Customer Segmentation & Lifecycle Analysis for TD Bank (Technical Report)

1. Introduction

Objective of the Project

The primary objective of this project is to conduct a comprehensive customer segmentation and lifecycle analysis for TD Bank within the Banking and Financial Services industry in order to provide a clear roadmap to move from stable today to sustainable tomorrow.

It evaluates customer demographics, professional profiles, income distribution, tenure, and generational composition to understand how effectively the bank is acquiring, retaining, and growing customer value over time.

This study focuses on how customers move through lifecycle stages from New to Emerging, Loyal, and Legacy; and how these movements intersect with income brackets, occupation, gender, and age. The goal is to identify structural risks in acquisition, retention, and portfolio aging, while uncovering growth opportunities in high-value and next-generation customer segments.

Despite a healthy average customer income of $114.4K and a customer base concentrated in peak earning years (average age of 46), the dashboard reveals a sharp 51% collapse in customer acquisition between 2024 and 2025. This decline represents a material threat to long-term portfolio sustainability if not addressed immediately.

This leads to the core analytical question of the project:

Is TD Bank building a future-ready customer base, or is it slowly aging out its portfolio while losing momentum in new customer acquisition?

To answer this, the analysis investigates:

- Whether TD Bank is successfully attracting the next generation of customers (Gen Z and Millennials).

- How income, gender, and occupation influence high-net-worth customer concentration.

- The health of the customer retention funnel across lifecycle stages.

- Whether the customer portfolio is diversified enough to withstand economic shocks.

- Where operational and relationship management efforts should be focused to maximize lifetime value.

This report is not just a descriptive segmentation exercise. It is a strategic diagnostic designed to guide executive, marketing, sales, and risk decisions that will determine whether TD Bank sustains growth beyond 2026.

2. Key Dataset and Methodologies

Dataset Overview

The analysis uses a consolidated customer dataset that captures demographic, professional, financial, and lifecycle attributes of TD Bank customers. Each record represents a unique customer and includes variables related to age, gender, occupation, income, tenure, region, and customer segment.

Methodologies

The analysis is built using Microsoft Excel with the following techniques:

- Data cleaning and standardization using Power Query

- Pivot Tables for aggregation by generation, income bracket, occupation, and segment

- Calculated fields for tenure and lifecycle classification

- Time-based analysis using Join Date

- Interactive dashboard visuals to support executive decision-making

3. Story of the Data

This dataset tells a clear story of customer lifecycle progression and professional growth within TD Bank.

It shows how customers enter the bank as New, evolve into Emerging, and eventually become Loyal or Legacy clients. It also reveals a strong relationship between occupation and income bracket, highlighting which professions drive high-value segments.

At the same time, the data exposes a growing imbalance:

- Strong income levels

- Weak tenure depth

- Declining new customer acquisition

- Underrepresentation of younger customers

Together, these signals suggest that while the bank has valuable customers today, its future pipeline may be at risk.

4. Data Splitting and Preprocessing

Data Preparation

Before analysis, the dataset was reviewed to ensure:

- No duplicate customer records
- No missing critical demographic or financial fields
- Consistent formatting of Join Date and income values

Feature Engineering

Additional analytical fields were created, including:

- Customer tenure (derived from Join Date)
- Generational classification (Gen Z, Millennial, Gen X, Boomer)
- Income brackets (Low, Medium, High)
- Lifecycle segmentation (New, Emerging, Loyal, Legacy)

These transformations enabled clear lifecycle and cohort analysis across time.

5. Pre-Analysis

Data Split

- **Dependent variables**: Customer Segment, Tenure, Income Bracket
- **Independent variables**: Gender, Age, Region, Occupation, Income, Join Date

Industry Context

- **Industry**: Banking & Financial Services

Stakeholders

- Chief Executive Officer (CEO)

- Chief Financial Officer (CFO)

- Chief Marketing Officer (CMO)

- Head of Sales / Relationship Management

- Chief Operating Officer (COO)

- Chief Risk Officer (CRO)

