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AI Discovery

Agentic AI Systems for Enterprises

Agentic AI is not a chatbot with extra steps. It is an orchestrated system where a planner proposes actions, specialised workers execute them through approved tools, and human gates sit on consequential decisions. Eurostat reports 20.0 per cent of EU enterprises using AI in 2025, while Gartner forecasts that more than 40 per cent of agentic AI projects will be canceled by 2027 for cost, unclear value, or weak controls. The board variable is whether agentic capability is wired into workflows that finance can measure.

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The problem in one sentence

The useful question is not which foundation model to buy. It is which workflows currently burn staff time on chase work, document assembly, cross-system lookups, and repeated approvals, and whether an agentic system can change those workflows with human gates intact.

Walk into a technology steering meeting in 2026 and “agents” are on the slide deck. Walk into operations of the same company and you often find a chat assistant, a vendor demo, and processes that still run through email chains. Agentic language has arrived faster than agentic operating discipline.

What you see globally right now is product marketing racing ahead of production proof. US and Asian platforms are packaging agents into suites. Startups sell crews for every workflow. Internal teams feel pressure to show an agentic roadmap before anyone has shipped one trusted loop with audit logs. Gartner predicts that 40 per cent of enterprise applications will feature task-specific AI agents by the end of 2026, up from less than 5 per cent in 2025 (press release, 26 August 2025). That is a surface forecast: agents become a common feature in enterprise software. Separately, Gartner predicts that more than 40 per cent of agentic AI projects will be canceled by the end of 2027 because of escalating costs, unclear business value, or inadequate risk controls. Reuters reported that cancellation forecast on 25 June 2025.

McKinsey’s State of AI 2025 survey found that nearly nine in ten respondents say their organisations regularly use AI in at least one function. Only 39 per cent attribute any enterprise-level EBIT impact to AI, and most of those attribute less than 5 per cent of EBIT. About 6 per cent qualify as high performers: organisations that attribute more than 5 per cent of EBIT to AI and report significant value. Agentic systems will not move a board into that cohort unless they change how work runs, not how demos look.

> **Agentic AI system, plainly:** software that can plan a sequence of steps, call approved tools, read results, and continue until it hits a stop condition or a human gate, with every action logged. **In practice:** a claims intake agent extracts fields from uploaded documents, checks them against the policy system, drafts a coverage note, and queues only ambiguous cases to a named adjuster with provenance attached.

> **Human gate, in short:** a mandatory pause where a named person must approve, edit, or reject before the system performs a consequential action such as sending external correspondence, changing a financial record, or dispatching funds. **Worked case:** the agent prepares a regulator response from policy and prior letters; a compliance officer edits and clicks send. The log records draft, edit, and sender.

This is not a chatbot upgrade

The chat window was the first consumer wrapper around large models, and it still shapes executive expectations. A chatbot waits for each human prompt and returns text. An agentic system proposes a plan, executes steps through tools, observes outcomes, and adjusts. That difference matters for architecture, cost, risk, and what boards should fund.

Consequential agentic deployments in 2026 rarely look like open-ended conversation. They look like bounded loops attached to a workflow:

- An accounts-payable loop that extracts invoice line items, compares them to purchase orders in the ERP, and routes only mismatches to a human reviewer. The metric is exception rate and hours removed from manual matching, not "number of agent sessions."
- An internal discovery loop that answers "have we approved this clause before?" by searching governed archives, returning citations, and stopping before it edits anything. Humans still decide; the system removes the three-day email chase.
- A support loop that drafts a resolution, checks it against policy, and escalates ambiguous cases with a summary attached. Agents review and send rather than type boilerplate from scratch.
- An onboarding loop that gathers documents, validates fields against rules, creates draft records in the CRM, and waits at a human gate before activation. The stop condition is explicit: no customer record goes live without a named approver.

None of this requires science fiction. It requires orchestration, tool permissions, evaluation, and owners who can change the process when the numbers demand it.

