UPI Transaction Analysis Dashboard

Project Objective

The main objective of this project is to analyze UPI transaction data to gain insights into user behavior, regional performance, transaction efficiency, and merchant engagement.The dashboard will help stakeholders understand transaction trends, identify operational bottlenecks, and improve decision-making through data-driven insights.

Business Problem / Opportunity

The growing adoption of digital payments has led to massive UPI transaction volumes across regions, banks, and categories. However, decision-makers lack a unified view of:

- Transaction success and failure trends
- Regional and merchant performance
- Behavioral insights across user demographics and device types

This dashboard presents an opportunity to consolidate these insights into a single, interactive Power BI platform to drive strategic actions and improve system efficiency.

Target Audience

Business Analysts – For trend identification and decision support
Operations & Fraud Teams – For monitoring failed or risky transactions
Banking Partners – For understanding transaction performance
Executives / Management – For performance overview and planning

Scope

Dashboard with five key analysis pages:

1. Transaction Overview
2. Performance Analysis
3. Fraud Analysis
4. Regional & User Behavior
5. Recommendations & Actions

Interactive filters (date, state, merchant, device type, etc.)
Key KPIs and performance metrics
Data normalization in PostgreSQL

Data Source(s)

Size

30.51 MB

Source

kaggle.com

Type

CSV

Key Metrics / KPIs

- Total Transactions
- Total Amount (₹)
- Successful Transactions (%)
- Failed Transactions (%)
- Average Transaction Amount
- Top Performing States

Deliverables

Choose dataset ,load to power Bi and document business requirements

Assess dataset & clean data

Document functional requirements & create dashboard mockups

Build Power BI dashboard & data model (draft)

Finalize dashboard & data model, export reports, prepare Analysis Report & README

Timeline / Milestones (5-Day Plan)

Day	Task
Day 1	Dataset Understanding
Day 2	Cleaning, PostgreSQL Normalization & Table Creation
Day 3	Power BI Connection & DAX Measures
Day 4	Dashboard Design (Pages 1–5)
Day 5	Final Touches

Notes / Assumptions

Data is static and represents historical transactions.

Merchant categories and states derived from normalized lookup tables.

All calculations are based on completed transactions only.

Dashboard visuals are designed for management and analytical decision-making, not operational monitoring.
Power BI is used for visualization; PostgreSQL serves as the main data model backend.