

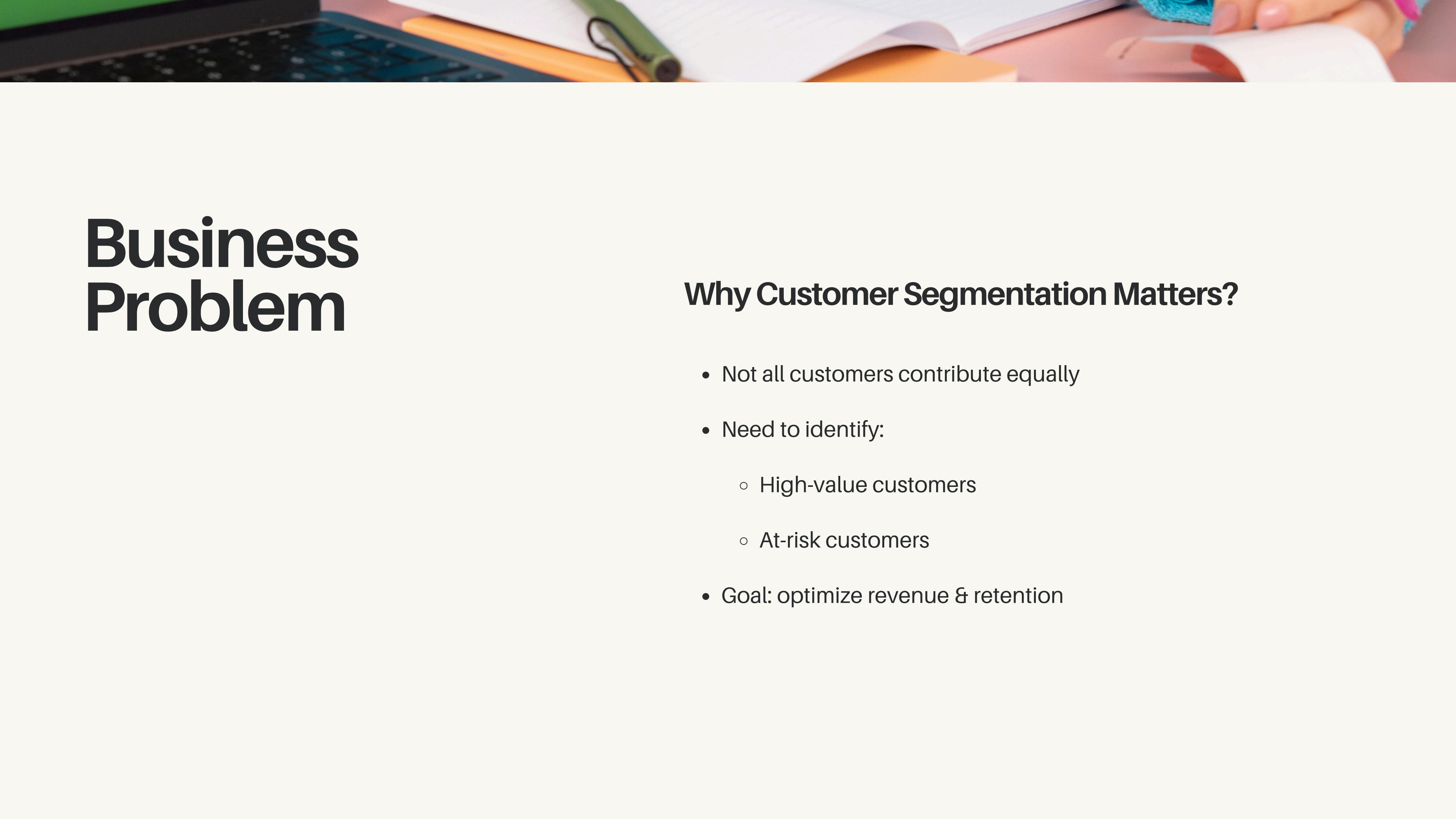


# Customer Segmentation using RFM Analysis

Data-Driven Customer Insights for Business Decision Making

Mario Wicaksono

Tools: Python, Power BI, RFM, K-Means



# Business Problem

## Why Customer Segmentation Matters?

- Not all customers contribute equally
- Need to identify:
  - High-value customers
  - At-risk customers
- Goal: optimize revenue & retention