Eurostat's enterprise AI survey adds context. In 2025, 20.0 per cent of EU enterprises with 10 or more employees reported AI use, up from 13.5 per cent in 2024. Adoption is rising, but the majority of firms are still early. Among firms that compete internationally, the relevant question is not whether agents exist in the market. It is whether your firm can run one loop in production before peers normalise the capability in your sector.

The architecture that survives audit

> **Orchestrator means:** the component that routes work to the right specialist, enforces policy, tracks state, and decides when to stop or escalate to a human. **On Monday:** when an email arrives with a supplier invoice attached, the orchestrator sends extraction to one worker, validation to another, and never allows a worker to call a tool outside its allowlist.

A production agentic stack has five layers boards should recognise:

1. **Signal intake.** Work enters through email, documents, API events, queues, or scheduled triggers. Intake must be explicit so the system knows what case it is handling and can attach a correlation ID for audit. Without a defined intake, agents operate on ambiguous context and produce confident wrong outputs.
2. **Orchestrator.** The orchestrator routes tasks, enforces policy, maintains session state, and applies cost and step limits. It is the difference between a demo script and a system that can recover from

partial failure. Without an orchestrator, multi-step runs become unmaintainable spaghetti that breaks on the first edge case.

3. **Specialist workers.** Research, extraction, classification, and drafting can be separate prompts or models with narrow permissions. Specialisation reduces tool misuse and makes evaluation easier because each worker has a smaller failure surface. Without specialisation, one general worker accumulates permissions it should not hold.

4. **Tool layer.** Approved APIs, search, governed retrieval, and enterprise systems of record sit behind explicit allowlists. OWASP's Top 10 for Agentic Applications for 2026 lists tool misuse and excessive agency among primary risks. Every tool call should be logged with inputs, outputs, and caller identity.

5. **Human gate.** Mandatory pause before consequential actions: external send, financial post, permission change, or irreversible update. The gate has a named role, a timeout policy, and an escalation path when nobody responds. Skip the gate and you build a liability. Skip the audit trail and compliance teams will shut the programme down.

This stack is not optional decoration. It is what separates a workflow that can run on Monday from a demo that survives only while the project team is in the room.

Operating implications: what changes in the first ninety days

Teams that adopt agentic systems well see three shifts that finance can recognise:

- **Faster answers.** Staff stop manually chasing information across systems because the loop retrieves, compares, and summarises before a human sees the case. Cycle time drops when the mechanical middle of knowledge work moves to software and humans handle exceptions only.

- **Fewer handoff errors.** Structured routes replace informal chat chains where context gets lost between people. Each step leaves a log entry, so "who said what to whom" is reconstructable without interviewing five colleagues.

- **Clearer accountability.** Every automated step has a log. Every exception has a named owner. When something goes wrong, the board is not debating whether the model "felt wrong." It is reading provenance.

The failure mode is the opposite: a flashy demo that handles one happy-path scenario, breaks on edge cases, and gets abandoned because nobody trusts it. Gartner's cancellation forecast describes programmes that reach this state at scale.

Mid-market teams often lose 15 to 30 hours per week on workflows that could be partially automated with agentic orchestration, provided the system respects data boundaries and keeps humans on consequential decisions. Those hours are the honest baseline for a ninety-day pilot charter. Without a baseline, the board cannot tell whether the loop moved anything.

Evidence base: agent fashion vs operating maturity

The agentic gap is visible across independent datasets. Populations differ and should not be blended into one universal rate.

