

Case Study

Generative AI Automates Glossary Creation for an Insurance Business

About the Client

A global life insurance group that manages portfolios of life insurance policies. With a global presence and strong financial backing exceeding \$74 billion in assets, this organization leverages AI-powered technology and expertise to ensure smooth transitions and continued value for policyholders

Engagement Snapshot

Headquarters: New York, USA

Industry: Life Insurance

Geographical Impact: USA, UK, Australia, New Zealand

Duration: 3 months

Technology: AWS, Python

Client Landscape: Agile, Generative AI



- Public Sector
- SAP Services Competency
- DevOps Services Competency
- Well-Architected Partner Program

- Data & Analytics Services Competency
- AWS Microsoft Workloads Services Competency
- Migration and Modernization Services Competency

AWS Redshift Delivery | AWS Kinesis Delivery | AWS Lambda Delivery | AWS API Gateway Delivery
AWS Glue Delivery | AWS QuickSight | AWS RDS Delivery | AWS DynamoDB Delivery

Business Needs

The client faced significant challenges in maintaining an accurate and consistent business glossary across its global operations. The existing manual processes for managing and updating the glossary were proving inadequate, leading to several critical issues:

Inconsistent Terminology:

Global operations led to miscommunication and potential errors due to a lack of uniform definitions across branches.

Error-Prone Manual Processes:

Time-consuming manual updates caused outdated and inaccurate information in critical processes.

Scalability Concerns:

The manual system couldn't handle the client's expanding data and metadata needs.

Regulatory Compliance Risks:

Inconsistent terms posed risks in regulatory filings and reports.

Inefficient Decision-Making:

Lack of a centralized glossary hindered employee productivity.

Customer Experience Issues:

Inconsistent terminology created confusion for policyholders.



Solution

In response to the business need, YASH Technologies implemented a robust solution utilizing Amazon Bedrock and Gen AI to extract metadata from diverse sources, automating the creation of accurate and consistent business glossary terms and descriptions. Key elements of the solution include:

- **AI-powered Term Discovery and Updates:** We utilized Amazon Bedrock and an LLM chatbot to identify new terms and suggest revisions to existing definitions, ensuring ongoing accuracy and relevance.
- **Consistent & Scalable Workflow:** We implemented a RAG-based model that automatically drafts new entries and updates existing ones, maintaining consistency in style and format as the glossary grows.
- **Automated & Accurate Metadata Extraction:** Our team leveraged RAG LLM model on Amazon Bedrock to extract key terms from diverse sources (policies, reports), improving data accuracy for the business glossary.
- **Knowledge-Powered Refinement:** Integrated a chatbot system to validate and refine metadata extracted by the LLM, ensuring high-quality data for the glossary.
- **Ensured Consistency:** A RAG model's knowledge base was used to guarantee consistent terminology across all data sources, creating a unified language for the business glossary.
- **Intelligent Discrepancy Detection:** Deployed an LLM-powered intelligence system that proactively identifies potential terminology inconsistencies and conflicts, safeguarding data accuracy.
- **Efficient Processing Power:** Leveraged Bedrock's efficient processing capabilities to handle large-scale metadata extraction and term generation, accelerating tasks and improving overall performance.
- **Seamless User Experience:** Developed an intuitive interface with an LLM chatbot, providing employees with real-time access to the latest glossary terms and definitions, streamlining their workflow.
- **AI-Powered Integration & Search:** Integrated the RAG system with business tools using APIs for context-aware term suggestions and implemented AI-assisted search functionality using the LLM, empowering users with efficient and intelligent glossary navigation.
- **Improved Customer Experience:** Established a customer-facing chatbot interface offering clear, consistent, and up-to-date terminology, ensuring consistent communication with policyholders.
- **Intelligent Insights & Control:** We used RAG's versioning capabilities to track terminology changes and the LLM to generate automated reports for stakeholders, providing valuable insights into glossary usage and areas requiring focus.

Key Solution Features

Advanced Gen AI LLM Model with RAG Capabilities:

Extracts metadata and generates business glossary terms.