# Methodology

## Analytical Workflow

Transaction Data Collection



Data Cleaning & Preprocessing



RFM Feature Engineering



K-Means Clustering

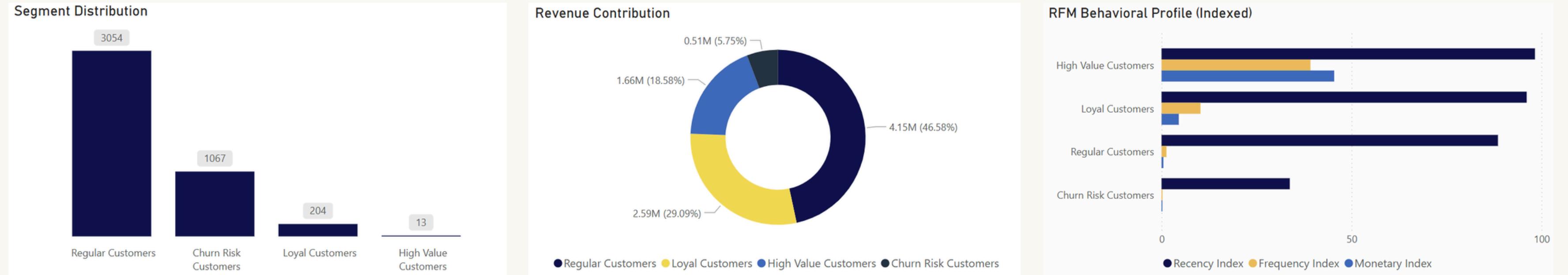


Segment Interpretation



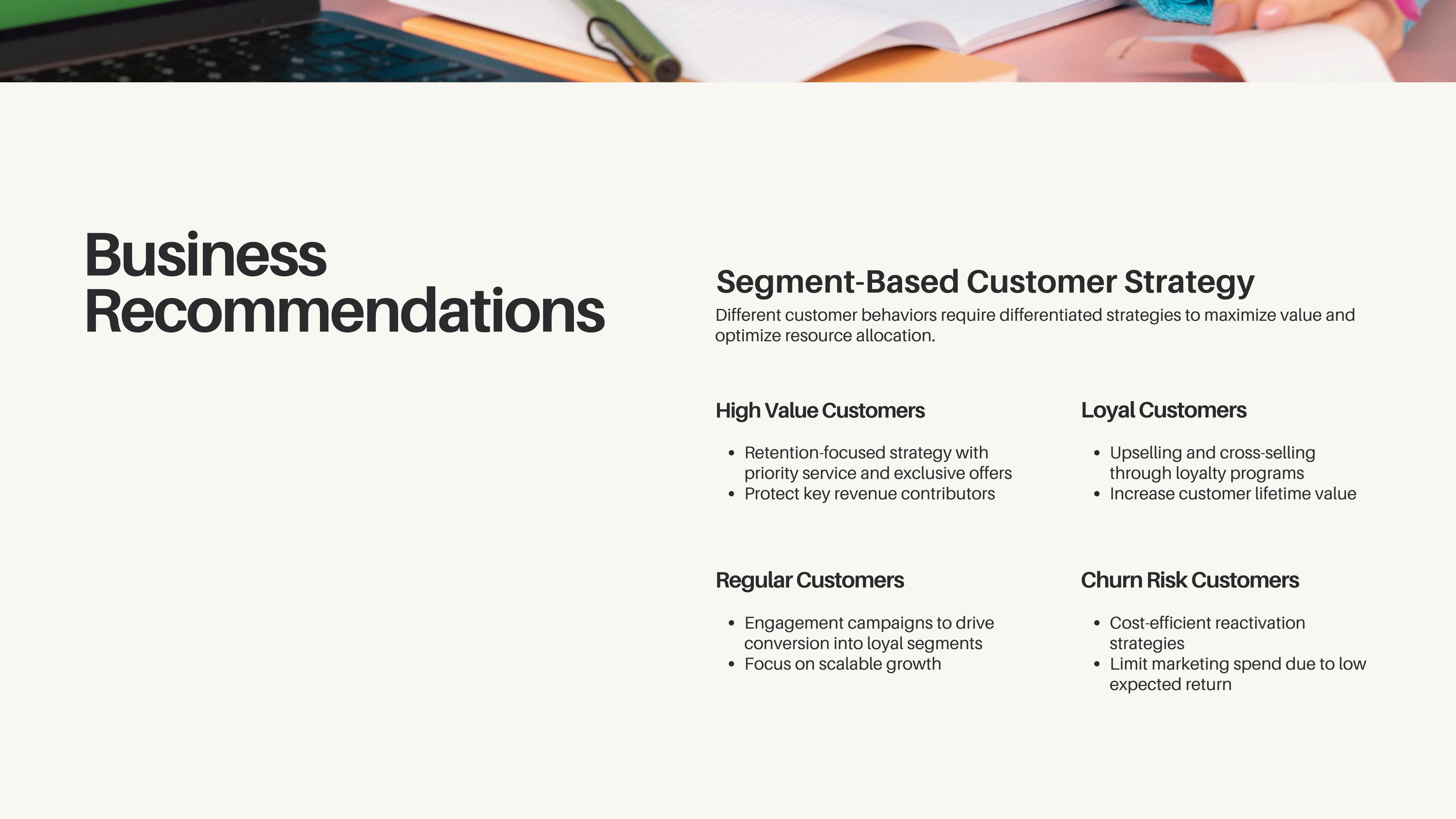
Dashboard Visualization (Power BI)

# Key Insights



## What We Found

- High Value Customers are few but generate significant revenue
- Regular Customers drive revenue through volume
- Churn Risk Customers show low engagement and low value
- Each segment requires a different business strategy



# Business Recommendations

## Segment-Based Customer Strategy

Different customer behaviors require differentiated strategies to maximize value and optimize resource allocation.

### High Value Customers

- Retention-focused strategy with priority service and exclusive offers
- Protect key revenue contributors

### Loyal Customers

- Upselling and cross-selling through loyalty programs
- Increase customer lifetime value

### Regular Customers

- Engagement campaigns to drive conversion into loyal segments
- Focus on scalable growth

### Churn Risk Customers

- Cost-efficient reactivation strategies
- Limit marketing spend due to low expected return