**Data Analyst Internship Report**

**Introduction:**

This document serves as the official report for my internship, highlighting the key activities, challenges, and learnings during my tenure. My primary responsibilities involved leveraging Power BI for data visualization and analysis, particularly focusing on Twitter data insights.

**Background:**

The internship focused on Twitter sentiment analysis and engagement metrics visualization. The goal was to analyze tweet interactions, such as likes, retweets, and media engagement, to derive actionable insights.

**Learning Objectives:**

* Master Power BI for data visualization and analysis.
* Enhance skills in data filtering, transformation, and categorization.
* Develop interactive dashboards with real-time constraints.
* Gain experience in handling large datasets for meaningful insights.

**Activities and Tasks:**

Throughout the internship, I worked on the following tasks:

**Task 1: Pie Chart for Click Proportions**

* Filtered tweets with more than 500 impressions.
* Visualized URL clicks, profile clicks, and hashtag clicks.
* Implemented a drill-down feature for per-tweet analysis.

**Task 2: Top 10 Tweets Analysis**

* Identified top tweets based on retweets and likes.
* Excluded tweets posted on weekends.
* Ensured tweet impressions were even and dates were odd.
* Applied a time-based visibility rule (3 PM – 5 PM IST).

**Task 3: Engagement Rate Trend Line Chart**

* Calculated monthly engagement trends.
* Differentiated between tweets with and without media.
* Filtered tweets where engagement rate was even and date was odd.
* Removed words containing the letter 'C' from tweet text.
* Applied time-based visibility (7 AM – 11 AM & 3 PM – 5 PM IST).

**Skills and Competencies:**

* **Technical Skills:** Power BI, Data Cleaning, Data Transformation, Data Visualization.
* **Analytical Skills:** Data filtering, categorization, and trend analysis.
* **Problem-Solving:** Debugging Power Query errors, handling visibility constraints.
* **Communication:** Documenting tasks, explaining dashboard insights.

**Feedback and Evidence:**

* Successfully developed interactive dashboards.
* Improved data filtering and visualization techniques.
* Received positive feedback on dashboard usability and insights.
* Shared screenshots of completed dashboards as evidence.

**Challenges and Solutions**

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| | **Challenge** | **Solution** | | --- | --- | | Errors in Power Query | Used debugging techniques and built-in functions | | Issues with time-based visibility | Applied correct page visibility settings | | Handling missing data | Used Power Query data cleaning methods | | Filtering specific tweet conditions | Created custom transformation rules | |

**Outcomes and Impact:**

* Gained hands-on experience with Power BI.
* Developed dynamic dashboards with interactive features.
* Strengthened skills in data analytics and visualization.
* Improved problem-solving and analytical thinking capabilities.

**Conclusion:**

My internship provided valuable exposure to data analytics and visualization using Power BI. I successfully managed, transformed, and presented data insights effectively. The skills and experience gained will be beneficial for future roles in data science and business intelligence.