

PhonePe Pulse Data Visualization and Analysis

1 Project introduction

Description:

In the digital age, money moves faster than ever—and nowhere is this more visible than in India's UPI ecosystem. PhonePe, a front-runner in digital payments, has opened up a goldmine of public transaction data through its **Pulse platform**

2 Project Objective

- 1 Analyzing digital payment trends across states and districts
- 2 Measuring user activity, growth, and retention behavior
- 3 Comparing high-performing and low-performing regions
- 4 Understanding category-wise usage of UPI payments
- 5 Identifying mobile brand influence on transaction patterns
- 6 Highlighting gaps in digital adoption and usage
- 7 Delivering practical, data-backed recommendations for improvement

3 Data Sources & Categories

- 1 Aggregated Data: State -> Year -> Quarter
- 2 Map Data: District-level registered users, app opens, transactions.
- 3 Top Data: Rankings by volume/value and user registration.

4 Key Findings

- 1 Maharashtra had the highest transactions (5.2B+) and value (₹12.5L Cr+).
- 2 Nagaland had the lowest usage (~8L transactions, ₹250 Cr).

3 Urban areas show strong UPI adoption.

5 Problems statement

1 Poor insurance usage

2 Low rural adoption

3 Complex JSON formats

6 Solutions

1 Promote UPI awareness in low-use regions

2 Give offers for less-used categories

3 Partner with mobile brands for app reach

4 Improve user retention with reminders/offers

5 Fix app issues and avoid downtime

7 Tools used

Python, Pandas, PostgreSQL, Streamlit, Plotly express.

8 Conclusion

This project offers meaningful insights into India's digital payment landscape, highlighting regional trends and opportunities through PhonePe Pulse data.