# **Balanced Tree Clothing Company Sales Analysis**

### Introduction:

The Balanced Tree Clothing Sales Analysis project focuses on analysing sales data from Balanced Tree, a fictional clothing company. The project aims to derive insights into various aspects of sales transactions, product performance, and customer behaviour to inform business decisions and strategies.

#### **Database Structure:**

The project utilizes a relational database management system with the following structure:

## **Tables:**

product\_hierarchy: Stores hierarchical information about product categories, segments, and styles.

product\_prices: Contains pricing information for different products.

**product\_details:** Provides detailed information about products including names, categories, segments, and styles.

**sales:** Captures transactional data including product IDs, quantities, prices, discounts, membership status, transaction IDs, and timestamps.

# **Analysis Queries:**

The project employs various SQL queries to conduct comprehensive analyses of the sales data:

## **High-Level Sales Analysis:**

- 1. Total quantity sold for all products.
- 2. Total revenue generated for all products before discounts.
- 3. Total discount amount for all products.

## **Transaction Analysis:**

- 1. Number of unique transactions.
- 2. Average unique products purchased in each transaction.
- 3. Average discount value per transaction.
- 4. Percentage split of all transactions for members vs. non-members.
- 5. Average revenue for member transactions and non-member transactions.

## **Product Analysis:**

- 1. Top products by total revenue before discount.
- 2. Total quantity, revenue, and discount for each segment.
- 3. Top selling product for each segment.
- 4. Total quantity, revenue, and discount for each category.
- 5. Top selling product for each category.
- 6. Percentage split of revenue by product for each segment.
- 7. Percentage split of revenue by segment for each category.
- 8. Percentage split of total revenue by category.
- 9. Total transaction "penetration" for each product.
- 10. Most common combination of at least 1 quantity of any 3 products in a single transaction.

## **Conclusion:**

The Balanced Tree Clothing Sales Analysis project provides valuable insights into sales performance, customer behaviour, and product popularity. By leveraging SQL queries and database management, the project enables stakeholders to make informed decisions to optimize sales strategies, product offerings, and customer experiences.