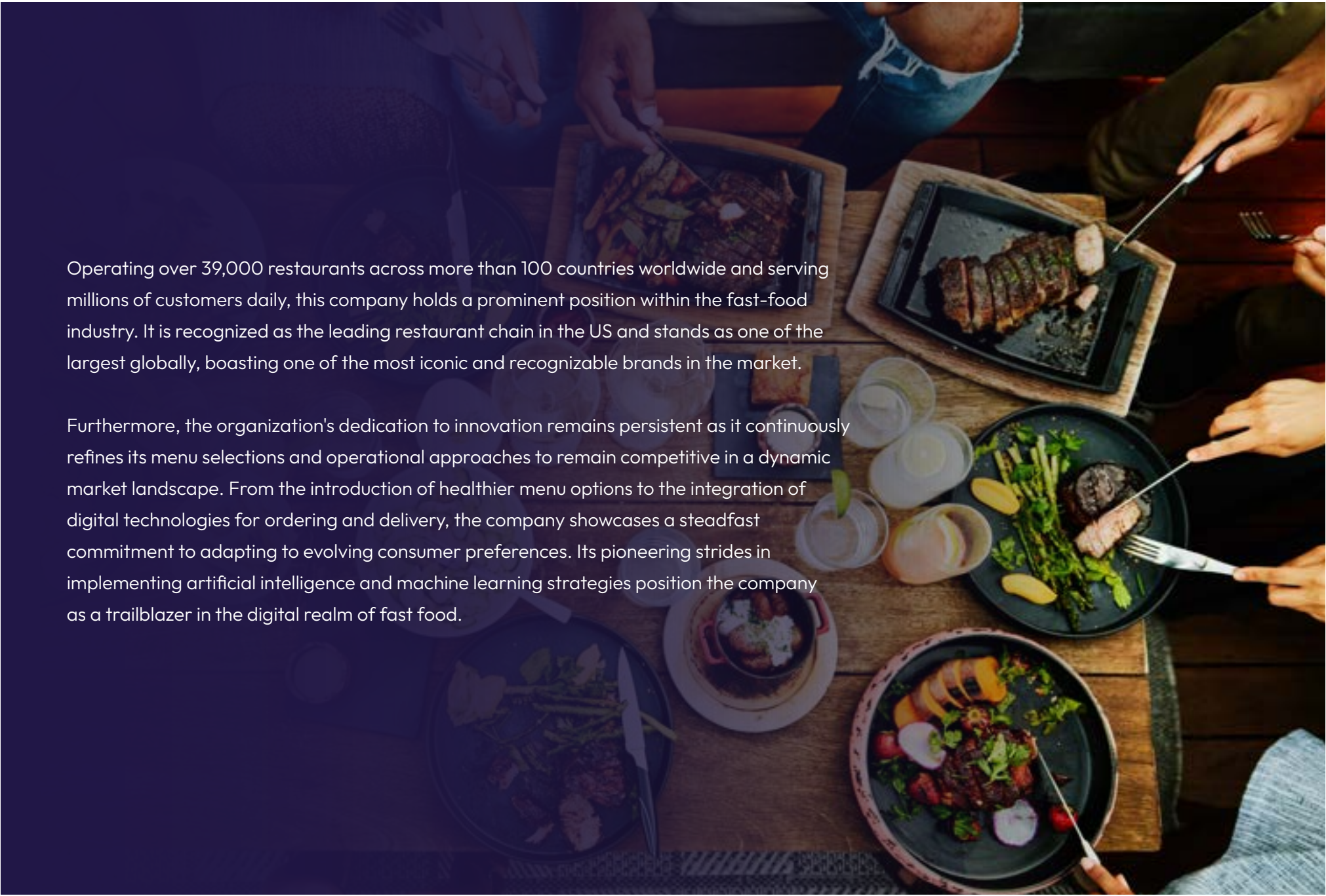




Breaking Down Silos with Gen AI: Developing a Unified Search Solution Across One of the World's Largest Fast-Food Chains

Improving UX, fueling expansion and driving growth through advanced AI, ML, and analytics solutions for a unified search engine.





