



# Query to Quality: Redefining Relevance with Generative AI

## SUMMARY

Our client, a leading professional services company, wanted to implement an AI solution to provide employees the ability to quickly and accurately find company related information from an extensive wiki of user generated content. The establishment of trust and real-time observability in the solution was paramount to enable quick resolution of identified discrepancies, including identifying and remedying or removing outdated and irrelevant documents.

## SOLUTION

We engineered a Retrieval Augmented Generation (RAG) solution to enhance the discoverability and utility of the existing user-generated content, creating a responsive user interface that retrieves relevant content to address user queries. This provided quick access to pertinent information, insights into frequently asked questions, gaps in relevant data, and identification of inaccurate responses, achieved through industry best practices such as Test-Driven Development (TDD) and Metrics-Driven Development (MDD).

We also optimized our processes by employing synthetic test data generation, streamlining validation procedures for Subject Matter Experts (SMEs). Presenting pre-prepared test sets for validation eliminated the need for SMEs to generate data from scratch. Leveraging various LLM capabilities, we set up real-time evaluations of usage patterns, tracked changes over time, and analyzed key metrics derived from our test sets. This comprehensive approach saved time and also expanded the corpus coverage, addressing commonly overlooked questions efficiently.

## RESULTS

**200%**

Increase in size of testset with introduction of Synthetic Testset Generation

**6X**

Metric-driven Development reduced the time from change to feedback

**30%+**

Increased accuracy compared to native RAG solution