

Enhancing document intelligence for risk management with GenAI

Client

A risk management and financial services consulting firm

Company Size

100+ employees

Location

North America

A North American consulting firm specializing in outsourced risk management, claims recovery, benefits advisement, and actuarial services sought to improve how it handled large volumes of complex, client-facing documents. These documents contained dense legal and financial terminology, unstructured data, and varied formats. This made manual review inefficient and error-prone.

Marlabs conducted a GenAI proof of concept (PoC) to assess the viability of AI-powered querying and analysis. By applying tools like Microsoft Copilot and ChatGPT-4o, the firm increased speed and accuracy in information extraction. This initiative boosted operational efficiency and decision-making capabilities.



AI Discovery & Strategy



GenAI Proof of Concept



Intelligent Document Processing



Operational Efficiency Assessment

The Challenge: Modernizing document review in risk & finance consulting



Objective: Evaluate AI's feasibility and create a strategy for processing and extracting value from complex, unstructured documents.



Existing Issues: Manual review processes were time-consuming and failed to scale with document volume and complexity.



Solution Needed: A GenAI-enabled system to accelerate, standardize, and improve document analysis.



Outcome: Improved information extraction accuracy and response speed to support better decisions across client services.



The client needed a way to efficiently extract insights from high volumes of complex documents with legal and financial language. Manual methods were slow, inconsistent, and not scalable across diverse document types and use cases.

The Solution: Implementing a GenAI proof of concept for document analysis

Marlabs delivered a GenAI proof of concept that used tools like Microsoft Copilot and ChatGPT-4o to query large volumes of client documents that contained diverse terminologies and formats. The goal was to test how AI could improve speed, accuracy, and scalability in extracting relevant information while also enhancing compliance and domain relevance.

Phase 1: AI Discovery & Readiness

Our team assessed existing document processes and data structures to determine AI fit.

Workstreams:

- Document landscape evaluation
- Process bottleneck identification
- Success criteria alignment

Phase 2: Model Selection & Testing

We tested multiple GenAI tools for their ability to handle complex, domain-specific content.

Workstreams:

- Microsoft Copilot integration
- ChatGPT-4o performance trials
- Tool benchmarking

Phase 3: Query Design & Interaction Simulation

The team built and tested natural language queries to simulate real-world document analysis.

Workstreams:

- Prompt engineering
- Query-response refinement
- Use case simulation

Phase 4: Performance Evaluation & Insights

We measured improvements in accuracy, speed, and usefulness of AI-assisted responses.

Workstreams:

- Accuracy comparison
- Time savings analysis
- Insight capture effectiveness

Services and Technologies Used:

Services:

- AI Discovery & Readiness
- GenAI Proof of Concept
- Intelligent Document Processing Strategy
- Operational Efficiency Assessment

Technologies:

- Python
- OpenAI
- Microsoft Copilot 365
- ChatGPT-4o

The Results: Impact on the client organization

The GenAI PoC demonstrated strong potential for automating and enhancing the firm's ability to extract meaningful insights from complex client documents, generating 80% ROI in just a few weeks. With measurable gains in speed and accuracy, the firm is now equipped to scale its services and deliver more timely, informed decisions for clients.



Faster Document Review: This PoC reduced the time required to process complex legal and financial files from 2700 hours of manual effort to 80 hours, saving \$175-\$225k annually.



Scalable Information Retrieval: We enabled handling of high-volume document intake with consistent results.



Improved Data Accuracy: We increased precision in extracting critical details from unstructured text, fostering 100% process accuracy.



Better Decision Support: The solution provided more timely and relevant insights to client-facing teams.



Higher Analyst Productivity: The solution freed staff from repetitive tasks and allowed them more time for strategic work.



Proven AI Readiness: Marlabs validated use of GenAI tools for long-term operational enhancement.