and provides a comprehensive, cross-functional view of your organization's total spend and operations.

Impact: *Intuitively explore your data lake*

CATEGORY MANAGEMENT

Story Telling Agent

Auto-generates structured category narratives using market data, spend analytics, and supplier landscape intelligence to accelerate category strategy development.

Category Consultant Agent

AI advisory agent that provides on-demand category insights, market benchmarks, and strategic recommendations to guide sourcing and category planning decisions.

Impact: *Implement data-driven strategy in category management*

SOURCING AND CONTRACTING

Sourcing Creation Agent

Automatically builds sourcing events from requirements, generating optimal lot structures, templates, and RFQ configurations to accelerate event creation.

Formula Agent

Generates pricing formulas and cost models linked to commodity indices and market drivers, enabling dynamic pricing structures and automated cost calculations.

Scoring Agent

Applies AI-driven supplier evaluation using weighted multi-criteria scoring models, enabling structured supplier comparison and scenario analysis.

Impact: *Continuous, dynamic and optimized sourcing*

SUPPLIER DISCOVERY

Intelligent Supplier Discovery

Helps buyers find suppliers using natural language to assess requirements and preferences. Returns rich results on each potential supplier for fast, confident decisions.

Impact: *Streamlined and intelligent supplier discovery*

CONTRACTS

Negotiation Playbook Agent

Generates negotiation strategies and recommended tactics based on supplier performance data, historical sourcing outcomes, and market conditions.

Obligation Extraction Agent

Automatically extracts contractual obligations, SLAs, compliance requirements, and key terms from sourcing and contract documents using AI.

Impact: Intelligent, real-time collaboration

SUPPLY CHAIN COLLABORATION

Email AI

Manages orders through email rather than logging into a complex system. **Confirm, reject, or modify** purchase orders directly within communication threads.

Impact: Use natural language to simplify the procurement process

SAVING OPPORTUNITIES

Optimization Agent

Continuously mines enterprise data to proactively identify hidden value and mitigate supply chain risks.

Impact: capture cost savings and optimize supply base

Coupa Navi™ agents translate Deloitte's "agent archetypes" into real, workflow-level impact across direct procurement.

What makes Coupa's AI-native technology different?

Trusted AI data: Relevant, timely, secure, and ethically-sourced datasets that power AI agents to learn, adapt, and drive real outcomes.

AI-native technology: A platform built natively from the cloud to embed intelligence and orchestration at every layer, learning and scaling faster and adapting automatically as business needs change.

- **\$9 trillion** in global transactional spend data
- A network of more than **10 million buyers and suppliers**
- Best practices followed for **19 years**

[Learn More About Coupa AI](#)



COMMON CHALLENGES FOR AI ADOPTION

Challenge: Data Quality & Availability

Data silos across departments and legacy systems can make it difficult to aggregate data for AI.

Potential solution: Integrating and harmonizing direct supply data across ERPs, third-party data providers, and supply chain systems.

Challenge: Lack of Clear Business Case or ROI

Projects that start as “tech-first” often stall without defined use cases or success metrics.

Potential solution: Defining KPIs and scoped pilots, so teams can prove ROI quickly and scale what works.

Challenge: Talent & Skills Shortage

Upskilling current staff or hiring externally can be slow and costly; partnerships with vendors/consultants may be needed.

Potential solution: Embedding AI guidance, policy explanations, and next-best actions within direct procurement and supply chain planning workflow.

Challenge: Change Management & Org. Resistance

Poor communication or lack of involvement from business users can lead to low adoption or “shadow IT” workarounds.

Potential solution: Embedding AI guidance within direct supply workflows, reducing reliance on superusers and IT while helping teams adopt new processes.

Challenge: Ethical, Privacy, & Regulatory Concerns

Legal or risk teams may slow projects unless risks are proactively addressed.

Potential solution: Customer-permissioned datasets, secure frameworks, and human-in-the-loop guardrails.

Challenge: Poor Model Explainability & Trust

If users don't understand AI-driven decisions, they may not trust or act on AI recommendations.

Potential solution: Coupa delivers constraint-aware recommendations with transparent rationale, simplifying complex outputs into human-readable explanations.



THE REALIZATION OF AN AI-POWERED CATEGORY STRATEGY

When category strategy is slow, disconnected, or built on inconsistent data, value leaks out in predictable ways: rushed sourcing events, overreliance on incumbents, and avoidable expediting when supply conditions shift. An AI-powered category strategy closes those gaps by helping teams move faster from insight to sourcing action.

