

Internship Report

Intern Name: Monika Suthar

Internship Title: Real-Time Twitter Analytics Dashboard – Power BI

Duration: 01-06-2025 to 01-07-2025

Organization: NULLCLASS

Project: Twitter Analysis Dashboard

1. Introduction

This report outlines my internship experience working on the Twitter Analysis Dashboard using Power BI. The project involved importing, transforming, and visualizing Twitter data to uncover patterns in user engagement and media performance. The goal was to enhance my data analysis skills while building an interactive real-time dashboard.

2. Background

Social media platforms like Twitter generate valuable data that can reveal patterns in user engagement, sentiment, and content performance. In this project, a pre-provided Twitter dataset was used to analyze key metrics and trends. Using Power BI, the data was transformed into interactive visuals that offer clear insights. This project demonstrates how social media data can be turned into meaningful business intelligence through visual storytelling.

3. Learning Objectives

- Understand the fundamentals of Power BI and real-time data visualization.
- Gain experience in cleaning and transforming social media data.
- Learn to apply advanced filters using DAX expressions.
- Build custom visualizations based on specific conditions and time constraints.
- Improve problem-solving and independent research skills.

4. Activities and Tasks

- Developed a Twitter dashboard with multiple visuals based on user engagement, sentiment, and media.
- Completed 3 main tasks involving dynamic filtering based on:
 - Engagement rate
 - Tweet length, word count
 - Time of the day (IST)
 - Tweet metadata (date, likes, replies)
- Used DAX to build logic for showing/hiding visuals based on custom conditions.
- Implemented advanced logic such as removing specific words and highlighting tweets by thresholds.

5. Skills and Competencies

Technical Skills:

- Power BI Desktop
- Power Query Editor
- DAX (Data Analysis Expressions)
- Data modeling and transformation

Soft Skills:

- Independent learning
- Time management
- Logical reasoning
- Problem-solving

6. Feedback and Evidence

- All required tasks were completed and validated through a fully functional .pbix dashboard.
- Evidence includes:
 - GitHub repository with .pbix file
- The project was self-driven with the use of online documentation and resources.
- Screenshots are available in the repository.

7. Challenges and Solutions

- **Time-based conditional visuals:** Required dynamic filtering using system time; resolved using DAX time checks and role-playing dimensions.
- **Tweet content filtering:** Managed word-level filtering using string functions.

8. Outcomes and Impact

- Created a Power BI dashboard that can analyze Twitter data in real time.
- Learned how to combine time-based and data-based filtering techniques.
- Improved fluency with DAX and Power BI visuals.
- Gained experience managing a full BI workflow — from data ingestion to deployment.

9. Conclusion

This internship provided a valuable learning opportunity to build real-time dashboards using Power BI. I enhanced my technical skills, practiced working independently, and created a project that reflects real-world data challenges. The experience has strengthened my understanding of business intelligence and data storytelling.