BCG: Knowledge Discovery & Enterprise Search

Background: Boston Consulting Group (BCG), a leading global management consulting firm, was looking to to improve the productivity of their consulting staff. Specifically, their goal was to bring actionable insights from 50+ years of accumulated data and knowledge to their consultants' fingertips, thereby enabling them to focus on valuable analysis and developing better insights rather than spending time searching and locating information.

Challenge: For BCG's consultants to deliver value in a timely manner to their clients, they were up against the significant challenge of making sense of an ever-growing digital repository accumulated over 50+ years dispersed across multiple data sources and involving multiple data formats. Every document was rich in text, graphs, and imagery and was hard to analyze quickly. Existing knowledge systems often forced consultants to use keyword-based searches, sometimes having to go page by page, and scanning entire documents from top to bottom. Consultants struggled to find the most relevant insights despite time-consuming search efforts.

Solution: Articul8 AI deployed a full-stack, production-grade enterprise GenAI platform in a few weeks that included a conversational system with contextual understanding, multimodal capabilities, and in-app document citation and exploration. The product was powered by a domain-specific multi-modal (image and text) large language model built on BCG's corpus of unstructured, mixed-mode knowledge data, and deployed within BCG's virtual private cloud (VPC) without any data leaving the enterprise perimeter.

Outcomes:

- **Business Impact:** BCG's strategic deployment of Articul8's GenAI knowledge discovery platform directly enhanced its services, equipping the firm to provide more informed strategies and insights to clients. Consultants were able to complete tasks more efficiently with +39% uplift in work completion rate.

- **Operational Efficiency:** Improvement in BCG's search capability streamlined the consultants' ability to retrieve information quickly, thereby optimizing workflow and reducing time spent on data search and sifting, with a 27% enhancement in search relevance. A Senior Partner at BCG noted the efficiency gains, saying, "BOOM!!!!! I found one of the hardest pieces of information to find with my very first search using the new Articul8 platform. I never found it [previously] despite searching for it multiple times [with the old keyword-based tool]."

- **User Experience:** The GenAI-based knowledge discovery product powered by Articul8 markedly improved BCG consultants' user experience. This was evident in the increased satisfaction levels and the enthusiastic feedback from the team. "This

is life changing. Search will never be the same again. My clients are going to be blown away!" said a Managing Director & Senior Partner. With this new GenAI powered tool, BCG consultants reported a <u>+46-point Net Promoter Score (NPS) increase.</u>

- <mark>For Red Baron: Please include BGG logo. Also, please highlight the following in large font / stylized visual so that it jumps out:</mark>
- <mark><u>+39% uplift in work completion rate</u></mark>
- <mark><u>27% enhancement in search relevance</u></mark>
- <mark><u>+46-point Net Promoter Score (NPS) increase.</u></mark>

Intel: Manufacturing Root Cause Analysis

Background:

Chip manufacturing is a complex, dynamic process that requires constant monitoring, analysis, and optimization. Intel developed a manufacturing "incident assistant" using Articul8's GenAI platform to diagnose & resolve manufacturing problems & improve overall manufacturing process efficiency.

Challenge:

Machine downtime in semiconductor fabs costs millions of dollars. Identifying issues during downtime is complicated, highly manual, and depends on the engineer/technician's work experience as well as the ability to draw quick insights from past historical data and multiple data sources and types (structured, unstructured data, time series data, etc.). Intel was looking for a GenAI powered solution to diagnose & resolve manufacturing problems & improve overall manufacturing process efficiency.

Solution:

Using Articul8's GenAI platform, Intel ingested and analyzed structured and unstructured data from diverse sources, including historical data and real-time feeds from sensors and semiconductor manufacturing equipment, to empower manufacturing engineers and technicians to gain valuable insights into their manufacturing operations and make data-driven decisions for failure mode root cause analysis, reduction of manufacturing downtime, automated work order creation, and improving overall manufacturing process efficiency.

Outcomes:

Using the Articul8 GenAI platform, Intel processed decades of structured and unstructured data from a number of sources such as machine logs, knowledge articles, and internal knowledge wiki pages to develop a natural language based GenAI application for manufacturing equipment root cause analysis (RCA). This resulted in accelerated incident resolution times, thousands of hours saved in highly skilled labor productivity, saving millions in fab equipment downtime costs per year & improving overall manufacturing efficiency.

For Red Baron: Please include Intel logo. I will also send you a video to embed as part of this case study.

Major Financial Analytics Company: Financial Research Analyst Assistant

Background: A leading B2B financial data and analytics company, was looking to leverage the power of Generative AI (GenAI) to drive transformational change in their software products. The mission was to transform the large financial data corpus owned by the customer into actionable insights for their end customers, pushing beyond the limits of traditional financial analysis offered in their current software products.

Challenge: The company's end-users such as investment banking and equity research teams deal with vast quantities of financial data - from market reports and economic indicators to company filings and global events. Traditional methods of financial data analysis are manual and time-consuming, and financial analysts spend hours on the company's platform searching and reading through all relevant documents to distill the data into actionable insights. In addition, they spend a considerable amount of time manually putting together reports that could sometimes be hundreds of pages long. They rely on tools offered by the Financial Analytics Company to inform and improve their investment thesis, however, the exiting tools didn't offer rich connected inputs sourced from multi-modal datasets. This left a significant burden of connecting disparate sources of data on the analysts.

Solution: The company partnered with Articul8 AI to leverage GenAI to drive automated data understanding and multimodal insights, with a focus on improving their end-user experience to bring customer-facing, revenue generating use cases to market quickly. Leveraging Articul8 AI's GenAI platform, the team processed and ingested 2M+ documents (250B+ tokens) including 10K filings, 10Qs, earnings transcripts and proprietary research and analysis documents in their production deployment. The outcome was a GenAI-powered financial analyst copilot that included capabilities such as conversational search, on-demand summaries and insights with source links, role-based metadata filtering for customized access, and multi-dimensional summarization through a knowledge graph for exhaustive analysis.

Outcomes:

- **Business Impact:** This project received strong support from the company's C-suite and Board, reflecting GenAI's role in driving the company's growth and innovation and setting the stage for the company's evolution from a data provider to a business insights provider. This strategic shift is aimed at delivering greater value to the company's end customers through in-depth analytics and insights. The copilot product was the "fastest beta-to-production deployment", in the words of the

company's CIO and is already on track to drive multi-million dollars in net new revenue.

- **User Experience:** Articul8's vertically integrated and optimized GenAI platform enabled a ~100ms roundtrip search retrieval time even with thousands of concurrent users. In addition, the GenAI-powered application received a 95% quality of response "thumbs-up" score across hundreds of users in tens of enterprises during the product rollout.

- 2 million + documents ingested
- ~100ms roundtrip search retrieval time
- Fastest beta to production deployment.