PhonePe Transactions Analysis Dashboard

An in-depth analysis of digital payment trends using the PhonePe Pulse dataset, designed to provide actionable insights for business stakeholders.



Project Overview

Objective

To analyse PhonePe transaction trends and user behaviour across various Indian states, identifying key patterns and opportunities.

Data Source

Utilising the rich and comprehensive PhonePe Pulse GitHub dataset, specifically 'aggregated_transaction' and 'aggregated_user' files.

Key Deliverables

Development of an interactive dashboard for visualising transaction and user engagement metrics, enabling data-driven decisions.

Technology Stack



Python

The core programming language for data manipulation and backend logic.



SQLite

For efficient storage and retrieval of cleaned, structured data.



Seaborn & Pandas

Essential libraries for data analysis and compelling visualisations.



Streamlit

For creating an interactive and user-friendly web application dashboard.



Google Colab & Ngrok

Enabling cloud-based development and live deployment of the dashboard.

Dashboard Features

Interactive Filters

Users can dynamically filter data by state, year, and quarter to drill down into specific trends.

Transaction Visuals

Bar charts illustrate transaction count and total amount, providing a clear view of payment volumes.

User Metrics

Key statistics on app opens and registered users offer insights into user adoption and engagement.



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13 Transstemed	10%	8.9%
14 Transsleged	11%	9.7%
18 Transstetons	10%	8.1%
10 Transalemed	15%	9.7%
18 Transsfemed		
13 Transsiemed	16%	4.7%



State-wise Transaction Insights

This section displays a heatmap offering a granular view of transaction amounts across Indian states over different years.

The heatmap clearly highlights regions with high and low digital payment activity, crucial for targeted business strategies.

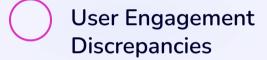
Key Insights from Analysis

High Transaction Volumes

States such as Andhra Pradesh and Bihar consistently exhibit the highest transaction volumes, indicating strong digital payment adoption.



Merchant payments and peer-topeer (P2P) transactions form the majority of PhonePe usage, reflecting key user behaviours.



Despite high user registrations, some states show a noticeable drop in active user engagement, highlighting areas for improvement.

Impact & Future Focus

Strategic Understanding

The dashboard helps stakeholders understand the nuances of digital payment adoption across India.

Business Focus Areas

Identifies specific regions and transaction types for targeted marketing and product development efforts.

Informed Decisions

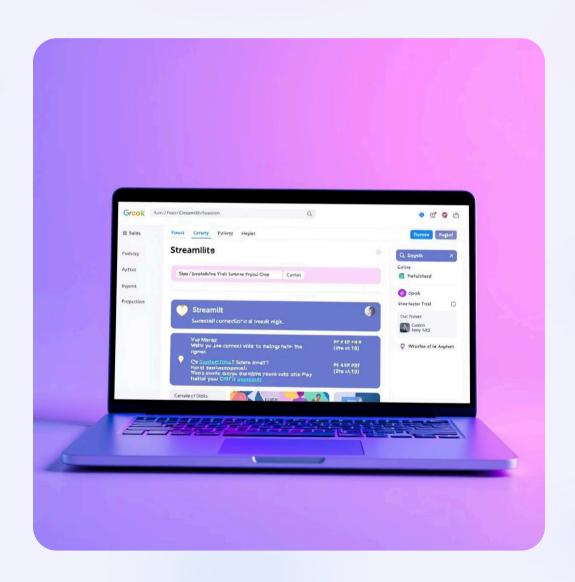
Provides data-driven insights to refine business strategies and enhance user experience.

Deployment & Accessibility

The PhonePe Transactions Analysis Dashboard is live and accessible, ensuring continuous monitoring and analysis of digital payment trends.

Live Streamlit App

Hosted via Google Colab, making the dashboard available for real-time interaction.



Utilising **ngrok** for secure tunneling, the application provides a seamless and responsive user experience from any web browser.