Turning category work into an operating system – the Cirtuo acquisition

With the Cirtuo acquisition, Coupa brings category management into a more continuous, collaborative, and execution-ready process. The goal is to operationalize strategy so it can be updated as conditions change and then translated into sourcing actions without friction. In practice, this can help reduce category strategy cycle times by **50%** while accelerating sourcing event creation by **50%**, freeing teams to spend less time on manual documentation.

Category strategy only works when the underlying data is structured, consistent, and trusted. AI-powered classification tools like Coupa's AI Classification (AIC) help maintain clean, accurate spend data at scale, reducing the manual effort required to keep categories current across suppliers, parts, and purchasing patterns.

Sourcing optimization and formula creation: making trade-offs explicit

In direct supply environments, sourcing decisions rarely come down to unit price alone. Teams must weigh multiple constraints and trade-offs. Coupa Sourcing Optimization and formula creation help make those trade-offs explicit, so teams can evaluate more scenarios and make award decisions that improve both cost and continuity of supply. Done well, optimization-driven sourcing can contribute to a **10-30%** reduction in expedited costs by awarding in a way that is more resilient to variability and less likely to trigger downstream fire drills.

Integrated supplier performance and risk management

An AI-powered category strategy is only as strong as the supplier network behind it. Coupa integrates supplier performance and risk management at all stages, using community data to enrich the signal teams have on reliability, disruption exposure, and execution performance.

Realizing the category strategy advantage

Coupa's approach connects category strategy, structured data, optimization, and supplier intelligence into a single motion. That combination can help direct procurement teams move faster, evaluate more options under real constraints, and reduce the value leakage that shows up later as expedites, shortages, and instability.



How to Kickstart your AI journey

Know the Possibilities

1. Explore Art of the Possible

Re-imagine
Procurement

Define your Vision

2. Formulate your vision

What are our goals
and aspirations?

Activate your Vision

4. Identify the technology

5. Prepare data

3. Prioritize use-cases

Where do we
capture value?

6. Pilot use-case

Build the Foundation

Effectively integrate
technology, data,
and people

Tech Stack

Data Readiness

Change Management

Reviewing the benefits of AI-native supply chain

Teams Using GenAI Drive Real Business Impact²

2x more value
generated

during major disruptions – including recession, pandemic, and inflation

24% shorter

sourcing time for non-renewed contracts

58% faster

requisition-to-PO cycle time for nonbid purchases

Learn the four traits of
a Digital World Class[®]
procurement organization.

Get The Hackett Group[®] Report

*Source: Achieving Digital World Class[®] Procurement Excellence Through Gen AI

Coupa's approach to supply chain brings together optimization, machine learning, and generative AI in a single environment, embedded in the workflows teams use every day.

Industry-leading optimization and modeling capabilities combine with AI-driven guidance to help teams evaluate trade-offs across cost, service, inventory, and risk.

In day-to-day operations, gains show up as measurable productivity improvements. Coupa's Email AI capabilities can increase productivity by **50%** by helping teams process communications, surface key information, and move work forward more efficiently. AI also helps reduce report production time by **70%**, giving teams more time to focus on decisions.

At the decision layer, Coupa enables stronger decision intelligence through inventory optimization, helping organizations make more informed trade-offs. And across adjacent finance and transaction workflows, Coupa's AI capabilities can support high automation performance, including **greater than 90% invoice match accuracy rates**, reinforcing the broader value of an AI-native platform.

Taken together, these capabilities can help organizations build a more resilient, productive, and scalable supply chain function, one that combines human judgment with AI-driven intelligence to plug up the leaks and protect continuity of supply.





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References

1) [Deloitte®, 2025 Global CPO Survey](#)

2) [The Hackett Group®, Achieving Digital World Class® Procurement Excellence Through Gen AI](#)

About Deloitte and Coupa

Deloitte and Coupa help direct supply leaders turn GenAI ambition into measurable outcomes. Deloitte brings deep industry experience, strategic insight, and demonstrated transformation support—from business case through adoption—while Coupa brings an AI-native platform that embeds optimization, machine learning, generative AI, and agentic AI directly into everyday workflows.

Together, Deloitte's agentic AI archetypes and IndustryAdvantage™ approach, combined with Coupa's execution capabilities, help organizations close decision gaps earlier, improve decision-making, and drive more consistent action across the supply chain. As one of Coupa's largest systems integrators, Deloitte leverages Coupa's platform to align with each organization's needs so leaders can break down silos, adapt to changing markets, protect continuity of supply, and drive targeted transformation with agility and confidence.

Learn about the Deloitte and Coupa Alliance

Additional Information

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