

PROJECT TYPE

AI / GenAI readiness assessment

TECHNOLOGIES

Python, Azure OpenAI (GPT-4), LangChain, LlamaIndex, PostgreSQL, Pinecone (vector database), Power BI

DURATION

4 weeks

METHODOLOGY

Scrum

TEAM

1 AI Architect
1 Data Engineer
1 ML Engineer
1 Business Analyst

AI readiness assessment for an insurance company

A structured AI assessment that defined high-value use cases, designed a production-ready architecture, and established a clear roadmap for controlled implementation and scaling.

Project background

The Client is a European insurance group operating across multiple countries, providing health, property, and life insurance services. The company employs over 2,500 people and manages large volumes of structured and unstructured data, including claims, policies, and customer communications.

Prior to the project, the Client had launched several isolated AI initiatives, including chatbot pilots and document analysis tools. These initiatives demonstrated potential but remained disconnected from core operations. Leadership required a structured approach to evaluate AI opportunities, define implementation priorities, and ensure alignment with business goals, compliance standards, and long-term operational strategy.

Project Distinctive Features

- ✓ AI use case prioritization framework
- ✓ RAG-based architecture blueprint
- ✓ Token usage and cost simulation model
- ✓ Governance and access control design
- ✓ Integration-ready system architecture
- ✓ Multilingual document processing support

Business challenge

The Client expected a clear, business-aligned AI adoption strategy with validated use cases and predictable outcomes. We translated fragmented AI experiments into a structured, measurable, and scalable AI roadmap with defined architecture, governance, and cost model.

Additional challenges:

- ✓ Compliance with data protection regulations
- ✓ Integration readiness assessment with existing CRM and claim systems

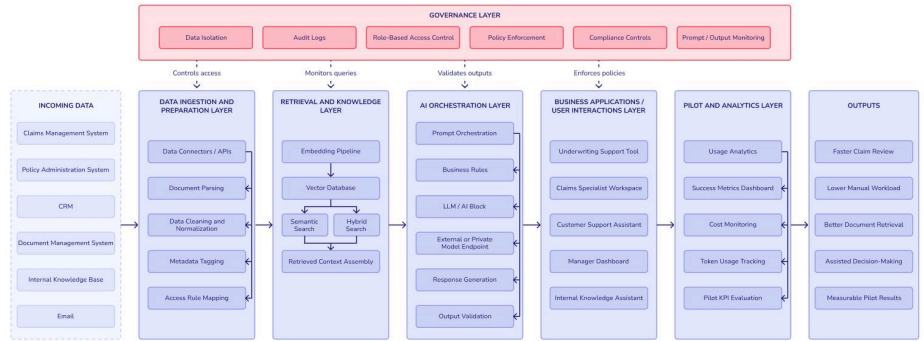
Our solution

We delivered an AI/GenAI readiness assessment that defined business opportunities, designed the target architecture, and established a clear path from experimentation to implementation.



SumatoSoft brought structure and clarity to our AI initiatives. We moved from disconnected experiments to a clear, actionable strategy with defined business value. This allowed us to make confident decisions and begin implementation with full visibility into outcomes and costs.

CEO



Business case and ROI modeling

We started with AI opportunity mapping to identify areas with the highest automation potential.

Our business analyst reviewed the Client's operations and identified over 20 potential use cases across claims processing, customer support, underwriting, and internal knowledge management.

Each use case was evaluated based on:

- ✓ Business impact
- ✓ Implementation complexity
- ✓ Data availability

Four use cases were selected for further validation, including automated claims assessment and an internal knowledge assistant.

For each selected use case, we defined:

- ✓ Business impact
- ✓ Implementation complexity
- ✓ Data availability

As a result, we developed a financial model comparing manual workflows with AI-driven processes, enabling informed decision-making at the executive level.

Architecture and AI orchestration

We designed a unified AI foundation that connects data, models, and business systems into a single operational environment, enabling the Client to move from experimentation to scalable execution.

At the core is a retrieval-based architecture where internal data serves as the source for AI responses. Information from claims systems, policy databases, and document repositories is indexed in a vector database, allowing relevant context to be retrieved and used in each interaction. AI models operate on top of this layer through controlled orchestration, ensuring outputs remain aligned with business logic.

Integration with internal systems

The solution was aligned with the Client's existing systems, including CRM and document management platforms, allowing AI outputs to be used directly within operational workflows.

We analyzed the Client's core systems and defined integration points, ensuring compatibility with existing data structures and minimizing disruption to current processes.

Validation under real usage conditions

To ensure predictable operation at scale, we simulated system behavior under different usage scenarios, including variations in user activity, query volume, and model selection.

This allowed the Client to understand how AI usage translates into operational cost and to determine the optimal balance between performance and efficiency before implementation.

Pilot definition

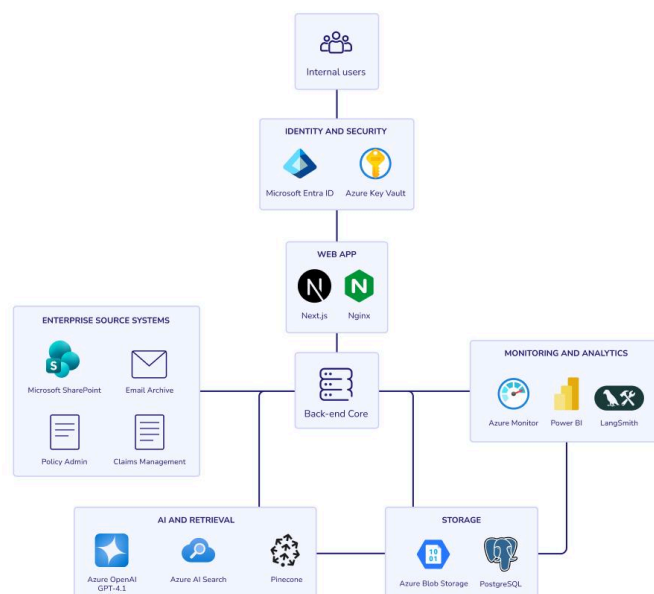
The final step was translating the defined approach into execution. We structured a pilot program focused on two prioritized use cases, with clearly defined success metrics, scope boundaries, and decision criteria.

This created a controlled path from assessment to implementation, where each stage can be evaluated and expanded based on measurable results.

Compliance with data protection regulations

We aligned the solution with data protection requirements by defining controlled data access, isolating sensitive information, and ensuring that all AI interactions are traceable and auditable.

This enabled the Client to operate AI systems within existing regulatory frameworks.



Customer's benefits

The Client approved a company-wide AI roadmap and launched pilot implementations for two prioritized use cases across three business units. The assessment enabled up to 35% projected cost reduction in claims processing and reduced decision-making time for AI investments from months to weeks.

What's happening with the project right now?

The project is currently in the pilot phase, with two prioritized use cases deployed across selected business units. The Client is measuring performance, cost efficiency, and user adoption to prepare for a broader rollout.