

Agentic AI in Insurance: From Use Case to Competitive Advantage

Agentic AI is not a future concept, it is being deployed now across personal lines underwriting, claims, and product distribution. The insurers seeing real returns share one characteristic: they built on the right foundation first.

This briefing sets out what Agentic AI means in practice for an insurer in Lloyd's position, where it is creating the most immediate value, and what the architecture has to do to support it.

What Agentic AI Actually Is

Previous waves of AI in insurance analysed data and generated recommendations. Agentic AI takes the next step: it acts. Agentic AI systems complete entire workflows autonomously adjusting premiums, routing claims, onboarding partners, triggering downstream actions within parameter-driven business logic your teams define and control.

The key distinction:

Unlike earlier AI that required a human to review a recommendation and take action, agentic AI executes with humans orchestrating at the goal and exception level, not the task level. Agents work continuously, at scale, across data sources that legacy systems cannot connect.

Sapiens has built agentic AI natively into the insurance platform, not as an add-on layer, but as embedded decision intelligence that runs across underwriting, pricing, claims, and distribution.

Agentic AI is materially changing how work is delivered. McKinsey estimates that up to 50% of manual activities across insurance operations could be eliminated through AI, fundamentally reshaping execution models and accelerating time-to-value.

Sapiens is investing tens of millions of dollars into agentic AI innovation ensuring it is embedded within the core platform architecture required for enterprise production-grade deployment, and enabling insurers to operationalise AI at scale.

This is underpinned by proprietary machine learning models trained on insurance-specific data covering underwriting, claims, fraud, and customer behaviour alongside connectivity to extensive partnerships.

Use Cases: Where Value is Being Created Now

Across these use cases, the impact is not incremental, it is structural. McKinsey reports that AI-driven transformation is delivering measurable improvements across core insurance domains, with leading carriers achieving double-digit gains in efficiency, cost reduction, and conversion through end-to-end process redesign.

Underwriting & Submission

Agents automatically ingest broker submissions, enrich with third-party data and surface recommended terms compressing quote turnaround from days to hours. Appetite rules are applied consistently. Underwriters handle exceptions and portfolio strategy, not data processing.

AI-enabled underwriting is already reducing manual effort significantly, [McKinsey](#) with leading insurers automating large portions of core underwriting workflows.

Pricing Adjustment

Pricing agents monitor exposure and claims signals continuously and adjust parameters in near-real time. Rate adequacy responds to emerging loss trends within hours, not at the next repricing cycle. The closed loop between claims outcomes and future pricing becomes a structural advantage.

Compliance & Audit

Every agentic decision produces an explainable, auditable trail. Underwriting and pricing decisions can be traced end-to-end which is essential for FCA oversight, Solvency II governance, and internal risk management. The guardrail architecture ensures that automation operates within regulatory and business constraints by design.

Claims Triage & Processing

At first notification of loss, an agent classifies claim complexity, routes to the appropriate handling path, initiates downstream actions (policy checks, reserve setting,

communication), and escalates exceptions to human handlers. [McKinsey](#) estimates that AI-driven claims automation can reduce loss adjustment expenses by 25–30% and improve settlement speed by up to 50%.

Partner & White-Label Onboarding

Configuring and launching a new white-label product offering to a distribution partner currently requires development resource and months of lead time. Agentic

configuration agents automate the product setup, rules deployment, and testing cycle, compressing partner launches to days. For a bank with multiple distribution relationships, this is a material competitive capability.

Customer Communication

Agents manage personalised communications across the policy and claims lifecycle – renewal, mid-term adjustment, claims status – without manual intervention. Tone, channel, and

content adapt to customer profile and claim context, improving experience while reducing contact centre volume on routine queries.

The Foundation Question

The single most important factor in whether Agentic AI delivers returns or creates risk is the operating model it sits on.

AI on a Static, Fragmented Architecture	AI on a Dynamic, SaaS Platform
Amplifies existing inconsistencies and data gaps	Accelerates performance by acting on clean, connected data
Compliance and audit trails are manual, fragmented	Explainability and audit built into every agentic decision
Customisations create integration barriers that agents cannot bridge	Configuration-only model means agents operate across a fully connected data estate
Pilots remain pilots, scaling requires architectural change	Agentic capabilities scale enterprise-wide from the same foundation

Deloitte estimates that while the majority of insurers have begun deploying AI, up to 85–90% of initiatives fail to scale beyond pilot, with impact constrained by fragmented data and legacy architecture.

The platform foundation is therefore the defining factor in whether agentic AI delivers measurable returns or remains stuck in experimentation.

[Forrester’s 2026 forecast](#) projects that AI and automation can improve expense ratios at leading insurers by two percentage points but only for insurers that have scaled beyond pilots into enterprise-wide deployment. The platform foundation is the constraint.

Business Impact

These improvements translate directly into improved expense ratios, faster time-to-revenue, and more agile risk selection, creating a meaningful competitive advantage at both portfolio and operating model level.

Explore what agentic AI could look like in your operating model

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About Sapiens

Sapiens International Corporation N.V. is a global leader of AI-centric, SaaS-based insurance software, delivering hyper-relevant experiences that are efficient, compliant, and innovative. With agile intelligence, Sapiens' solutions turn real-time data and human insight into precise action at every moment, across every risk. The Sapiens platform includes agentic workflows accelerating every capability across policy, underwriting, claims, reinsurance, decisioning, and finance and compliance. With more than 600 insurers in over 30 countries running on Sapiens, our deep industry expertise is the foundation of our long-term relationships, from initial implementation through to modernization and market transformation. Sapiens is headquartered in London, serving customers in property and casualty, life, reinsurance, specialty, and workers' compensation from offices across North America, Europe, the Middle East, and Asia Pacific.

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