

**Case Study** 

## GenAl – Data Lake Knowledge Chatbot using Amazon SageMaker Jumpstart Model

Customer has a service for which they want to develop an NLQ-based generative AI using the Amazon Bedrock algorithm. The customer wanted to have a chat interface that can understand their end-user query and provide them with the respective response consisting of the data from their database



## **Business Challenges**

- Increase in user queries
- Manual intervention to answer user queries
- Responding with user queries in real-time
- Analytics on what customers are querying mostly for

## **Our Solution**

- Amazon SageMaker Jumpstart foundation 'Falcon 40B' model trained on knowledge base using Athena tables
- The user will interact with the chatbot, which is developed using Amazon Bedrock and Athena
- The Bot Service will send the user queries to the Athena table, which will, in return, provide the SQL query
- The SQL Query will be executed on the Athena table, and the resulting output will be presented to the user as a response based on the SQL query

## **Benefits**

- Improved user satisfaction leading to an increment user interaction
- Help in reducing manual intervention from support of human
- Increment in annual profit
- · Lower Latency faster response times, keeping application agile and efficient

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Visit us online at https://mothersontechnology.com/

Motherson Technology Services Limited C- 26, Sector 62, NOIDA - 201309, Uttar Pradesh Phone: + 91 120-436-5555 E-mail: info.mts@motherson.com

