

## Retail Customer Retention Analytics – ADIDAS

### Project Objective:

Develop a robust, interactive Customer Retention Analytics Dashboard in Power BI using Adidas data that will:

- Consolidate customer demographics, purchase history, store/e-commerce performance, and loyalty data
- Enable dynamic segmentation of high-value, repeat, and churned customers
- Provide actionable insights to improve customer retention, loyalty engagement, and regional strategies

### Dataset Description:

1. [Customer\\_Demographics.csv](#): Contains demographic and membership details for Adidas customers.  
Columns: Customer\_ID, Age, Gender, Region, Income\_Level, Membership\_Since, Preferred\_Channel (Store/Online)
2. [Customer\\_Transactions.csv](#): Logs purchase transactions across Adidas retail stores, franchise outlets, and online platforms.  
  
Columns: Transaction\_ID, Customer\_ID, Store\_ID, Product\_Category (Footwear, Apparel, Accessories), Transaction\_Date, Amount, Promotion\_Applied (Yes/No)
3. [Store\\_Locations.csv](#): Metadata about Adidas retail and franchise locations.  
Columns: Store\_ID, Store\_Type (Flagship, Franchise, Outlet, Online), Region, Opening\_Year
4. [Loyalty\\_Program.csv](#): Tracks customer participation in Adidas' Creators Club loyalty program.  
Columns: Customer\_ID, Loyalty\_Tier (Base, Plus, Premium, Elite), Points\_Earned, Points\_Redeemed
5. [Churn\\_Labelled\\_Customers.csv](#): Provides a churn flag based on last purchase date and behavioral indicators.  
Columns: Customer\_ID, Last\_Purchase\_Date, Churn\_Flag (0 = Active, 1 = Churned), Churn\_Reason (Inactivity, Competitor, Low Engagement)

## Tasks to be Performed:

### Task 1: Data Modeling & Cleaning (10 Marks)

- Load and transform datasets in Power Query
- Handle duplicates, missing values, and ensure correct data types
- Create calculated columns:
  - $\text{Membership\_Duration} = \text{Today} - \text{Membership\_Since}$
  - Extract Transaction\_Year, Transaction\_Month

### Task 2: Churn & Retention Metrics (10 Marks)

- Create **ChurnRate KPI** =  $(\text{Churned Customers} / \text{Total Customers}) * 100$
- Visualize churn rate by:
  - **Region**
  - **Income Group**
  - **Channel (Store/Online)**
  - **Loyalty Tier**
- FunnelChart: Total Customers → Repeat Customers → Churned

### Task 3: Repeat Purchase Analysis (10 Marks)

- Segment customers:
  - **Low-Tier:** 0–3 purchases
  - **Mid-Tier:** 4–8 purchases
  - **High-Tier:** 9+ purchases
- Compare avg. purchase frequency by **Region, Age Group, Loyalty Tier**
- Identify **mostpurchasedproductcategories** by loyal customers

#### Task 4: Promotion & Loyalty Impact (10 Marks)

- % of transactions with promotion applied
- Compare **avg.purchaseamountwithvswithoutpromotions**
- Churn rate across **loyalty tiers**
- Points Earned vs Redeemed by Tier (clustered column chart)
- Recommendations to **improve redemption & retention**

#### Task 5: Store & Channel Performance vs Retention (10 Marks)

- Merge store data with transactions
- Visualize:
  - Avg. transaction amount by **Store Type**
  - Churn rate by store type
  - Correlation between **store opening year & retention**

#### Task 6: Customer Lifetime Value (CLV) Analysis (10 Marks)

- $CLV = \text{Total Amount Spent} / \text{Membership Duration (Years)}$
- Segment customers into **Low, Medium, High CLV**
- Visualize:
  - CLV vs Days Since Last Purchase
  - CLV by **Loyalty Tier & Region**

#### Task 7: Final Dashboard & Executive Summary (20 Marks)

- Multi-page Power BI Report:
  - Page 1: KPIs (Churn, CLV, Repeat Rate)
  - Page 2: Loyalty & Promotion Impact
  - Page 3: Store/Channel Insights
  - Page 4: Segmentation (Churned, Repeat, High-Value)
- Slicers: Region, Channel, Income, Loyalty Tier