**Value to the Industry**
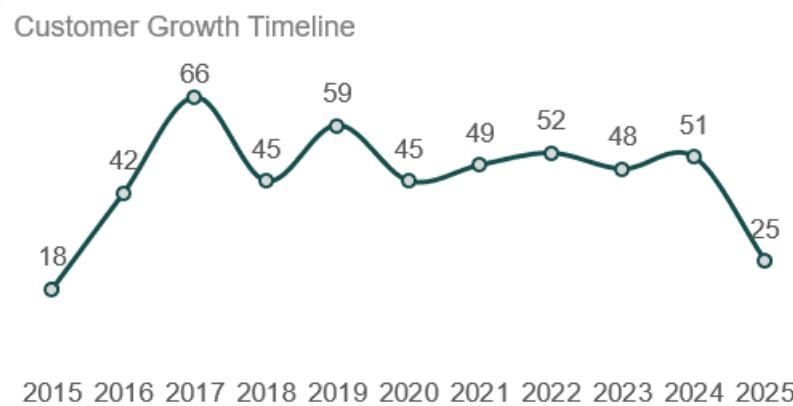
This analysis helps the bank:

- Improve customer lifetime value

- Reduce churn risk

- Strengthen next-generation acquisition

- Protect assets under management

- Allocate marketing and sales effort more effectively

6. In Analysis
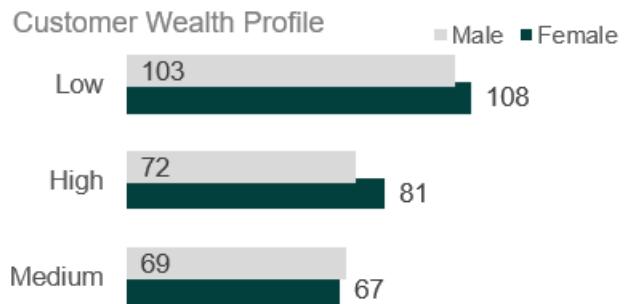
Key Observations (Simplified)
Customer acquisition dropped sharply from 51 new customers in 2024 to 25 in 2025, representing a 51% decline and the most serious risk identified in the analysis.

Customer Growth Timeline

18 42 66 45 59 45 49 52 48 51 25

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
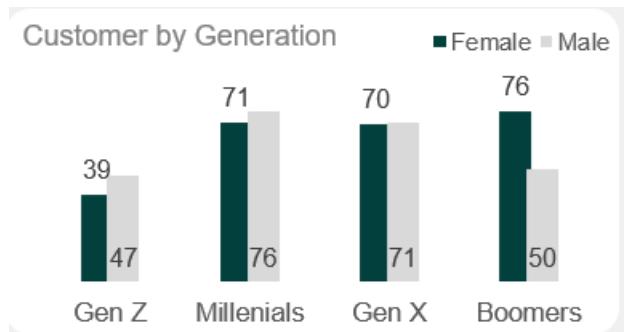
The average customer is 46 years old, earns $114.4K annually, and has only 5 years of tenure, indicating high earning power but short relationship depth.

High-income customers are increasingly female, with women (81) outnumbering men (72), making professional women a key growth driver for the bank.

Customer Wealth Profile   ■ Male ■ Female

Wealth	Male	Female
Low	103	108
High	72	81
Medium	69	67
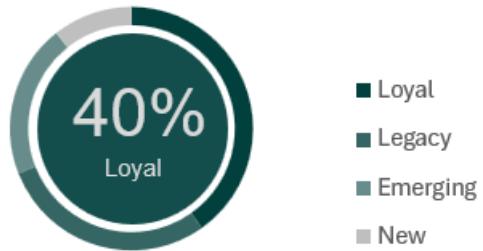
The customer base is dominated by Millennials (147) and Gen X (141), while Gen Z (86) remains significantly underrepresented.

