

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:
 - Membership_Duration = Today – Membership_Since
 - Extract Transaction_Year, Transaction_Month

Task 2: Churn & Retention Metrics (10 Marks)

- Create **ChurnRate KPI** = (Churned Customers / 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 **most purchased product categories** 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 = Total Amount Spent / 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