Power BI RFM Customer Segmentation Documentation

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# Dataset Overview

The dataset used is a modified version of the Online Retail dataset. It includes transactional data from 2009 to 2011, with columns such as InvoiceNo, InvoiceDate, Quantity, Price, and Customer ID.

# New Table: RFM\_Table

RFM\_Table is a summarized table that contains the following metrics for each customer:

- Recency: The number of days since the last purchase, calculated as the difference between the most recent InvoiceDate and a defined TodayDate (latest transaction date).  
- Frequency: The count of distinct invoices per customer, representing how often a customer made purchases.  
- Monetary: The total revenue generated by the customer, calculated as SUM(Quantity \* Price).

# New Columns (RFM Scores)

## 1. RecencyScore

Assigns a score based on how recent the last purchase was:  
- 4: <= 30 days  
- 3: <= 90 days  
- 2: <= 180 days  
- 1: > 180 days

## 2. FrequencyScore

Assigns a score based on the number of purchases:  
- 4: >= 100 invoices  
- 3: >= 50 invoices  
- 2: >= 20 invoices  
- 1: < 20 invoices

## 3. MonetaryScore

Assigns a score based on the total amount spent:  
- 4: >= 2000  
- 3: >= 1000  
- 2: >= 500  
- 1: < 500

## 4. RFMScore

This is a concatenation of RecencyScore, FrequencyScore, and MonetaryScore into a single string (e.g., 344).

## 5. CustomerSegment

Segments customers into categories based on their RFMScore:  
- Champions: RFMScore >= 444  
- Loyal Customers: RFMScore >= 344  
- Potential Loyalist: RFMScore >= 244  
- Need Attention: RFMScore >= 144  
- Others: Below 144