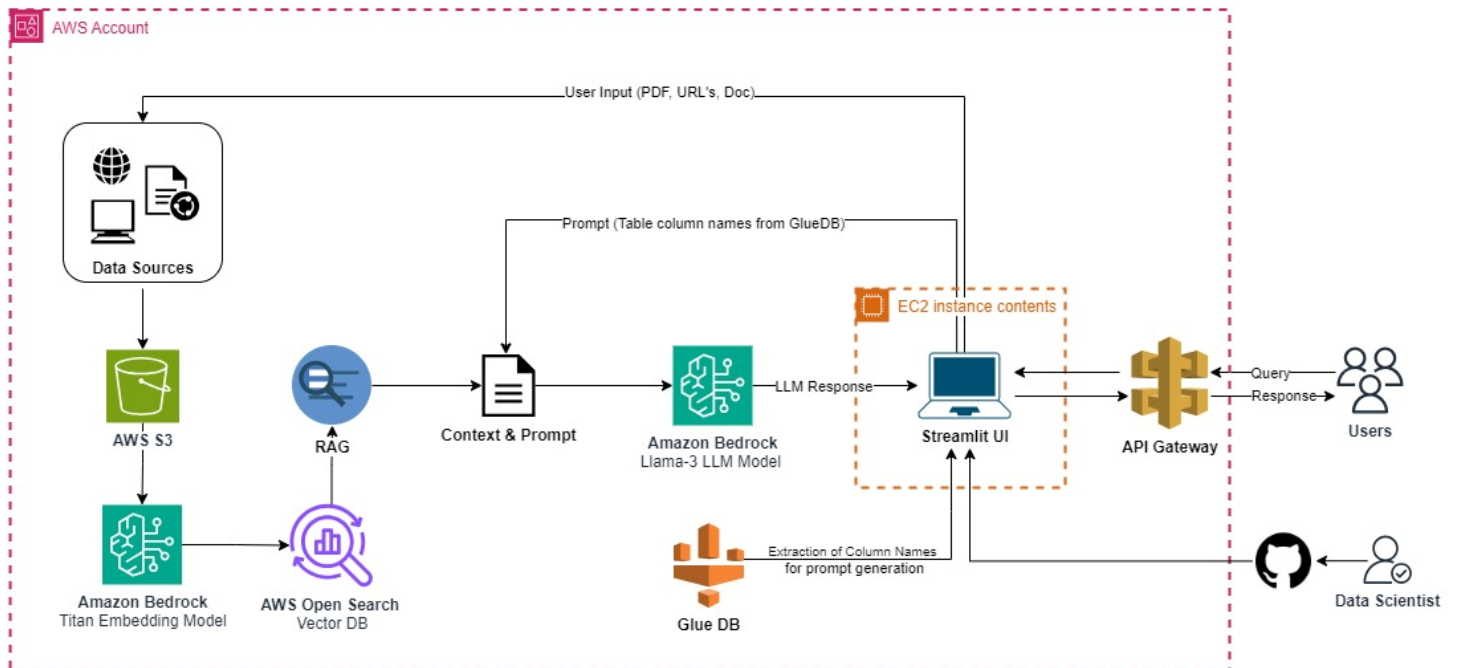
Automation:

Streamlined the process by automatically extracting metadata from various sources.

Precision & Uniformity:

Ensures precision and uniformity in glossary terms and descriptions, enhancing user satisfaction.

Solution Architecture



Technical stack

The architecture leverages the following components:

Amazon Bedrock	Titan Embedding	Llama 3	Streamlit	Github
AWS Glue Catalog	Amazon OpenSearch (Vector DB)	AWS Lambda / EC2	AWS S3	AWS API Gateway



Business Benefits

The solution delivered several benefits to the client:

- **Streamlined Analysis:**

Users can easily explore data, define custom KPIs, and generate visualizations with natural language.

- **Future-Proof Solution:**

The integration of LLMs positioned the solution to adapt and improve over time, ensuring long-term effectiveness.

- **Scalability:**

The solution proved to be scalable, capable of handling large volumes of data and generating glossary.

- **Enhanced User Satisfaction:**

Consistent and accurate glossary terms enhanced user satisfaction and operational efficiency.

- **Accuracy:**

By leveraging advanced algorithms and large language models, the solution ensures **90% to 95%** precision and reliability in glossary entries, minimizing the risk of human error & enhancing data integrity.

- **Enhanced Efficiency:**

Automated glossary term generation resulted in a **70%** reduction in the time required for creating and updating business glossaries, significantly decreasing the need for manual intervention.

- **Uniform Terminology:**

The solution maintained **100%** uniformity in terminology across all business documents and systems, reducing confusion and improving communication.

For more information contact YASH expert today at info@yash.com or visit www.yash.com

About YASH Technologies

YASH Technologies focuses on customer success. As a leading technology services and outsourcing partner for large and fast growing global customers, the company leverages technology and flexible business models to drive innovation and value throughout its customer's enterprise. YASH customer-centric engagement and delivery framework integrates specialized domain and consulting capabilities with proprietary methodologies and solution offerings to provision application, infrastructure and end-user focused Right-Sourcing services. YASH is a SEI CMMI (Level 5) and an ISO 9001:2015 certified company with U.S. and India headquarters and regional sales and development offices globally with customers spread across 6 continents.

Global Presence

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