Evidence	Finding	What it does and does not prove
Eurostat enterprise survey (2025)	20.0% of EU enterprises with 10+ workers used at least one AI technology, up from 13.5% in 2024; 17.0% of small, 30.4% of medium, and 55.0% of large enterprises used AI	Representative EU business adoption; does not measure agentic depth or ROI
McKinsey State of AI (2025)	88% reported regular AI use in at least one function; 39% reported any enterprise EBIT impact; about 6% met the high-performer definition (more than 5% of EBIT attributed to AI)	Global executive survey; self-reported impact; high performers redesign workflows
Gartner (Jun 2025)	Forecast: more than 40% of agentic AI projects cancelled by end-2027 due to escalating cost, unclear value, inadequate risk controls	Forecast, not observed cancellations; useful risk hypothesis for investment committees
Gartner (Aug 2025)	Forecast: 40% of enterprise applications will feature task-specific AI agents by end-2026, up from less than 5% in 2025	Product-surface forecast; agents as features, not proof of operating value
Deloitte State of AI in the Enterprise (2026)	23% of 3,235 surveyed leaders report at least moderate agentic AI use; 74% expect at least moderate use within two years; only 21% report a mature operating model for autonomous agents	Engaged AI-leader sample; intent ahead of maturity
Stanford AI Index (2026)	Agent use remained single-digit across nearly all functions in compiled survey evidence	Cross-source synthesis; organisational agent adoption still early relative to assistant use
OWASP Top 10 for Agentic Applications (2026)	Tool misuse, excessive agency, and inter-agent communication listed among primary risks	Security framework; defines failure modes boards should require controls against

Plain read: many firms will touch agentic features in software they already buy. Few will run bounded agentic loops in production with gates, evaluation, and a workflow metric. The board job is to fund the second category deliberately and refuse spend on the first category dressed as transformation.

Worked pattern: exception-first operations with an agent loop

The following pattern is illustrative, not a client case study.

Before: A team samples a fraction of inbound documents because full review is unaffordable. Exceptions are found late. Cycle time is dominated by chase email.

After: An agent loop extracts every document, compares fields to the system of record, and routes only disagreements to humans. The metric is exception rate, mean time to clear an exception, and hours removed from sampling work.

Requirements: API access to the system of record; a written definition of “disagreement”; a human owner for the exception queue; an evaluation set of known hard cases; a cost envelope per case; a kill criterion if error rate exceeds threshold.

Human gate placement: The agent never posts to the ledger or sends external email. It prepares draft entries and queues them. A named finance role approves batch posts once per day.

This pattern is agentic in the operational sense: multi-step, tool-using, stateful. It is not autonomous in the reckless sense: consequential actions wait on humans.

Governance under EU rules

Malta-based and EU-operating companies face the same structural constraint: cross-border data handling, GDPR obligations, and the EU AI Act’s transparency and risk-management expectations for high-risk deployments. Agentic systems amplify governance requirements because they act, not only generate text.

Boards should require:

- **Inventory row per agentic workflow.** System purpose, data categories, tools permitted, human gate definition, and owner name. An agent not on the inventory is shadow automation.
- **Risk tier before scale.** High-risk categories under the EU AI Act (hiring, credit, insurance, certain biometric uses) need documented risk management, logging, and oversight proportionate to impact. A low-risk internal summarisation loop and a customer-facing credit decision loop do not belong on the same governance track.
- **Provenance by default.** What the agent read, what it proposed, what the human changed, and what was executed. Provenance is how you pass an audit without reconstructing the week from Slack.
- **Cost envelope.** Step limits, token budgets, and monthly caps tied to workflow volume. Uncapped agent loops are how programmes hit Gartner's cancellation drivers.

Agentic systems built with policy gates and documented decision paths are easier to defend than black-box automation, regardless of which member state you operate from.