Customer by Generation   ■ Female ■ Male

	Gen Z	Millenials	Gen X	Boomers
Female	39	71	70	76
Male	47	76	71	50
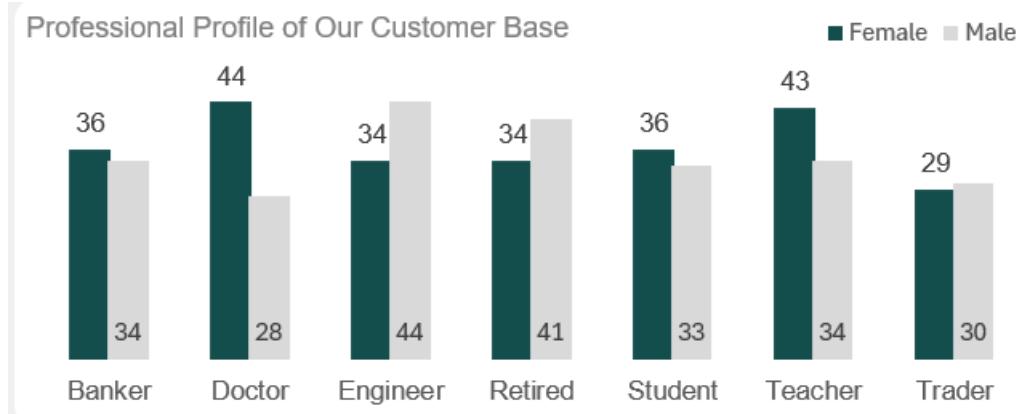
Only 40% of customers are Loyal, while 60% remain in New, Emerging, or Legacy stages, signaling a fragile retention funnel.

Customer Loyalty Segmentation

40%
Loyal

■ Loyal
■ Legacy
■ Emerging
■ New

Doctors (72) and Teachers (77) form the largest customer groups, creating a well-diversified and recession-resistant professional portfolio.

Professional Profile of Our Customer Base

	Banker	Doctor	Engineer	Retired	Student	Teacher	Trader
Female	36	44	34	34	36	43	29
Male	34	28	44	41	33	34	30

Initial Insights:

- The bank attracts high-income customers but struggles to retain them long enough to maximize lifetime value.
- Low Gen Z representation threatens the future customer pipeline and long-term sustainability.
- A large share of customers remains in early or unstable lifecycle stages, increasing churn risk if engagement is not improved.

7. Post-Analysis

Key Findings
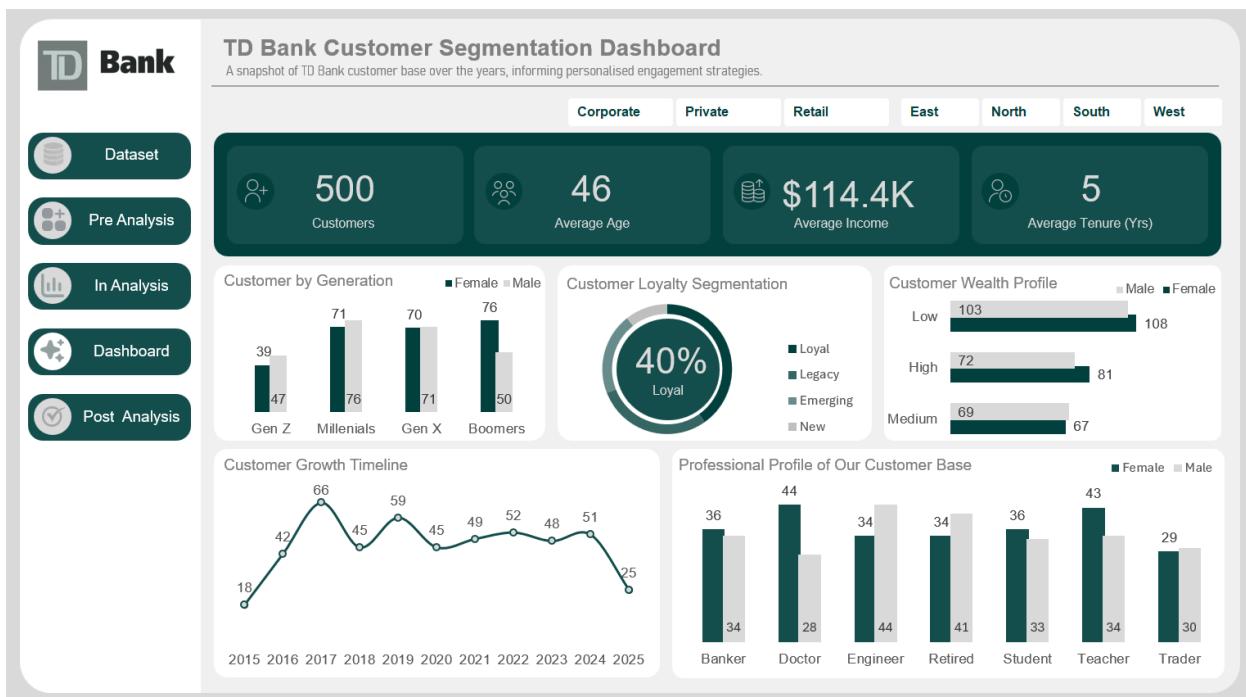
- **Growth risk**: The sharp acquisition drop in 2025 threatens long-term sustainability
- **Lifecycle imbalance**: Too many customers remain New or Emerging despite high income
- **Gender opportunity**: High-earning professional women are a clear strategic priority
- **Generational gap**: Gen Z is not being captured at the required scale
- **AUM risk**: Retired customers (75) signal future asset outflow

