

AZURE DATA PIPELINE

For TechRetail

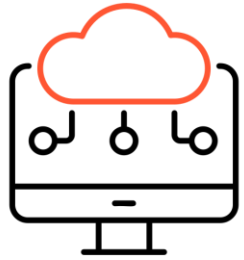
Group 4:

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- Kumkum Baswal

Background:

- **TechRetail**, a mid-sized retail company, wants to create a data pipeline to collect retail data from various sources, process it using advanced analytics, and visualize the results in a dashboard. The goal is to gain insights into sales trends and improve decision-making. The company wants to leverage Azure Databricks for data processing and Microsoft Fabric for data integration and visualization.

Objectives:



Data Ingestion

Azure Data Factory (ADF)

ADLS Gen2



Data Processing

Synapse Data Engineering

Databricks



Data Storage

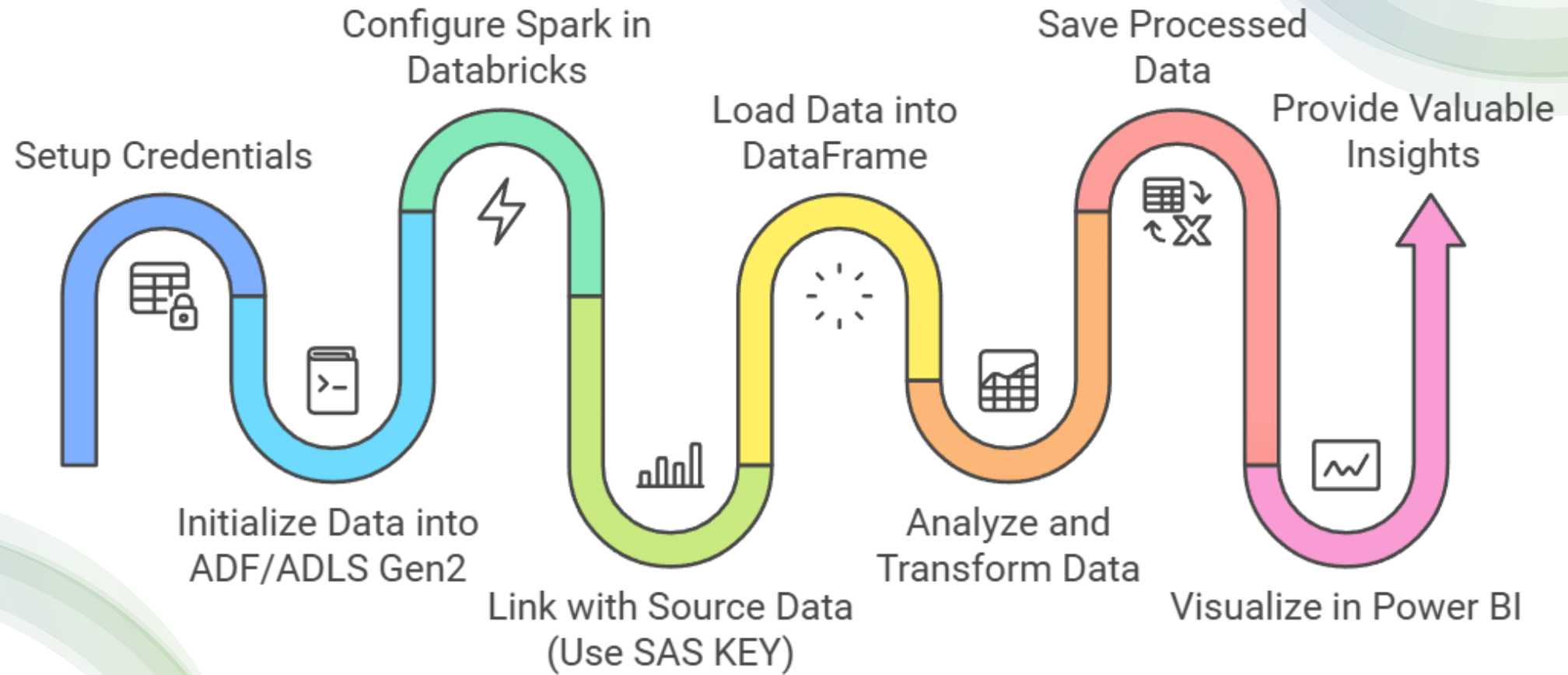
ADLS Delta Table



Data Visualization

Microsoft PowerBI

Architectural Process Flow:



