

AI-Enhanced Knowledge Solutions Amplified by AWS



Challenges

Bridging the Knowledge Gap in Rapidly Growing Businesses

As businesses expand, they face the challenge of integrating new employees who lack the extensive experience and knowledge of their seasoned subject matter experts (SMEs). This discrepancy creates a knowledge gap that cannot be bridged by the limited time of high-performing veterans alone. Our solution enables organizations to infinitely scale this critical knowledge, facilitating the efficient upskilling of newcomers without overburdening their invaluable experienced personnel. This ensures a smoother transition for growth, optimizing both learning and productivity across the board.



The Source Allies Solution

Scalable AI-Powered Knowledge Management Solution

Our solution, a retrieval augmented generation system powered by generative AI, transforms untapped knowledge within organizations into accessible insights. By indexing and leveraging existing documentation, transcripts, and presentations from subject matter experts (SME's), it provides contextually relevant information during interactions with large language models (LLMs). This approach not only bridges the knowledge gap for new employees but also scales SME expertise efficiently. Additionally, our high-scale data pipelines ensure seamless integration of dispersed organization information, enhancing solution accessibility. Importantly, our unique measurement tools assess the solution's accuracy and value, guaranteeing quality responses and preventing irrelevant or inaccurate information. This comprehensive system effectively addresses the challenges of scaling expert knowledge in growing businesses, offering a scalable, precise, and reliable knowledge management solution.

Benefits

Our solution scales SME expertise and ensures precision through measurement tools for accessible, reliable knowledge management.



Effortless Access & Control

Our intuitive AI interfaces use a "pull" model, letting users extract relevant information without causing information overload or confusion.



Centralizing Expert Knowledge

Democratizes SME knowledge within a company, upskilling employees by centralizing and simplifying access to proprietary information.



Cost-Efficient AI

RAG solutions reduce costs by using secure, efficient out-of-the-box models, charging only for actual usage without custom training.



Precision Measurement

Enhances accuracy with unique measurement tools, ensuring quality, precision, and reliability in knowledge management.

Source Allies on AWS

In addition to leveraging AWS's robust cloud infrastructure, our solution utilizes Bedrock, specifically the Titan Embeddings model and the Anthropic Claude V3 Sonnet model. With AWS's serverless offering, no deployment or server management is necessary, providing flexible access to generative AI without complex infrastructure setup. This integration enables contextually relevant information during interactions with large language models (LLMs), allowing us to bridge the knowledge gap and scale SME expertise efficiently.

Features



Effortless AI with AWS's Serverless Model

While serverless technology simplifies infrastructure maintenance, we recognize the need for quality assurance in generative AI outputs. To prevent issues such as gibberish or difficult-to-understand responses, we employ prompt engineering, few-shot prompt engineering, and model-specific techniques like "Putting words in Claude's mouth," where we start the answer for Claude, guiding its response. Additionally, automated quality monitoring allows us to track and correct any drift or unexpected responses, ensuring consistent and reliable outputs.



Precision Search with AWS OpenSearch Integration

Our solution utilizes AWS's OpenSearch service as its RAG database, offering a native AWS deployment that allows advanced search techniques like vector search, hybrid search, and reranking. This approach enhances the accuracy and contextual relevance of AI-generated responses, ensuring seamless information retrieval. The use of OpenSearch allows easy integration and scalability, improving the quality and relevance of the documents utilized for context injection.

Case Study: Farmers Mutual Hail Insurance Co.



Farmers Mutual Hail
Insurance Company of Iowa



Challenges

FMH operates in the complex crop insurance industry, contending with intricate regulations from multiple bodies concerning various factors like crop data, planting times, and policy details—a vast information scope too extensive for individuals to manage.



Solution

To streamline their process, they sought to upskill staff quickly, making intricate governmental and agricultural data easily accessible without overburdening their knowledgeable SMEs, thus improving efficiency and regulatory compliance.



Results

The outcome was a more efficient and accurate underwriting process in the crop insurance industry, ensuring policies are correctly tailored to specific conditions and regulations, enhancing overall operation effectiveness.

Get started with Source Allies solutions on AWS

Email: info@sourceallies.com to learn how to get started with your unique solution.