**Objective**

The primary objective of the project is to analyze public sentiment on Twitter regarding Quick Commerce apps such as Blinkit, BigBasket, Zepto, and Swiggy Instamart. This analysis will help understand customer perceptions, identify common issues, and gauge the overall satisfaction level with these services. The insights derived can be useful for businesses to improve their services and for potential investors to assess the market sentiment.

**Methodology**

**1. Data Collection**

* **Twitter API**: Use the Twitter API to collect tweets mentioning the Quick Commerce apps. Keywords and hashtags related to Blinkit, BigBasket, Zepto, and Swiggy Instamart will be used to filter relevant tweets.
* **Time Frame**: Define a specific time frame for the data collection to ensure relevancy (e.g., last 6 months).

**2. Data Preprocessing**

* **Cleaning**: Remove irrelevant data such as advertisements, duplicates, non-English tweets, and retweets.
* **Text Processing**: Convert text to lowercase, remove punctuation, stop words, URLs, and perform stemming or lemmatization.

**3. Sentiment Analysis**

* **Sentiment Labeling**: Use a pre-trained sentiment analysis model (like VADER, TextBlob, or a BERT-based model) to classify tweets into positive, negative, or neutral sentiments.
* **Sentiment Scoring**: Assign scores to tweets to quantify sentiment (e.g., +1 for positive, -1 for negative, 0 for neutral).

**4. Topic Modeling (Optional)**

* **LDA (Latent Dirichlet Allocation)**: Identify common topics or themes within the tweets to understand what specific aspects users are discussing (e.g., delivery speed, product quality, customer service).

**5. Data Visualization**

* **Graphs and Charts**: Visualize the distribution of sentiments over time, comparison between different apps, word clouds for frequently mentioned terms, and trends in topics.
* **Dashboards**: Create interactive dashboards using tools like Tableau or Power BI for a dynamic representation of the data.

**6. Analysis and Insights**

* **Comparative Analysis**: Compare the sentiment scores and topics of different Quick Commerce apps.
* **Trend Analysis**: Identify any trends or patterns in customer sentiment over the selected time frame.
* **Customer Feedback**: Highlight common issues and positive feedback to provide actionable insights for the businesses.

**Summary**

This project aims to perform a comprehensive sentiment analysis on tweets about Quick Commerce apps like Blinkit, BigBasket, Zepto, and Swiggy Instamart. The methodology involves collecting relevant tweets using the Twitter API, preprocessing the data to clean and prepare it for analysis, and employing sentiment analysis techniques to classify the sentiment of the tweets. Optionally, topic modeling can be conducted to uncover common themes discussed by users.