Operating over 39,000 restaurants across more than 100 countries worldwide and serving millions of customers daily, this company holds a prominent position within the fast-food industry. It is recognized as the leading restaurant chain in the US and stands as one of the largest globally, boasting one of the most iconic and recognizable brands in the market.

Furthermore, the organization's dedication to innovation remains persistent as it continuously refines its menu selections and operational approaches to remain competitive in a dynamic market landscape. From the introduction of healthier menu options to the integration of digital technologies for ordering and delivery, the company showcases a steadfast commitment to adapting to evolving consumer preferences. Its pioneering strides in implementing artificial intelligence and machine learning strategies position the company as a trailblazer in the digital realm of fast food.

Empowering Expansion Through Unified Knowledge

However, having to manage such a fast-paced expansion and rapidly evolving digital landscapes, the company grapples with several challenges.

While the enterprise maintains knowledge repositories such as SharePoint, Confluence, Jira, Github, Service Now, etc., and a variety of documentation and insights portals, which may benefit specific teams, that knowledge is becoming siloed among members of teams, resulting in effort redundancy and the failure to search for and share valuable learning experiences.

This inefficiency underscores the need for a comprehensive solution capable of efficiently retrieving, learning, and sharing information from various sources while ensuring relevance,

timeliness, and bolstered confidence in the searched data and information. Recognizing this imperative, the company conceived of a unified search engine solution to span across the enterprise, embarking on a quest to find the right partner to spearhead its implementation.

With a unique mix of skills, innovation, and extensive knowledge in cutting-edge technology such as Gen AI, machine learning, and advanced analytics solutions, Brillio was chosen as the partner to lead this endeavor. Additionally, Brillio's vision of continuous improvement aligns perfectly with the company's goals of perpetual innovation.

With a bold vision for expansion, the company anticipates opening 10,000 new stores worldwide by 2027, marking its most rapid period of growth to date

Advanced Features for a One-Stop-Shop Solution to Serve all Enterprise Search Needs

The first step in this endeavor was conducting thorough market research, impact studies, and recommendations to analyze the requirements for a unified search engine. This product would allow users to seamlessly access and retrieve information from over ten data sources through a single interface. Additionally, it incorporates AI-powered generator responses to offer insightful summaries, analyses, and even creative text formats based on the search results.

The Unified Search feature offers a streamlined search experience with a single search bar, allowing users to input queries once and retrieve results from all connected data sources simultaneously. It provides advanced search options such as filtering by specific data sources, date ranges, and keywords while displaying

real-time results as data updates in connected sources.

The Generator Response feature complements this by automatically generating concise summaries of complex search results, extracting key insights and trends from large datasets, and offering customizable templates to configure different response formats for various data sources or user roles. This combination enhances efficiency and decision-making by simplifying information retrieval and analysis processes.

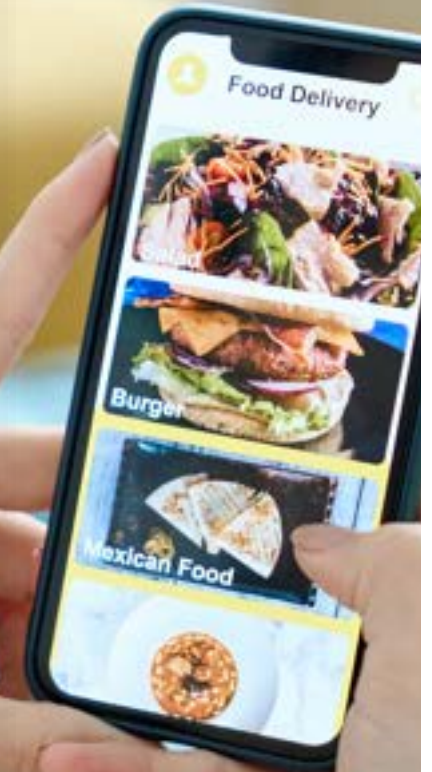
Multilingual Support enhances accessibility and inclusivity by providing a localized interface that translates the user interface into different languages, catering to a diverse user base. It

Several key questions had to be answered, such as how the search engine would look like, what key features it could provide, and the impact/benefit of deploying such a product.

also enables multilingual search, allowing users to input queries in their preferred language and retrieve results from sources with matching languages. Additionally, cross-lingual search and analysis capabilities leverage machine translation technologies to perform searches and analysis across content in different languages.

