



HDFC Bank Customer & Branch Analytics

Transforming operational data into strategic intelligence across 10,000 customers, 40 branches, and 3 years of performance metrics

Project Scope & Dataset

Customer Records

~10,000 customer profiles with demographics and behavior patterns

Transaction Data

~10,000 transactions analyzed for trends and patterns

Branch Network

40 branches evaluated for performance and efficiency

Time Period

2022–2025 comprehensive analysis

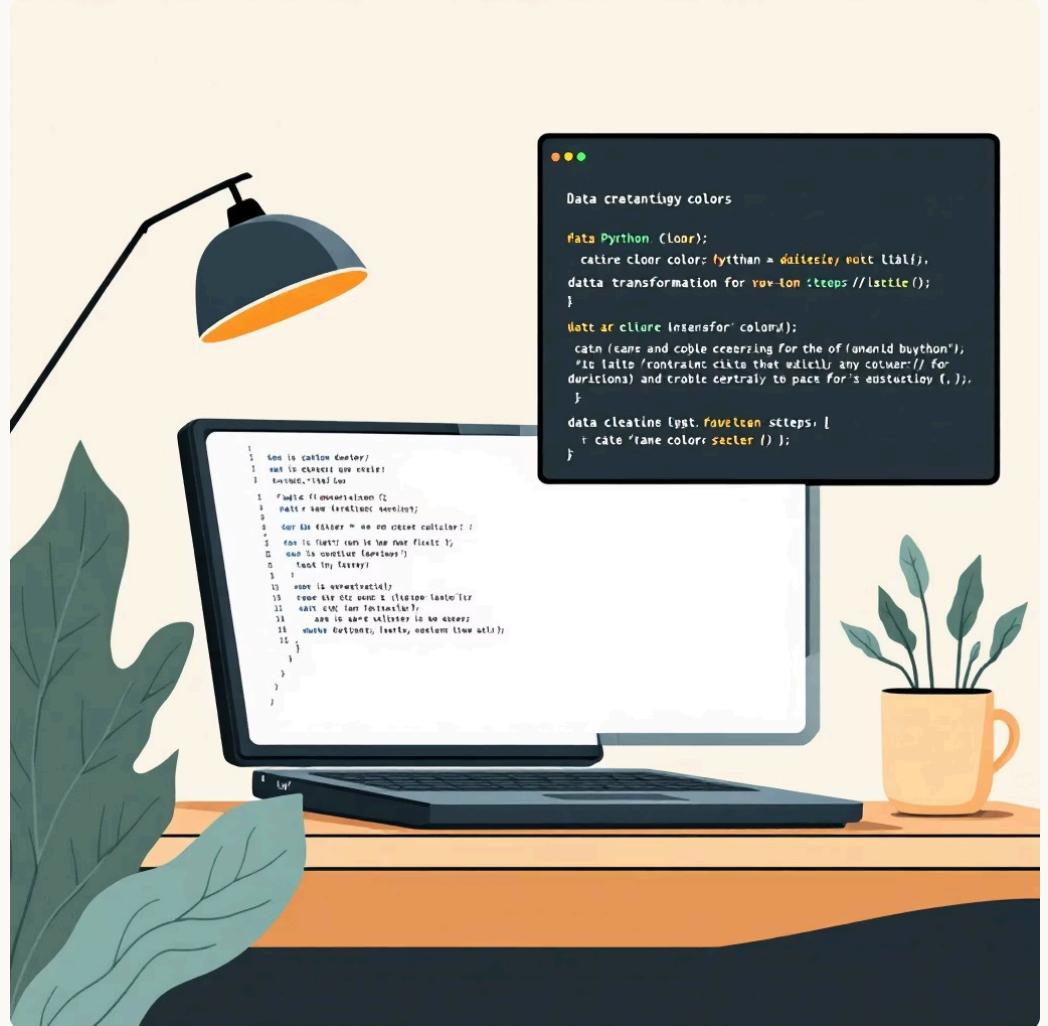
Complete end-to-end analytics workflow combining data cleaning, SQL analysis, and Power BI visualization to deliver decision-ready intelligence.

Data Preparation & Cleaning

Python-Powered Transformation

Rigorous data preparation ensured accuracy and consistency:

- Handled missing values and corrected datatypes
 - Removed duplicates and standardized formats
 - Created derived fields: Age Group, Total Balance
 - Merged datasets into unified cleaned.csv