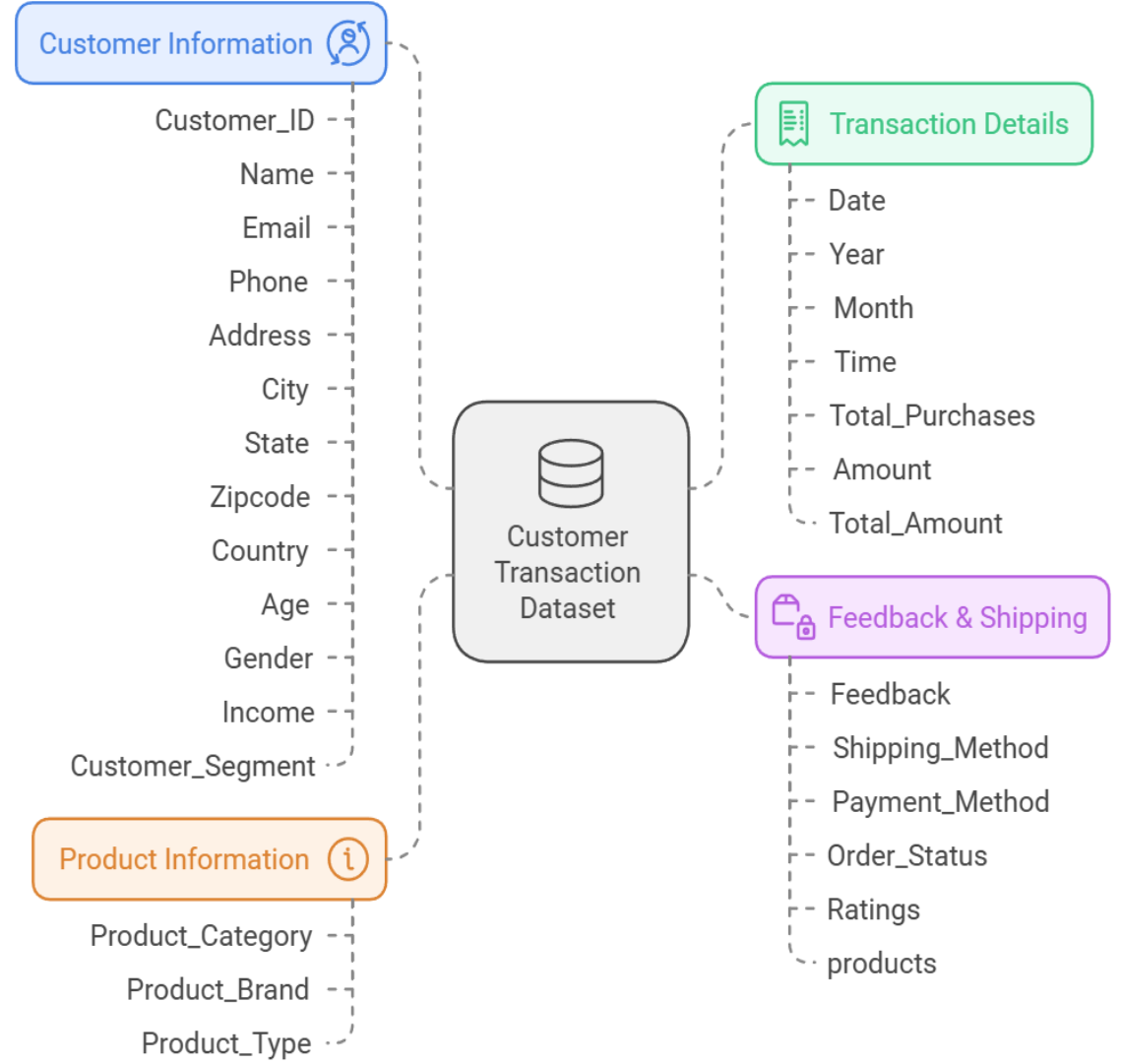


KNOW YOUR DATA

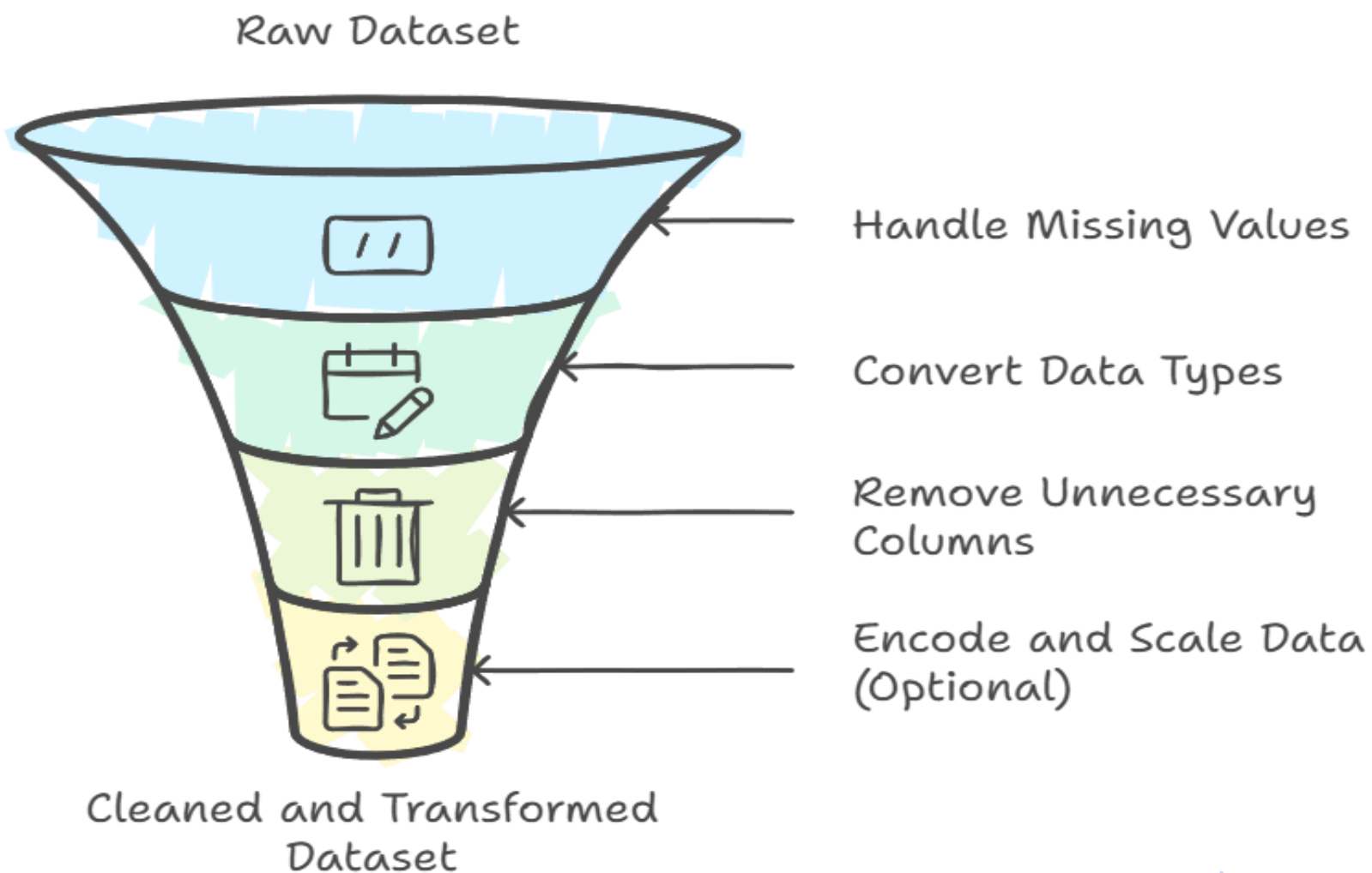
Dataset Insights



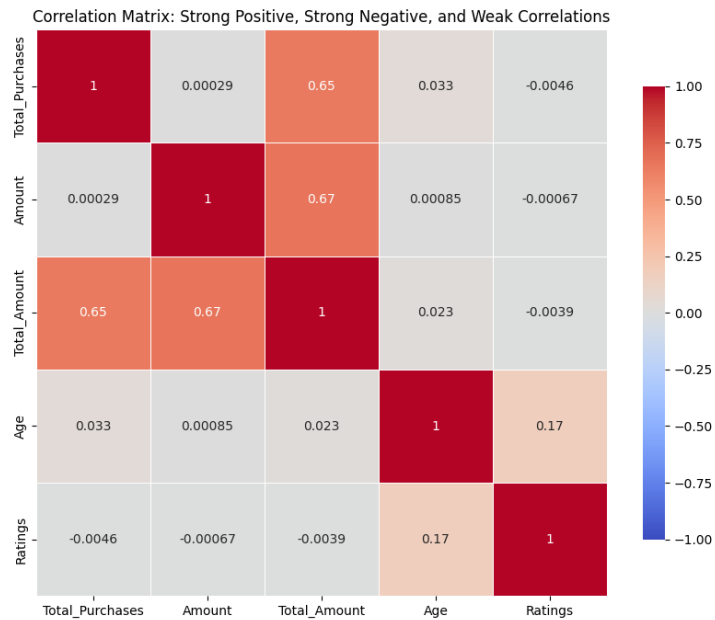
