FinTech Business & Customer Performance Dashboard

Project Requirements Document

Project Objective

To analyze customer behavior, financial performance, and loan portfolio health for a digital banking or fintech company. The goal is to create an executive-style Tableau dashboard that helps stakeholders monitor revenue growth, customer acquisition and retention, transaction activity, and loan quality.

Data Sources

Table	Description	Key Fields
fintech_customers_messy.csv	Customer demographics & acquisition info	customer_id, signup_date, region, acquisition_ch
fintech_transactions_messy.csv	Transaction activity per customer	transaction_id, customer_id, transaction_datetim
fintech_loans_messy.csv	Loan portfolio details	loan_id, customer_id, principal, interest_rate_ann

Data Model

Relationships (not joins) on customer_id. Customers is the primary table, with Transactions and Loans as one-to-many related tables.

Data Cleaning & Preparation Tasks

Area	Task	Tableau Approach
Dates	Mixed formats (dd/MM/yyyy, yyyy-MM-dd)	Use DATEPARSE() logic
Text	Standardize region, account_type, channel	UPPER(TRIM()), group aliases
Nulls	Handle missing age, fee, amount	ZN() or IFNULL()
Duplicates	Customers & transactions	COUNTD() or LODs to deduplicate
Outliers	Large amount or negative interest	Filter or cap using parameters
Derived Fields	Revenue, cohort month, churn flag	Calculated fields

Key Metrics / KPIs

Customer & Growth

Total Customers, Active Customers, New Customers by Month, Churn Rate, Average Credit Score, Distribution by Region / Account Type / Channel.

Transactions & Revenue

Total Transaction Value, Total Fee Revenue, Estimated Total Revenue, ARPU, Transaction Type Mix, Top Merchant Categories, Currency Mix.

Loan Portfolio & Risk

Total Loans Disbursed, Average Interest Rate, Loan Status Breakdown, Non-Performing Loan (NPL) Ratio, Delinquency Bucket Distribution, Average Credit Score by Loan Status.

Dashboard Structure

Dashboard	Purpose	Main Visuals
Executive Overview	Business summary for leadership	KPI cards, revenue trend, map, pie chart
Customer & Transactions	Behavior & revenue sources	Transaction type bar chart, cohort analysis, monthly tren
Loan Performance	Credit risk & loan health	Loan status bars, NPL trend, scatter plot, regional summ

Advanced Calculated Fields

Field	Formula	Description
Revenue	ZN([fee]) + IF [transaction_type]='card_spend' THEN [amount]*0.005 ELSE 0 END	Simulated revenue driver
Signup Month	DATETRUNC('month',[signup_date_parsed])	For cohort analysis
Customer Age Group	IF [age]<25 THEN '18-24' ELSEIF [age]<35 THEN '25-34' ELSEIF [age]<45 THEN '35-44' ELSE '45+'	Demographic segmentation
Active Customer Flag	IF DATEDIFF('day',[Last Transaction Date],TODAY())<=90 THEN 1 ELSE 0 END	Retention measure
NPL Ratio	SUM([npl_flag]) / COUNT([loan_id])	Portfolio quality metric

Deliverables

1. Tableau workbook (.twb or .twbx) with 3 dashboards.
2. 1-page summary of business insights and recommendations.
3. Optional Tableau Public post or LinkedIn showcase with screenshots.

Expected Learning Outcomes

- Data modeling with relationships.
- Data cleaning inside Tableau.
- Building calculated fields & KPIs.
- Creating multi-view dashboards.
- Business storytelling in finance analytics.