Validation of Initial Signals

The dashboard confirms early concerns:

- Strong current value, weak future pipeline
- Healthy income but insufficient retention
- Portfolio aging faster than it is being replenished

8. Data Visualizations & Dashboard Summary

TD Bank Customer Segmentation Dashboard
A snapshot of TD Bank customer base over the years, informing personalised engagement strategies.

| Corporate | Private | Retail | East | North | South | West |

- 500 Customers
- 46 Average Age
- $114.4K Average Income
- 5 Average Tenure (Yrs)

Customer by Generation (Female / Male)
- Gen Z: 39 / 47
- Millenials: 71 / 76
- Gen X: 70 / 71
- Boomers: 76 / 50

Customer Loyalty Segmentation: 40% Loyal (Loyal, Legacy, Emerging, New)

Customer Wealth Profile (Male / Female)
- Low: 103 / 108
- High: 72 / 81
- Medium: 69 / 67

Customer Growth Timeline
- 2015: 18
- 2016: 42
- 2017: 66
- 2018: 45
- 2019: 59
- 2020: 45
- 2021: 49
- 2022: 52
- 2023: 48
- 2024: 51
- 2025: 25

Professional Profile of Our Customer Base (Female / Male)
- Banker: 36 / 34
- Doctor: 44 / 28
- Engineer: 34 / 44
- Retired: 34 / 41
- Student: 36 / 33
- Teacher: 43 / 34
- Trader: 29 / 30

The Excel dashboard provides a single-page executive view of customer health and risk.

Key Metrics Displayed

- Average Income: $114.4K

- Average Age: 46 years

- Average Tenure: 5 years

- Customer Acquisition Trend (2015–2025)

Core Visuals

- Customer acquisition trend by year

- Income bracket distribution

- Customer segments donut chart

- Customers by generation

- Occupation distribution

- Gender split in high-income segment

Dashboard Purpose

The dashboard enables leadership to:

- Detect acquisition failures early

- Monitor lifecycle health

- Identify high-value segments

- Align marketing, sales, and risk strategy

9. Recommendations and Observations

Executive & Strategic (CEO / Board)

- Immediately investigate the root cause of the 2025 acquisition collapse

- Reposition the high-net-worth strategy to prioritize professional women

- Treat customer acquisition as a board-level KPI for 2026

Marketing & Acquisition (CMO)

- Launch a low-barrier product for Gen Z professionals

- Focus campaigns on Doctors, Teachers, and Engineers

- Shift messaging toward early-career wealth building

Sales & Relationship Management (Head of Sales)

- Introduce a structured First 90 Days Program for New and Emerging customers

- Use peer-to-peer referrals within professional networks

- Actively migrate Medium-income customers into High-income profiles

Operations & Risk (COO / CRO)

- Use automation for Low-wealth customers to improve efficiency

- Introduce Family Office and Trust services for Boomers

- Improve wealth measurement beyond annual income

10. Conclusion

TD Bank has a valuable customer base with strong income levels and professional diversity. However, the sharp decline in customer acquisition, combined with weak tenure depth and underrepresentation of Gen Z, presents a serious long-term risk.

To succeed in 2026 and beyond, the bank must:

- Fix the acquisition pipeline

- Convert Emerging customers into Loyal clients

- Retain high-income professional women

- Secure intergenerational wealth transfer

This analysis provides a clear roadmap to move from stable today to sustainable tomorrow.

11. References & Appendices

References

- TD Bank Customer Segmentation Dataset

- Microsoft Excel (Power Query, Pivot Tables, Calculated Fields)