DATASET OVERVIEW



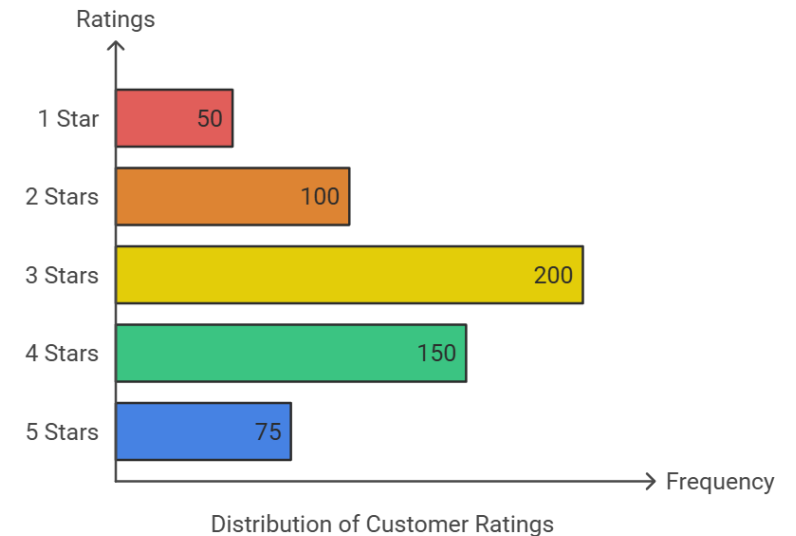
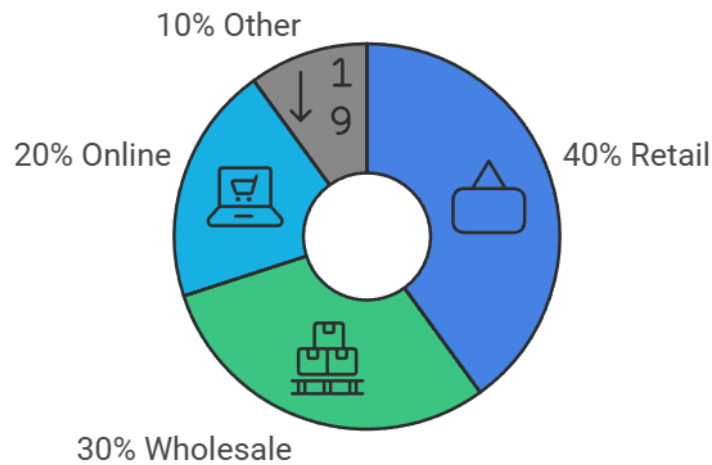