Key Transaction Insights

3

Customer Types

Business, Individual, and Employee segments analyzed for transaction patterns

10

Business Questions

SQL queries answered critical operational and strategic questions

4

Investment Types

MF, RD, FD, and Savings analyzed for contribution and demand

Customer & Branch Performance



Age Group Distribution

Ages 36–45 and 60+ represent key customer segments requiring tailored services



Geographic Concentration

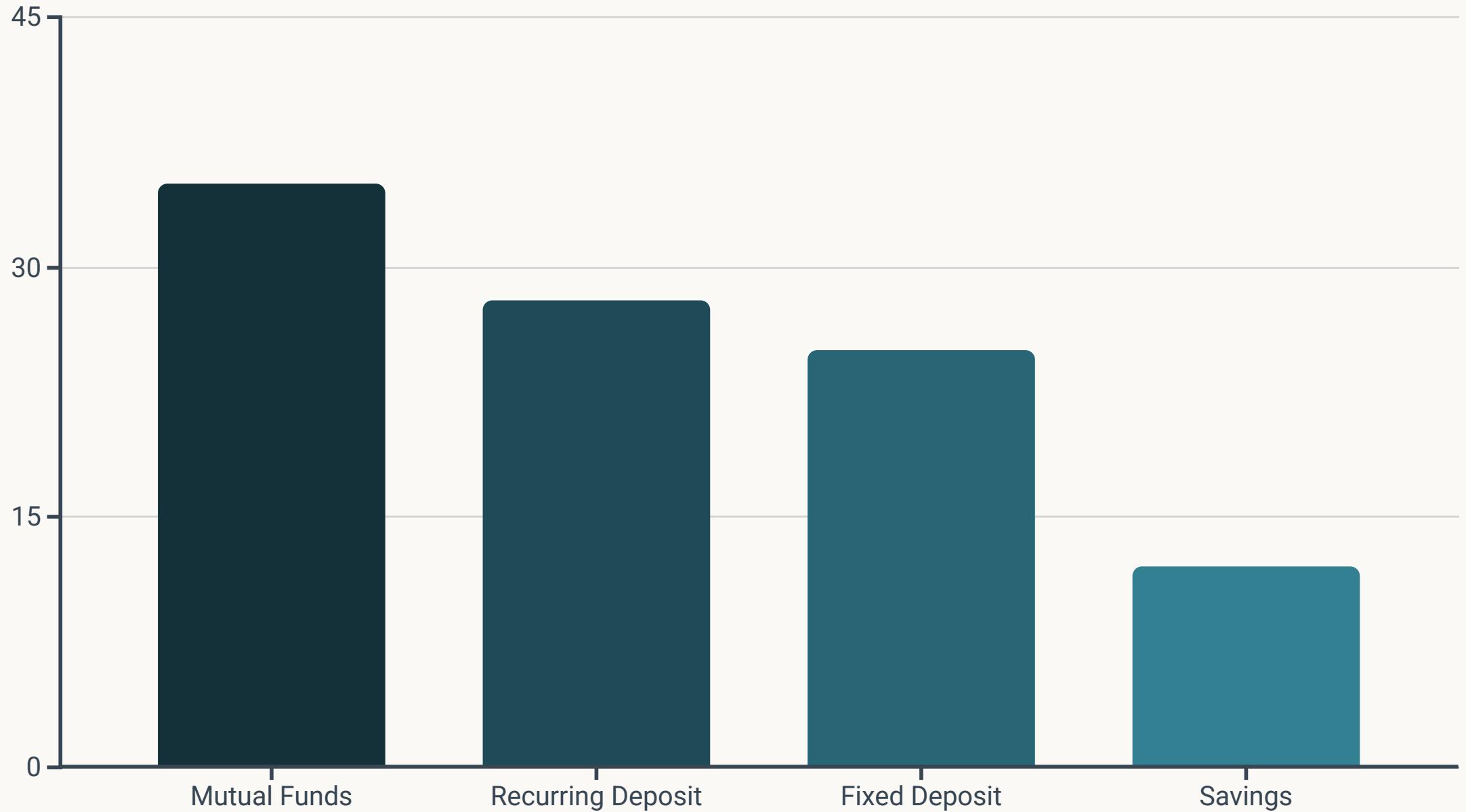
Pune and Mumbai drive highest transaction values across branch network



High-Value Customers

Top 10 customers identified for enhanced engagement and retention strategies

Investment Product Performance



Mutual Funds, RD, and FD dominate investment preferences, indicating strong demand for structured savings products.

Power BI Dashboard Overview

01

KPI Cards

Real-time metrics for transactions, customers, and revenue

02

Trend Analysis

Monthly transaction patterns and volume tracking

03

Branch Performance

Scatter plots revealing efficiency and revenue relationships

04

Customer Segmentation

Visual breakdown by demographics and behavior



Strategic Recommendations

Customer Engagement

Strengthen relationships with high-value customers through personalized services and exclusive benefits

Geographic Focus

Allocate resources to high-revenue cities: Pune and Mumbai for maximum ROI

Operational Efficiency

Optimize branches with high expenses to improve profitability margins

Product Strategy

Promote high-demand investments (MF, RD, FD) and tailor services for ages 36–45 and 60+

Segmentation Enhancement

Refine strategies for Business, Individual, and Employee categories based on behavior patterns