PhonePe Pulse – Business Intelligence Summary

Project: Visualizing Digital Payment Patterns in India
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Built With: Python, Streamlit, Plotly and Pandas

1. About the Project

This project investigates regional digital payment trends using PhonePe Pulse's publicly available dataset. An interactive dashboard was built to visualize quarterly data across Indian states, districts, and device brands.
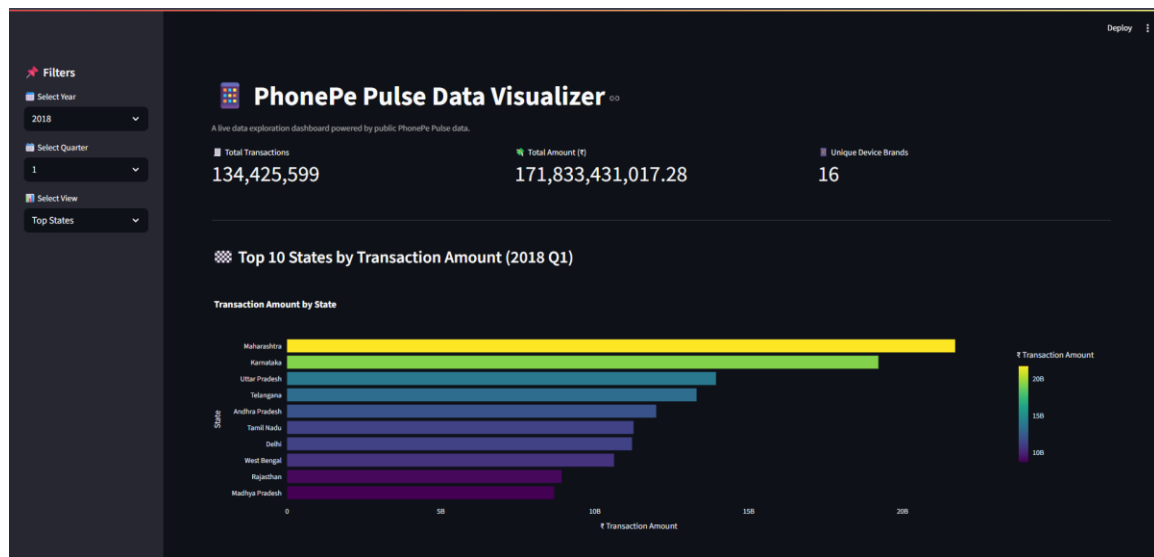
2. Data Sources

• state_transaction_data.csv – Transactions by state and quarter
• district_transaction_data.csv – District-level breakdowns
• state_user_device_data.csv – Smartphone brand usage patterns

3. Technical Implementation

The dataset was parsed from GitHub-hosted JSON files using Python. CSV conversions were performed, and the interactive dashboard was designed using Streamlit. Plotly Express was used to generate responsive and clean visualizations.

4. Dashboard Demonstration

Below is a screenshot of the dashboard (2018 Q1, Top States view):

5. Key Findings

• Maharashtra dominated in Q1 2018, with the highest transaction value.
• Karnataka, UP, and Telangana followed.
• Western and Southern states show stronger UPI engagement.
• Mobile brand usage is highly concentrated among Android manufacturers.

6. Actionable Insights

• Focus business expansion efforts in growing regions like Telangana and Tamil Nadu.
• Leverage brand popularity data to drive device-based targeting.
• Develop regional language support and offers for Tier-2 cities.

7. Attachments

• Dashboard screenshots
• Processed CSVs
• Project repository link