

The Metro Bank Analytics Challenge: A 5-Week Finance Case Study

Welcome Analysts,

Week 3: Analyzing Transaction Behavior & Patterns

Milestone Title: Following the Money: Decoding Customer Spending Habits

Your Task: Now that you know what accounts customers have, the Operations Department needs to understand how they use them. Analyze transaction data to uncover spending patterns, identify preferred channels (Mobile, Branch, etc.), and see which merchants dominate spending.

This will help optimize resources and tailor offers.

Primary Dataset: Transactions.csv

Linking Datasets: Accounts.csv (Week 2), Customers.csv (Week 1)

Datasets: [<https://drive.google.com/drive/folders/1C47NsDKW8KJ5HprU9GikcKiT0u7-m6Zx?usp=sharing>]

Key Questions to Answer:

Overview: What is the total volume (number) and total value (\$) of all transactions? What is the average transaction amount?

Behavior by Type: Where is the money flowing? Break down the total value and volume by Transaction Type (Deposit, Withdrawal, Transfer, Payment).

Channel Preference: How are customers banking? Which channel (Online, ATM, Branch, POS) is most popular? Which channel is used for the highest-value transactions?

Merchant Analysis: Which merchants (e.g., Walmart, Apple) see the most banking activity?

Advanced Correlation: Do customers with Credit Cards (from Week 2 data) make more "Payment" type transactions? Do high-balance customers use different channels?

Deliverable:

An Excel workbook containing: PivotTables & Grouping: Creating summaries by type, channel, and merchant. Grouping the Date field by Months to see trends.

Slicers & Timelines: Adding interactive filters to create a dynamic dashboard.

An enriched "Transactions" sheet with new columns for Account_Type and Customer_Segment.

A "Dashboard" sheet to visualize your findings.