**Adidas Sales Dataset**

**Data Source:**

<https://www.kaggle.com/datasets/heemalichaudhari/adidas-sales-dataset>

**Requirement:**

The objective of this assignment is to analyse the Adidas sales database and identify key insights to help improve sales performance and optimize business strategies. By examining the sales data, we aim to understand factors influencing sales, identify trends, and uncover opportunities for growth. Specifically, we need to come up with below aspects:

1. **Total Sales, Total Profit, Average Price per Unit, and Total Units Sold:**
   * Calculate and visualize the overall sales, profit, average price per unit, and total units sold.
2. **Profit by Retailer:**
   * Analyse the total profit generated by each retailer and identify the top-performing retailers.
3. **Sales Trend Over Time:**
   * Track the trend of sales over time at different levels such as year, quarter, month, and day.
4. **Units Sold by Product Category and Gender Type:**
   * Analyse the total number of units sold by product category and gender type to understand customer preferences.
5. **Top Performing Cities by Profit:**
   * Identify the top 5 performing cities based on profit and gain insights into their sales strategies.

**Data Dictionary:**

* **Retailer:** Represents the business or individual that sells Adidas products directly to consumers.
* **Retailer ID:** A unique identifier assigned to each retailer in the dataset.
* **Invoice Date:** The date when a particular invoice or sales transaction took place.
* **Region:** Refers to a specific geographical area or district where the sales activity or retail operations occur.
* **State:** Represents a specific administrative division or territory within a country.
* **City:** Refers to an urban area or municipality where the sales activity or retail operations are conducted.
* **Gender Type:** Categorization of individuals based on their gender, such as male or female.
* **Product Category:** Represents the classification or grouping of Adidas products.
* **Price per Unit:** The cost or price associated with a single unit of a product.
* **Units Sold:** The quantity or number of units of a particular product sold during a specific sales transaction.
* **Total Sales:** The overall revenue generated from the sales transactions.
* **Operating Profit:** The profit earned by the retailer from its normal business operations.
* **Operating Margin:** A financial metric that indicates the profitability and efficiency of a retailer's operations.
* **Sales Method:** The approach or channel used by the retailer to sell its products or services.