

Optimization of digital marketing campaigns by HCLTech with Databricks

Enhanced marketing performance using data engineering and analytics solution for a European company



The client is an European multinational chemical and consumer goods company with USD 20 Bn+ revenue and 50K+ employees, active in both the consumer and industrial sectors. The client company is popular for its top brands from the three globally operating business units namely Laundry & Home Care, Beauty Care, Adhesive Technologies. It owns range of brands sold in 50+ countries across multiple geographical regions. The client has around 5-billion-dollar marketing spend and planning efficient marketing spend strategies and optimization of digital advertising.

They wanted to move to a centralized, cloud-based data lake-house architecture to address their specific business challenges while ensuring that more timely information was available 24x7. They wanted promotion monitoring and campaign management to be done with greater timeliness, reliability, and consistency across a robust ETL workflow implementation where multiple modes of data transmission was running in parallel providing a multiplier effect to increase value for the business. To supercharge progress HCLTech built data engineering solutions using Databricks which successfully optimized the client's digital marketing campaigns.

The Objective:

Using Databricks on Azure, the client wanted to achieve below objectives:

Marketing campaign optimization: 1

Utilize Databricks to monitor campaign performance in real-time, leveraging data visualization and dashboards. Analyze key metrics, identify underperforming campaigns or channels, and make data-driven optimizations to improve marketing campaign outcomes continuously.

Data-driven content strategy: 2

Identify content performance trends, such as most engaging topics, formats, or channels. Leverage this information to create a data-driven content strategy that aligns with customer preferences and maximizes content effectiveness in driving traffic, engagement, and conversions.

Predictive analytics for campaign optimization: 3

Utilize Databricks to build predictive models using historical marketing data. Predictive analytics can help optimize campaign performance by identifying better marketing channels, predicting customer responses to different messages or offers.

The Solution:

Established the data requirements for measuring effectiveness of marketing campaigns by defining digital marketing objectives and Key Performance Indicators (KPIs)

Identified related data sources such as Meta for Business, Google Ads, Amazon Advertising etc. and analyzed various aspects such as APIs, access, data objects and formats and chosen Databricks to execute ETL activities.

Performed Data Cleansing activities such as missing values, outliers and inconsistencies and transformed data to make it suitable for analysis using Databricks

Implemented data validation checks to ensure the accuracy and reliability of the dataset.



Benefits

Supercharging analytics workloads



Unified Analytics Platform: Databricks provides a unified platform to bring together data engineering and analytics capabilities in a single environment. This allowed marketing teams to seamlessly integrate and analyze data from various sources, such as social media platforms, website analytics tools, and CRM systems



Scalability and Performance: Databricks enables processing and analyzing large volumes of marketing data at scale. It ensured high performance even with complex data transformations and advanced analytics algorithms. This scalability empowered marketing teams to handle ever-growing data volumes efficiently.



Real-time Data Processing: Databricks provides environment for real-time data processing. Marketers analyzed campaign performance in real-time and make timely adjustments to their campaigns.



Advanced Analytics and Machine Learning: Databricks provides a rich set of analytics and machine learning capabilities. Marketers uncovered actionable insights from their data.



Interactive Data Exploration and Visualization: Databricks offers interactive data exploration and visualization capabilities. Data Scientists visually explored and analyzed data through intuitive interfaces.



Collaboration and Agility: Databricks offers collaborative features, allowing teams to work together efficiently. Multiple team members collaborated on data engineering tasks, analytics workflows, and shared insights and visualizations. This promoted cross-functional collaboration between marketing, data engineering, and data science teams.