Airline Sentiment Intelligence ETL Data Pipeline

DSCI-6007-02

Team 3



OUR TEAM



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Business Problem

We are the data engineering team managing the branding for a popular airline, JetBlue. JetBlue is a leading airline that wants to understand how customers perceive their brand based on Twitter discussions. Our task is to determine public sentiment towards JetBlue and identify the key factors that drive positive or negative customer experiences.



Our Proposed Solution



• Develop an ETL pipeline that ingests, processes, and analyzes tweets.



• Store raw and processed data securely using AWS.



• Perform sentiment analysis to classify tweets as Positive, Negative, or Neutral.

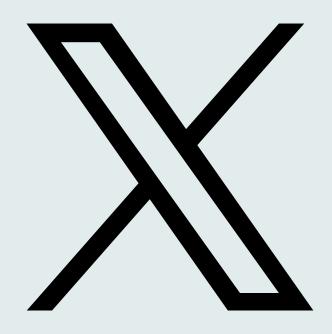


• Use data visualization tools to present insights.



Data Source

Used Twitter API to fetch tweets mentioning JetBlue.

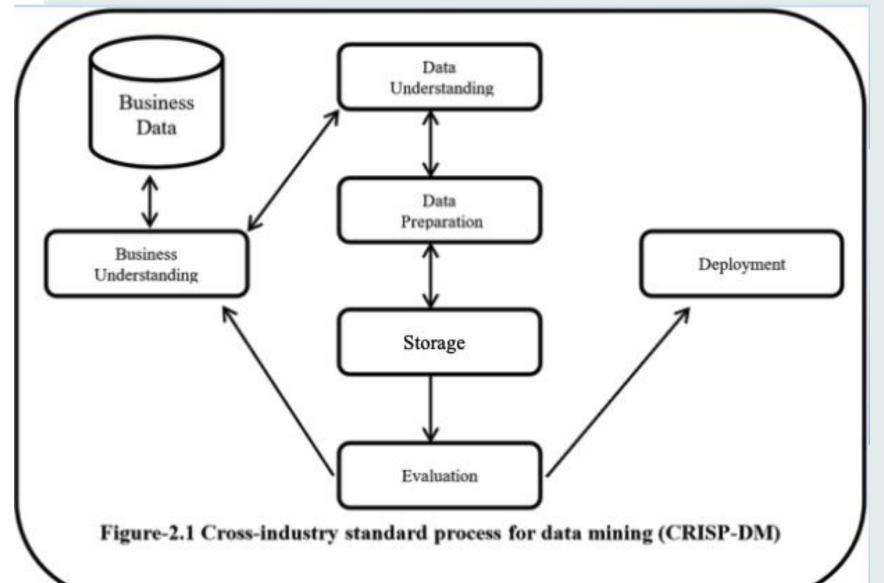


X API

https://developer.twitter.com/en/portal/dashboard



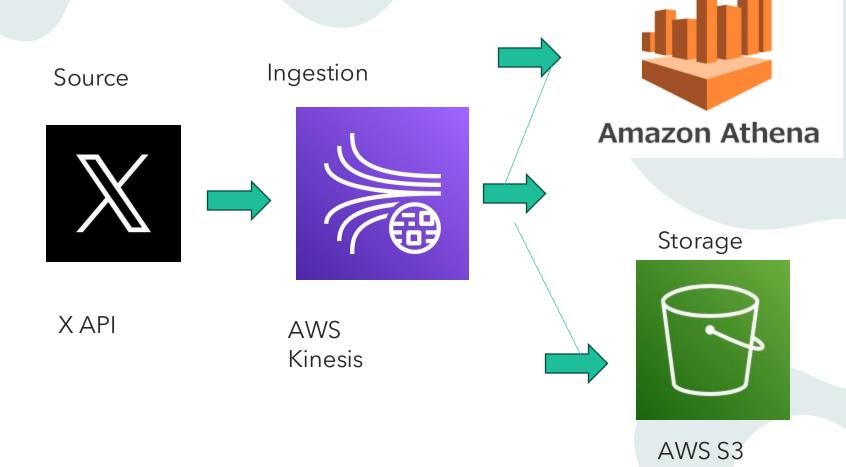
Crisp-DM Methodology

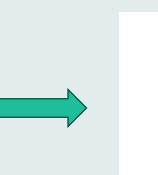




Tools & Project Flow

Processing









Summary & Next Steps

1

• Built an ETL pipeline for sentiment analysis of JetBlue tweets.

2

• Currently setting up AWS services for processing and storage. 3

• Next Steps: Finalize sentiment analysis model and dashboard visualization.