Data Cleaning and Transformation Process



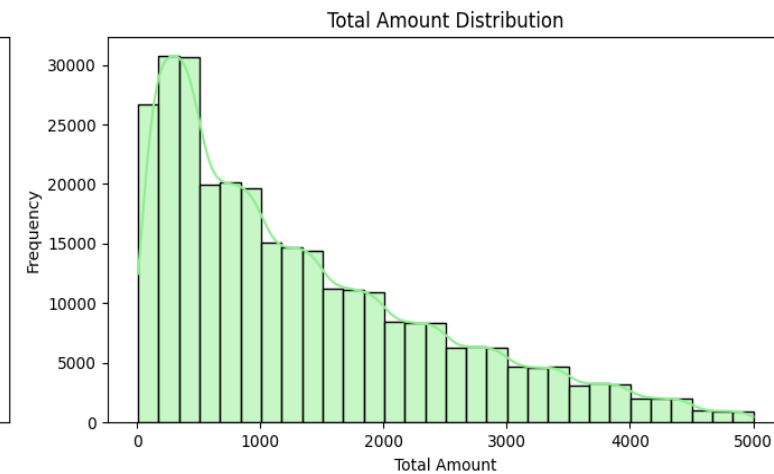
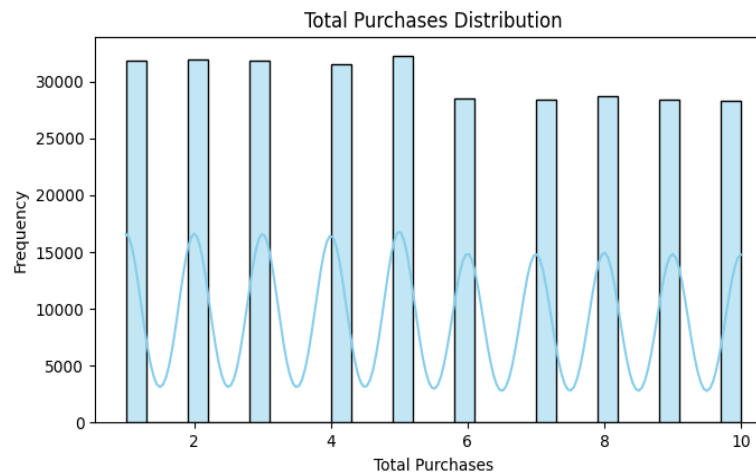
Dataset Insights Visualization



