

Documentation for London Bike Rides Report

1. Report Overview

- Title: London Bike Rides Analysis
- Objective: The report aims to analyze bike ride data in London to identify trends, peak usage times, and factors influencing bike rides.

2. Data Sources

- Data File: The primary data source is contained within the Tableau workbook file named `London-Bike-Rides.twb`.
- Data Description: The dataset includes information such as ride duration, start and end locations, user type (subscriber or customer), and timestamps.
- Key metrics include total rides, average duration, and usage patterns over time.

3. Data Preparation

- **Cleaning Process:**
 - Removed duplicates to ensure accuracy.
 - Handled missing values by applying appropriate imputation methods.
- **Transformations:**
 - Created calculated fields such as ride duration in minutes and day of the week from timestamps for better analysis.

4. Visualizations

- **Types of Visualizations Used:**
 - Time Series Analysis: Line charts to show trends in bike usage over time.
 - Heat Maps: To visualize peak usage times by hour and day.
 - Bar Charts: To compare usage between different user types (subscribers vs. customers).
- **Key Insights:**
 - Identification of peak hours for bike usage.
 - Comparison of ride durations between different user types.

5. Dashboard Design

- The dashboard is designed for user interactivity, allowing stakeholders to filter data by date range, user type, and specific locations.
- Key performance indicators (KPIs) are prominently displayed for quick reference.

6. Findings and Recommendations

- Findings:

- Peak bike usage occurs during weekday mornings and evenings.
- Subscribers tend to take longer rides compared to customers.

- Recommendations:

- Consider increasing bike availability during peak hours to meet demand.
- Implement targeted marketing strategies for customer users based on ride patterns.

7. Future Work

- Suggestions for future analysis include:

- Integrating weather data to assess its impact on bike usage.
- Exploring demographic data to understand user behavior better.

8. Conclusion

- The London Bike Rides report provides valuable insights into bike usage patterns that can inform operational decisions and enhance user experience.