Anti-patterns boards should recognise early

1. **Agentic cosplay.** A chatbot with a planner badge and no tool allowlist, no audit log, and no owner. The demo looks modern; the workflow unchanged. Procurement pays for language, not operating change.
2. **Crew before loop.** Multi-agent topology funded before a single loop runs in production with evaluation and a metric. Coordination cost rises while nothing graduates. Gartner's cancellation forecast targets this sequencing mistake.
3. **Tool sprawl.** Every API in the enterprise becomes callable because "the agent might need it." OWASP lists excessive agency as a primary risk. Allowlists should shrink over time as you learn what the workflow actually needs.
4. **Missing kill criterion.** Pilots run indefinitely without a written graduate or kill decision tied to cycle time or error rate. Immortal pilots consume steering attention and teach the organisation that agentic means permanent experiment.
5. **Token theatre in the board pack.** Session counts and model names substitute for hours removed and exception rates. Finance cannot audit token charts against EBIT. High performers attribute more than 5 per cent of EBIT because workflows changed, not because usage rose.

Counter-position: assistants may be enough for now

Another board might argue that agentic systems are premature complexity. McKinsey shows most AI value still comes from assistants and embedded features in existing software, not custom orchestration. Deloitte finds only 21 per cent of surveyed leaders reporting a mature operating model for autonomous agents. Why fund loops when Copilot and suite agents will arrive in the ERP anyway?

That argument has merit for firms with no documented workflow, no data permissions, and no owner willing to change process. Suite agents will handle a growing share of routine tasks inside vendor boundaries. They will not replace bespoke loops where your competitive advantage sits in proprietary archives, cross-system exceptions, or sector-specific compliance paths.

The management implication is sequencing, not ideology. Use suite agents where the workflow is standard. Build bounded agentic loops where the workflow is yours, measurable, and blocked on chase work today. Refuse to fund custom orchestration without a baseline metric and a human gate design on paper first.

Board decision standard

An agentic programme clears investment committee only when it identifies:

1. **Named workflow with baseline.** The programme names one workflow with a verified baseline dated and signed: cycle time, manual hours, or exception rate. Without a baseline, the board cannot detect movement or kill the pilot honestly.
2. **Single-loop scope.** The first production target is one loop with allowlisted tools, not a crew diagram. Multi-agent expansion requires evidence that a single loop insufficient on cost or quality data, not vendor keynote language.
3. **Human gate definition.** Consequential actions are listed. Named roles approve them. Timeout and escalation paths exist. Auditors can read the rule without calling the vendor.
4. **Evaluation set and error threshold.** Known hard cases are held out. Error rate above threshold triggers pause, not optimism. Evaluation is how you trust the loop on Monday morning.
5. **Cost envelope.** Monthly cap, step limit, and cost-per-successful-case estimate. Uncapped loops are incompatible with Gartner's stated cancellation drivers.
6. **Graduate, pause, or kill criterion.** Pre-written with owner and date. Programmes without kill dates become permanent demos.

This standard is stricter than approving an agent platform licence. It is cheaper than funding orchestration that cannot explain how value will appear in ninety days.

What leadership should do in the next ninety days

1. **Inventory reality.** List agentic pilots, chat assistants, and production loops separately. Count what touches a system of record with logs. The inventory prevents "agentic strategy" slides from hiding zero production attachment.
2. **Pick one bounded loop.** Choose a workflow with measurable chase work, available data access, and a willing owner. Reject crew funding until one loop graduates or is killed with a written reason.
3. **Write the gate map.** Document which actions stop for humans and who approves. Legal and compliance review the map before tools go live, not after an incident.
4. **Fund operator training.** Staff who will live in the exception queue need practice on real cases, including failures. A town hall is not training.
5. **Report workflow metrics.** Cycle time, exception rate, hours removed, cost per case. Not token counts. Not model brand names.

Closing position

Agentic AI is real as a product surface and as an operating pattern. Gartner expects agents in enterprise applications and heavy cancellation of agentic projects that lack cost discipline, clear value, and risk controls. McKinsey shows that access is widespread while EBIT impact concentrates in a small high-performer cohort that attributes more than 5 per cent of EBIT to AI.

Boards that fund chat access while neglecting orchestration, gates, and audit trails will own demos. Boards that ship one bounded loop with provenance and a workflow metric will learn whether agentic capability belongs in their operating model before the cancellation wave arrives.

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