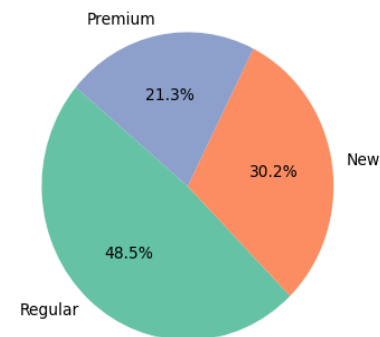
Distribution of Customer Segments



Key Distributions In The Data



Customer Segment Distribution



TechRetail Sales Analytics Dashboard

TechRetail Sales Analysis

Key Metrics for Business Insights

Total Revenue
124.70M

Total Transactions
90K

ATV
1.38K

Average Age
35.83

Total Products Sold by Category



Date

All

Customer_Seg...

New

Product_Catego...

All

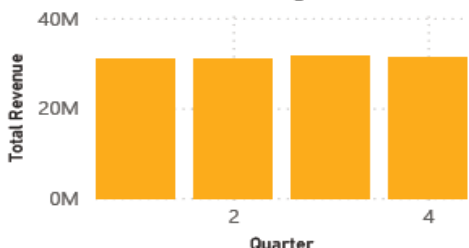
Country, City, St...

All

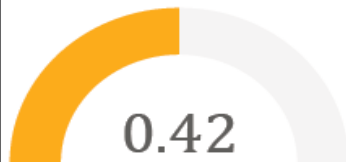
Monthly Sale Trends



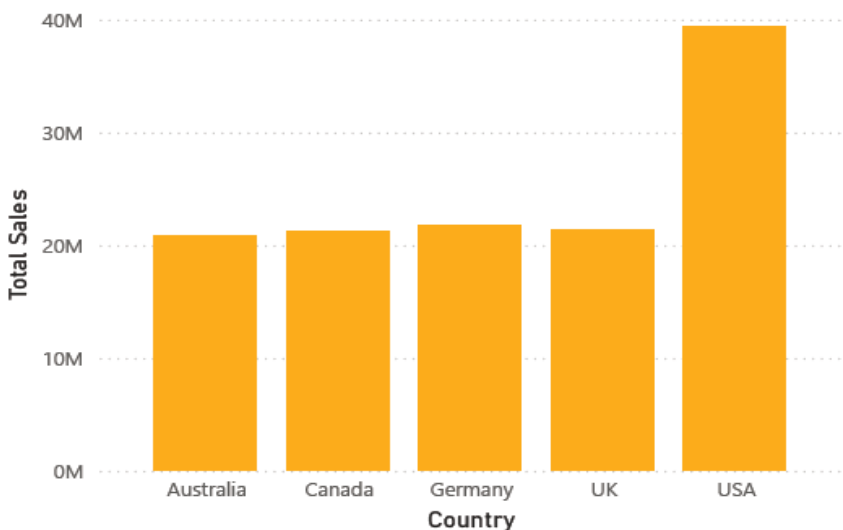
Revenue Per Quarter



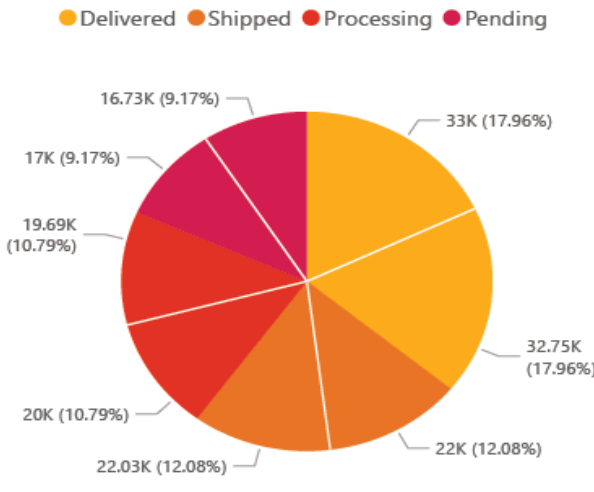
Customer Retention Rate



Sales Distribution



Order Status Breakdown



THANK YOU

