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Three Enterprise Use Cases That Benefit from Agentic Orchestration

How leading organizations are operationalizing AI agents safely, efficiently, and at scale today with Camunda

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Executive overview

Enterprises are eager to drive value from artificial intelligence, but for most organizations, value remains elusive. Technology implementation is fragmented, often confined to proof-of-concept pilots or isolated teams experimenting with chatbots and copilots, kept far away from mission-critical workflows due to trust concerns and lack of visibility.

Agentic orchestration changes that equation. It blends deterministic automation with dynamic, AI-driven decision-making to create safe, context-aware, self-optimizing business processes.

While countless enterprise processes could benefit from this approach, we've identified three use cases as especially effective starting points:

1. **Automated technical support** – handling unpredictable infrastructure and IoT issues to preserve positive customer experiences, particularly in telecommunications
2. **Human workflow optimization / client onboarding** – streamlining document-heavy, compliance-bound processes, particularly in financial services
3. **Trade data evaluation and enrichment** – reducing manual reconciliation under tight regulatory deadlines for financial services

Each demonstrates how enterprises can move from experimental AI to measurable business outcomes—safely, transparently, and fast.

Camunda makes this shift possible by orchestrating people, systems, and AI agents within a single executable process model, maximizing the ROI of AI investments through agentic orchestration.

Why AI needs agentic orchestration to succeed

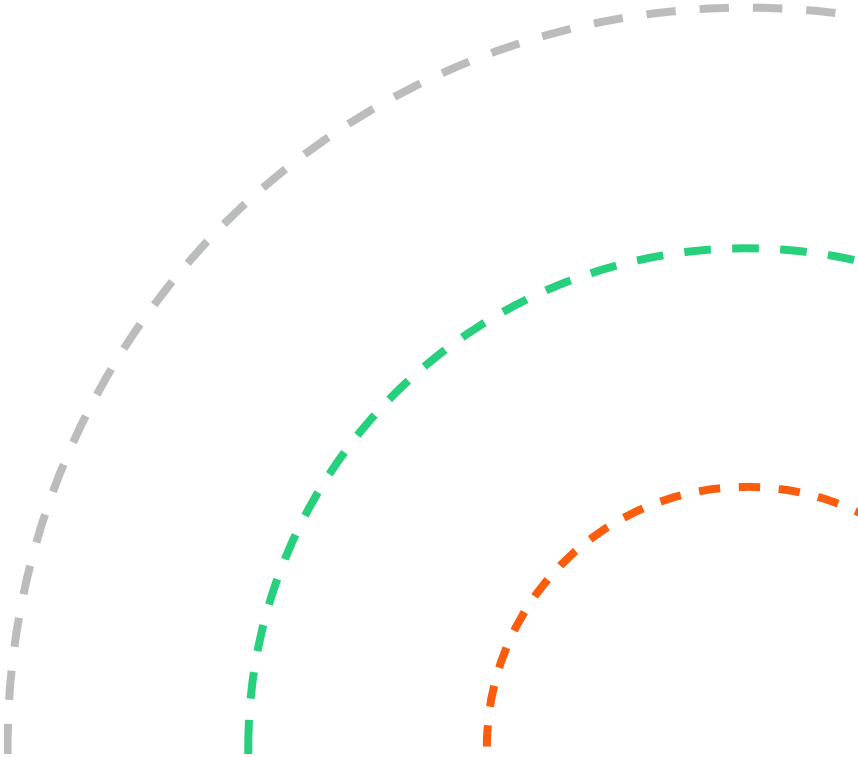
Agentic orchestration combines deterministic process automation with dynamic, AI-driven reasoning. It allows organizations to integrate LLMs and specialized AI agents into their existing processes without losing control or trust.

AI can perform some tasks well, such as making decisions, generating content, and automating tasks, but they struggle with others, especially context switching (needed to keep track of multi-step workflows), governance and compliance (needed for oversight and auditing), collaboration (needed to work with human decision-makers and other technologies), and scalability (needed to manage interactions between multiple agents). Without agentic orchestration, AI value has a natural ceiling that limits its value.

Agentic orchestration breaks that ceiling by:

- Automating the un-automatable. Processes that depend on judgment, unstructured data, or contextual reasoning become candidates for automation.
- Balancing autonomy and governance. Agents act only within clearly modeled boundaries and human oversight remains embedded.
- Accelerating time-to-value. Proof of concepts can often be built in hours or days, not weeks.
- Enabling learning loops. Agents continuously improve by codifying successful resolutions back into deterministic flows.
- Maintaining compliance and auditability. Every AI decision is logged and traceable.

