



# SMART SUPPORT: “DB QUERY.AI” DATABASE ASSISTANT

© Lagozon Technologies Pvt. Ltd.

## CUSTOMER BACKGROUND:

Lagozon Technologies is a leading tech. service provider, focusing on Data Analytics & Data Engineering solutions. They have key partnerships with industry giants such as Qlik, Microsoft, AWS, Snowflake, and Databricks. Serving clients in Healthcare, Retail, FMCG, Manufacturing, Logistics, and BFSI sectors, Lagozon operates across India, Singapore, UAE, Canada, and the United States.

## PROBLEM STATEMENT:

In the past, the sales team faced considerable hurdles marked by limited access to critical insights and missed opportunities resulting from the constrained availability of data and cumbersome, time-intensive processes. This situation hindered the team's ability to gather comprehensive market intelligence, impeding their capacity to identify and seize lucrative sales prospects. Consequently, the team struggled to make informed decisions, leading to underperformance and a failure to maximize revenue generation potential.

## SOLUTION AND PROCESS IMPLEMENTED:

The solution leverages on Generative AI models for creative content generation like Text, Images, Music & Videos, Audio etc. These models are pre-trained on massive amounts of data from different sources which helps to generate entirely new data.

To be able to harness this power of Generative AI, many different techniques and frameworks are combined together, the choice of which depends on the project nature and complexity.

The given solution is an interactive data retrieval system which would allow healthcare providers to access and analyze patient information seamlessly in natural language. It comprises state of the art RAG (Retrieval, Augmentation, Generation) framework which harness the Generative AI models for generation of SQL queries from the questions asked by business users in natural language. This augments the healthcare staff with the data in the healthcare system's database by eliminating the need for technical queries and optimize day-to-day decisions

## AT A GLANCE

### Client

Lagozon Intellectual Property

### Region

India

### Target Industry

Sales Domain across all Verticals

### Function

Sales Solutions

### Technology Stack

Azure Open AI Services

## TECHNIQUES AND TECHNOLOGIES USED:

Dynamic  
Prompt  
Engineering

Vector  
databases  
(ChromaDB,  
Pinecone etc.)

Large Language  
Models (Azure,  
OpenAI,  
Hugging Face)

Frameworks  
(LangChain,  
LlamaIndex)

Databases  
(Snowflake, SQL  
Server,  
PostgreSQL)

### Automated Data Retrieval:

Integrating Generative AI Solutions for automated data retrieval transformed our sales team's operations. By developing and deploying advanced machine learning algorithms, we eliminated the need for manually crafting technical queries. This solution streamlined access to crucial information by automatically extracting and processing data from our database. With Generative AI Solutions, sales team members could fully leverage data, gaining deeper insights into customer behaviour and preferences through real-time analytics and predictive modeling.

### Personalized Sales Pitches:

Leveraging Generative AI Solutions for data retrieval revolutionized customer interactions. Utilizing sophisticated natural language processing and machine learning techniques, the system generated comprehensive insights into customer preferences and behaviours. Sales professionals could then personalize their pitches with greater accuracy and efficiency, supported by AI-driven recommendations and predictive analysis. Each sales approach was finely tuned to individual customers, ensuring a more tailored experience.

## BENEFITS:

### Efficiency and Time Savings:

By automating the data retrieval process with Generative AI, the sales team no longer needed to manually craft technical queries. This significantly reduced the time spent on accessing crucial information, allowing the team to focus more on strategic tasks. As a result, the overall productivity of the sales team increased, enabling them to handle more clients and opportunities in less time.

### Enhanced Data Utilization:

The integration of advanced machine learning algorithms enabled the system to automatically extract and process data from the database. This ensured that the sales team had seamless access to real-time analytics and predictive modeling, facilitating deeper insights into customer behaviour and preferences. Consequently, the team could make data-driven decisions more rapidly and accurately, improving their ability to respond to market trends and customer needs.

## Improved Customer Engagement:

With comprehensive insights generated through sophisticated natural language processing and machine learning techniques, sales professionals could personalize their pitches more accurately and efficiently. This led to more tailored and effective customer interactions, enhancing the overall customer experience. By understanding individual customer preferences and behaviours, sales pitches became more relevant and engaging, leading to higher conversion rates and customer satisfaction.

## Strategic Decision Making:

The solution provided AI-driven recommendations and predictive analysis, enabling sales professionals to make more informed and strategic decisions. This supported the development of finely tuned sales approaches, increasing the likelihood of successful outcomes by aligning strategies with individual customer needs and behaviours. The ability to anticipate customer needs and market shifts gave the sales team a competitive edge, allowing them to proactively address challenges and seize new opportunities.

The screenshot displays a 'Service Desk' interface with two chat windows. The left window shows an AI-generated response to a query about desktop delivery orders for store AA166141. The right window shows an AI-generated response to a query about total call center delivery orders across all stores.

**Service Desk**

**total desktop delivery order for AA166141**

To calculate the total desktop delivery order for store AA166141, we just need to sum up the `DESKTOP_DELIVERY_ORDER` column for that specific store.

Here's the SQL query to calculate the total desktop delivery order for store AA166141:

```
SELECT SUM(DESKTOP_DELIVERY_ORDER) AS TOTAL_DESKTOP_DELIVERY_ORDER
FROM lz_foods
WHERE STORE_ID = 'AA166141';
```

This query will return the total desktop delivery order for store AA166141.

Query Results:

total_desktop_delivery_order
92

Your message

**Total call center delivery order**

To calculate the total call center delivery orders across all stores in the dataset, you can sum up the values from the `CALL_CENTER_DELIVERY_ORDER` column. Here's the SQL query for that:

```
SELECT SUM(CALL_CENTER_DELIVERY_ORDER) AS TOTAL_CALL_CENTER_DELIVERY_ORDER
FROM lz_foods;
```

This query will return the total number of call center delivery orders across all stores in the dataset.

Query Results:

total_call_center_delivery_order
43,588

Your message