Case Study: Snowflake Data Analysis for MarketEase

MarketEase is an e-commerce company specializing in a diverse range of products including clothing, beauty & personal care, movies & television, and books. The company operates primarily through an online platform, providing services to a global customer base. Recently, MarketEase migrated its data infrastructure to Snowflake to leverage its scalable, secure, and flexible data storage and analysis capabilities.

Objectives

MarketEase aims to utilize Snowflake for enhancing its data analytics capabilities with the following objectives:

- 1. **Customer Analysis**: Understanding the demographics and purchasing behavior of its customers.
- 2. **Product Performance:** Evaluating product performance based on sales, ratings, and reviews.
- 3. **Order Management**: Monitoring order statuses and identifying patterns in order cancellations and processing times.

Customer Analysis

1. Demographics:

Determine the age group distribution of customers.

Analyze geographical distribution by state and zip code.

Gender-based purchasing patterns.

2. Purchasing Behavior:

Average order value per customer.

Frequency of purchases per age group and state.

Identify high-value customers based on total spending.

Product Performance

1. Sales Analysis:

Total sales by product and category.

Comparison of product ratings and reviews.

Identify top-selling products and categories.

2. Customer Feedback:

Analyze product ratings and their correlation with sales.

Review sentiment analysis to understand customer satisfaction.

Order Management

1. Order Status Analysis:

Proportion of cancelled vs. processed orders.

Temporal patterns in order cancellations and processing times.

Weekday vs. weekend order trends.

2. Financial Metrics:

Calculate the total revenue and average order value.

Profit analysis based on selling price and cost price.