Agentic orchestration unlocks organizations' ability to drive value by incorporating AI and agents into mission-critical workflows that require both high-predictability and the ability to proactively make decisions, all while ensuring trust through end-to-end visibility and traceability while including humans-in-the-loop where needed. In our customers' experience, we've seen three use cases where the need for deterministic and dynamic orchestration, guardrails, and orchestration across humans, agents, and systems are most pronounced - and the value from getting it right with agentic orchestration is more quickly discoverable.



USE CASE 1
Automated technical support

Executive summary

In telecommunications and IoT operations, thousands of devices generate unpredictable error codes each minute. Human operators can't triage every alert quickly enough.

With agentic orchestration, deterministic workflows handle known error patterns while AI agents learn to diagnose and resolve new errors dynamically.

Results Camunda customers have achieved:

- ~80% reduction in manual triage
- Near-real-time response to issues
- Proof of concept built in hours; production rollout in under a day

Business impact

- Faster mean-time-to-resolution (MTTR) and higher system uptime
- Operators focus on innovation rather than repetitive tasks
- Reduced operational costs and improved customer experience

How Camunda makes it possible

- Event-driven orchestration activates AI agents only when anomalies occur.
- Guardrails ensure AI can recommend actions but cannot execute high-risk tasks (such as device resets) without human approval.
- Every successful agent resolution becomes a codified subprocess for future reuse—creating a continuous learning loop.
- *Camunda is the only process orchestration platform purpose-built for agentic orchestration.*

USE CASE 2
Human workflow optimization / client onboarding

Executive summary

Financial institutions handle complex, human-driven onboarding that involves Know Your Customer (KYC) checks, anti-money laundering (AML) validations, and document reviews. Manual handling slows time to revenue and frustrates customers.

Agentic orchestration integrates deterministic compliance rules with AI agents that perform data validation and document enrichment—while keeping auditors and humans in the loop.

Results Camunda customers have achieved:

- 40–65% faster onboarding time
- 8,000+ hours of manual work reallocated annually
- Full regulatory compliance maintained

Business impact

- Accelerated customer acquisition and revenue recognition
- Enhanced regulatory confidence through complete audit trails
- Improved employee experience by eliminating repetitive work

How Camunda enables safe AI collaboration

- BPMN process models govern each AI interaction, providing transparency into what tools the agent can use.
- Human-in-the-loop tasks and AI-as-judge patterns maintain regulatory oversight.
- AI-generated outputs feed DMN decision tables for consistent judgment logic.
- *Open standards (BPMN and DMN) make every AI decision transparent and auditable.*

USE CASE 3
Trade data evaluation and enrichment

Executive summary

Financial institutions operating in or trading with institutions within the United States must now reconcile trades within one day of execution (T+1). Unstructured data and inconsistent formats make manual reconciliation slow and error-prone.

Agentic orchestration automates discrepancy detection, validation, and escalation—under strict controls.

Results Camunda customers have achieved:

- Major reduction in manual reconciliation effort
- Fewer regulatory exceptions and fines
- Higher data accuracy and audit confidence

Business impact

- Operational risk and costs drop dramatically
- Faster regulatory reporting cycles
- Better employee focus on high-value analysis

