

# SENTIMENT ANALYSIS USING GEN AI

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MAY 2024

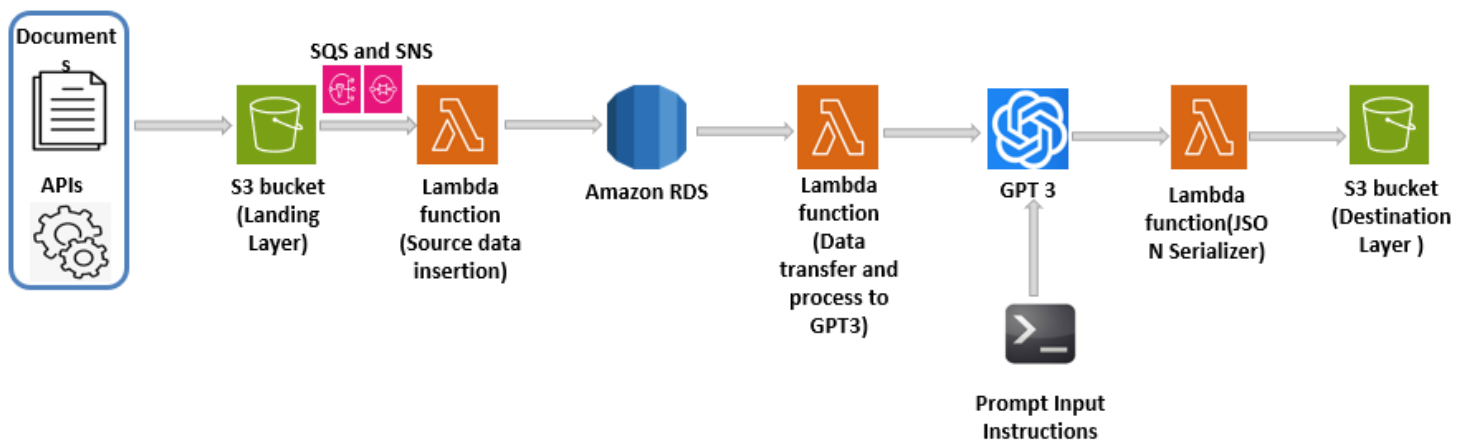
## Request and Guidelines Provided

- Client: Private Limited Firm
- As there was a decrease in the customer turnout ratio to customers visiting the website, we suggested identifying the sentiment of the customers who visited the website using the customer activity data
- Consolidate the data across multiple sources from different geographical locations to understand the sentimental analysis of the customer and enrich the business functionalities in those areas

## Methodology and Final Deliverable

- The data preparation process involves splitting of datasets into training and testing based on the homogeneity to accustom different types of data
  - The data is stored in S3 which acts as a data lake and then it is processed into Amazon RDS (Maria DB) to store the data in row-column format through the AWS Lambda function
  - Once the data gets ingested into RDS then the lambda function is invoked to ingest the data into GPT 3 through Open AI's API
  - Further prompt engineering is implemented so the prompts are passed into the LLM to extract the sentiments of the customer from the data
  - Lambda function is leveraged to serialize the output which is given from the LLM into JSON format and further the JSON output is stored in the S3 destination layer

### Data sources



Enabling our clients to achieve resource optimization through leveraging an offshore capacity model

## Our Highlights



Worked with  
1,000+ Clients



From Emerging to  
Established Firms



Servicing Clients  
in 80+ Countries



Across Industries  
and Asset Classes



Client-Integrated  
Operating Strategy

## Why Partner With Us



### HR Solution

- Flexible Staffing Model
- Dedicated Tiered Team Support



### Quality

- Industry-Leading Talent
- Multiple Layers of Quality Checks



### Operating Leverage

- Centralized Resource Pool
- Integration across Value Chain



### Cost Efficiencies

- Lower Indirect Costs
- Meaningful Direct Cost Savings

## What We Do

### Private Equity and Portfolio Companies

- Data Sourcing and Engineering
  - Capturing Data from Portfolio Companies
  - Creating Data Pipeline Enabling Automated Data Flows
- Reporting and Automation
  - Dashboard and Reports for Performance of Portfolio Companies
  - Fund Summary Reports for Investors
  - Process Optimization and Automation

### Capital Markets

- Data Sourcing and Engineering
  - Capturing and Processing Disparate Datatypes from Multiple Data Sources
  - Data Sanitization, Curation, and Data Pipeline Creation
  - Creating Databases, Data Lakes, and Data Warehouses & Ingesting using ETL/ELT Jobs
- Data Analytics, Reporting, and Automation
  - Customized Analytics
  - Key Indicators, Thresholds, Alerts, and Controls
  - Robotic Process Automation

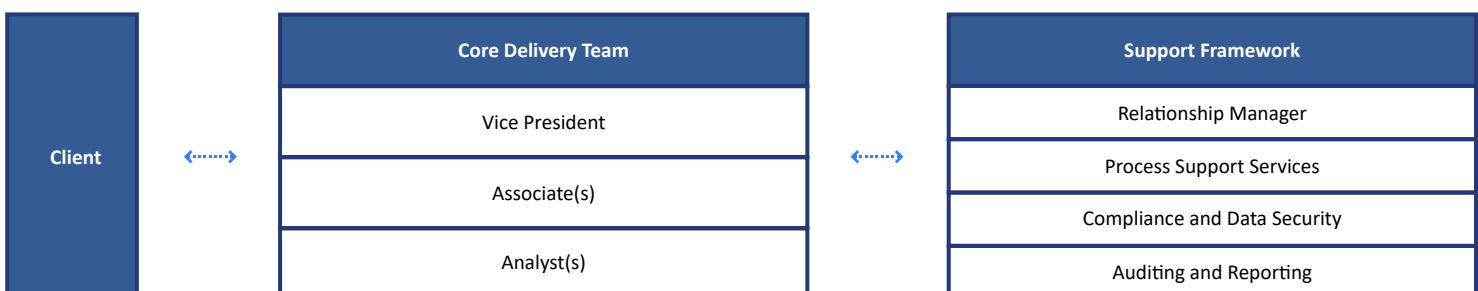
### Corporates

- Data Sourcing, Design, Architecture, and Storage
  - Capturing, Sanitizing, and Ingesting Disparate Datatypes from Multiple Data Sources using Data Model and Data Flow Diagrams
  - Creating and Maintaining Databases, Data Lakes, Data Warehouses, and Data Marts
- Data Analytics, Reporting, Governance, and Automation
  - Customized Analytics and OLAP Processing
  - Key Indicators, Thresholds, Alerts, Controls, and Data Governance
  - Robotic Process Automation and Artificial Intelligence

### Data Vendors

- Data Sanitization and Enrichment
  - Creating Rules and Alerts
  - Enrichment of Data using Fuzzy Logic
- Data Reporting, Automation, and Governance
  - Dashboard and Reports for Performance of Portfolio Companies
  - Master/Meta Data Management, Data Lineage, and Access Controls

## How We Do It





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