The User-Friendly Interface further improves usability with an intuitive design, search suggestions, and auto-completion features, along with visual aids and interactive elements for enhanced data visualization and user engagement.

The added advanced functionalities, such as a mobile app, Natural Language Processing & Machine Learning capabilities enable a deep understanding of user intent and context to deliver more relevant results and generator responses and facilitate continuous learning, improving search accuracy and generator response quality based on user interactions. These functionalities ensure a seamless and efficient user experience, enabling users to effectively navigate and utilize the search engine's capabilities.



Crafting Custom Connectors to Integrate Data Sources to GCP

To navigate the complexities of this endeavor, thorough testing of multiple connectors to each data source is imperative, particularly when integrating with the chosen cloud platform, in this case, Google Cloud Platform (GCP).

For instance, consider the integration with a knowledge base/document repository like Confluence. This integration involves harnessing GCP services such as Google Cloud Storage (GCS) to store extracted data in HTML format. Furthermore, the utilization of Google Cloud Functions or Google Kubernetes Engine (GKE) can optimize the processing and analysis of the extracted data, ensuring scalability and efficiency throughout the operation.

This custom connector boasts several key features aimed at enhancing data integration processes. Firstly, resilience is prioritized by implementing robust error-handling

mechanisms and retry strategies, mitigating potential failures during data extraction and transfer. Leveraging GCP services, the connector is also designed for scalability, dynamically adjusting to workload demands to ensure optimal performance and resource utilization.

Moreover, the connector emphasizes speed and latency optimization, achieved through optimized API requests and efficient data transfer mechanisms, thereby minimizing latency and maximizing data retrieval speed from Confluence. Furthermore, it simplifies user interactions by abstracting complexities associated with interacting with Confluence APIs and GCP services, providing a streamlined and user-friendly interface for data integration tasks. These features collectively contribute to an efficient and seamless integration process, empowering users to effectively leverage data from Confluence within the GCP environment.

By offering serverless or containerized deployment options on GCP, the connector optimizes resource usage and reduces operational costs.

Driving ROI, Cost-Efficiency, and Growth Through Search Innovation

While the project is currently in its initial phase, undergoing comprehensive discovery, impact studies, technical analysis, and proposal formulation, the potential benefits for the client are substantial. Through the utilization of generative AI, encompassing Large Language Models (LLMs) and other advanced models, a unified search application will be developed to meet all search requirements seamlessly.

This innovative solution aims to streamline document retrieval, summarization, and information analysis processes with effortless precision and accuracy, leading to a significant enhancement in efficiency.

The rapid access to information will result in considerable time savings per employee, thereby boosting organizational productivity. Furthermore, the application will ensure comprehensive and relevant search results, enabling users to glean insights from information dispersed across the organization. Additionally, intra-team collaboration will be fostered, fostering increased confidence in shared information.

The initiative is poised to generate substantial ROI and cost savings through heightened efficiency, productivity gains, and overall reduction in IT overheads, while concurrently strengthening data governance and ensuring compliance with regulatory standards. Moreover, the implementation of a more intuitive user experience (UX) is anticipated to enhance employee satisfaction and adoption rates, ultimately contributing to an enriched overall employee experience.



ABOUT BRILLIO

At Brillio, our customers are at the heart of everything we do. We were founded on the philosophy that to be great at something, you need to be unreasonably focused. That's why we are relentless about delivering the technology-enabled solutions our customers need to thrive in today's digital economy. Simply put, we help our customers accelerate what matters to their business by leveraging our expertise in agile engineering to bring human-centric products to market at warp speed. Born in the digital age, we embrace the four superpowers of technology, enabling our customers to not only improve their current performance but to rethink their business in entirely new ways. Headquartered in Silicon Valley, Brillio has exceptional employees worldwide and is trusted by hundreds of Fortune 2000 organizations across the globe.



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