Camunda's hybrid pattern in action

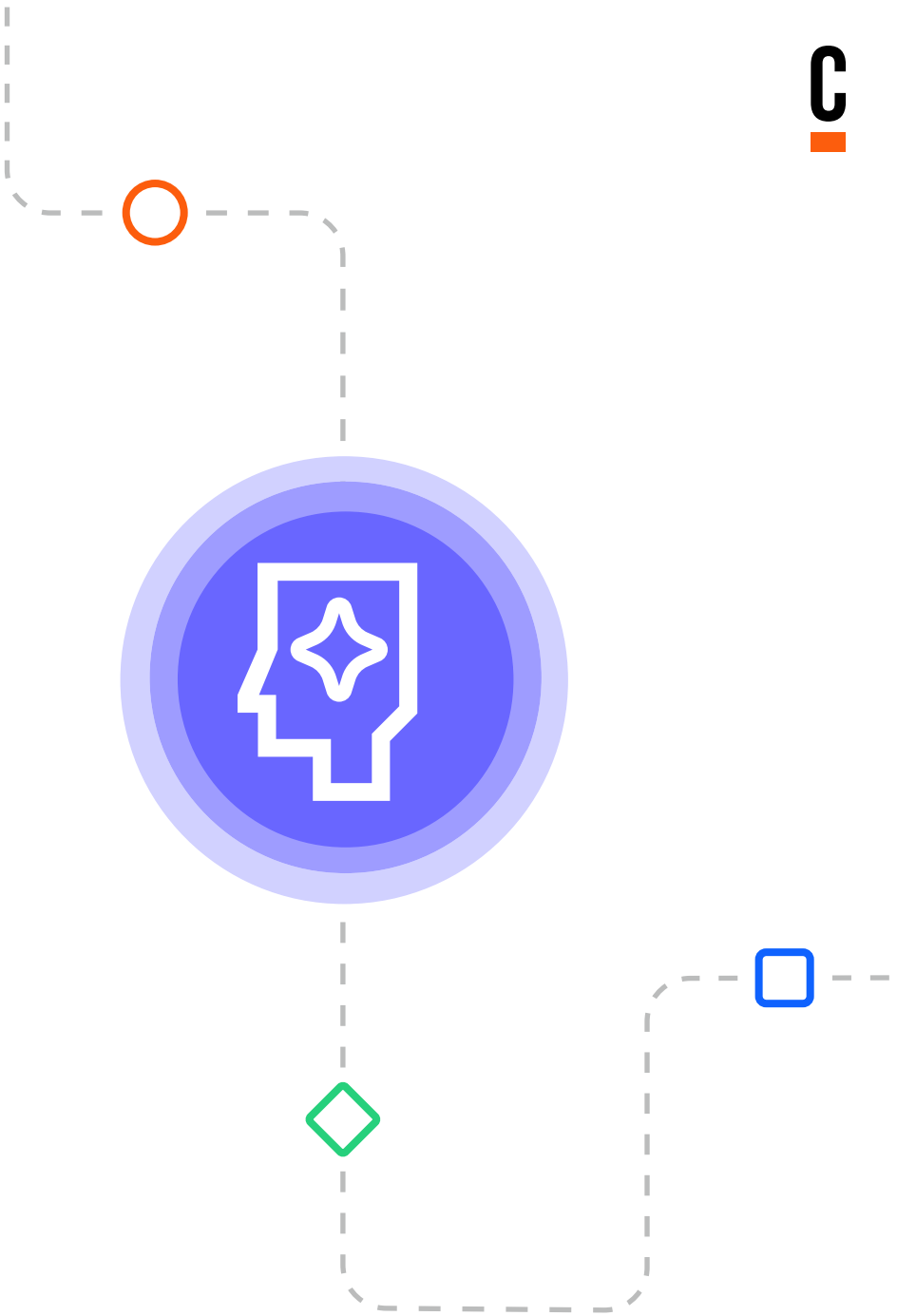
- Deterministic DMN tables verify calculations; AI agents handle unstructured trade data.
- Guardrails prohibit agents from modifying source records.
- Every AI decision and handoff is logged in Camunda for full traceability.
- *This combination of AI autonomy within deterministic guardrails is the core of Camunda's agentic orchestration vision.*

How Camunda delivers true agentic orchestration

Across all three use cases, Camunda stands out by delivering a foundation for agentic automation that is open, governed, and scalable. This is possible through Camunda's key differentiators:

- Unified orchestration with a common process model. Ensure transparency and vendor neutrality while orchestrating both structured tasks and agentic logic within one BPMN process model.
- Process-level determinism with agentic flexibility. Control process flow deterministically and layer in dynamic agent behaviors only where needed.
- Cloud-nativeZeebe engine. High-throughput, event-driven execution for modern architectures, supporting agent planning loops, short- and long-term memory, and event-driven orchestration across LLMs, APIs, and microservices.
- Governed agentic framework. Combine human oversight and AI autonomy with confidence. Unlike many frameworks, every process step, including AI reasoning, is observable, interruptible, and auditable.

Together, these capabilities enable enterprises to transform automation from local efficiency projects into a strategic, AI-ready operating model.



Getting started: Choosing your high-impact use case

Ready to unlock the true value of enterprise-grade agents at your organization? It's time to choose the first use case that can benefit from agents orchestrated holistically into the workflow.

Most organizations begin with a single process that involves:

- Unstructured data inputs (documents, emails, messages)
- Human decision points requiring context or judgment
- Strict compliance or audit requirements
- High volume and low predictability

These processes are ideal candidates for agentic orchestration.

Book a demo to see Camunda's agentic orchestration in action—turn complex processes into intelligent, auditable flows that deliver real business impact fast.

Book now

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About Camunda

Camunda is the leader in enterprise agentic automation, orchestrating complex business processes, including high-value knowledge work, across agents, people, and systems. By creating production-ready, enterprise-grade agents with built-in governance, Camunda uniquely delivers trusted AI agents for business-critical processes. Over 700 leading innovators like Atlassian, ING, and Vodafone, rely on Camunda to slash time-to-value from months to days, boost operational efficiency, and elevate customer experiences. Ready to become an AI-first enterprise?

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