Project Requirements Document: Cyclistic

BI Analyst: Mai Nguyen

Client/Sponsor: Jamal Harris, Director, Customer Data

Purpose:

To inform next year's business plan, the Customer Growth Team will analyze customer ride data to understand bike usage and demand. The primary objective is to identify high-demand station locations to guide resource allocation and strategic growth. We will develop an executive dashboard that synthesizes millions of ride records into key performance indicators. This tool will provide leadership with a clear, aggregated view of customer behavior, ensuring that our strategic decisions are driven by robust data insights.

Key dependencies:

This project will require a dataset of customer data, so the Director of Customer Data, Jamal Harris, will need to approve the request. Approval should also be given by the teams that own specific product data including bike trip duration and bike identification numbers to validate that the data is being interpreted correctly. The primary contacts are Adhira Patel, Megan Pirato, Rick Andersson, and Tessa Blackwell.

Stakeholder requirements: (List the established stakeholder requirements, based on the Stakeholder Requirements Document. Prioritize the requirements as: R - required, D - desired, or N - nice to have.)

In order to continuously improve and effectively market products, the dashboard must help Cyclistic decision-makers understand how their customers are using the bikes and the demand at different locations, including factors that might influence that demand at different times.

- A table or map visualization exploring starting and ending station locations, aggregated
- by location. R
- A visualization showing which destination (ending) locations are popular based on the total trip minutes. R
- A visualization that focuses on trends from the summer of 2015. D
- A visualization showing the percent growth in the number of trips year over year. R
- Gather insights about congestion at stations. N
- Gather insights about the number of trips across all starting and ending locations. R

- Gather insights about peak usage by time of day, season, and the impact of weather. R

Success criteria: (Clarify what success looks like for this project. Include explicit statements about how to measure success. Use SMART criteria.)

Specific: BI insights must clearly identify the specific characteristics of a successful product. They must demonstrate how customers are currently using bikes and what impacts demand at station locations. **Measurable:** Each trip should be evaluated using starting and ending location, duration, variables such as time of day, season, and weather. For example, do customers use Cyclistic less when it rains? Or does bikeshare demand stay consistent? Does this vary by location and user types (subscribers vs. non-subscribers)? **Action-oriented:** These outcomes must prove or disprove the theory that location, time, season, and weather impact user demand. Then, the Cyclistic team will use this knowledge to refine future product development. **Relevant:** All metrics must support the primary question: How can we build a better Cyclistic experience? **Time-bound:** Analyze data that spans at least one year to see how seasonality affects usage. Exploring data that spans multiple months will capture peaks and valleys in usage.

User journeys: (Document the current user experience and the ideal future experience.)

Assumptions: (Explicitly and clearly state any assumptions you are making.)

Compliance and privacy:

The data must not include any personal info (name, email, phone, address). Personal info is not necessary for this project. Anonymize users to avoid bias and protect their privacy.

Accessibility:

The datasets will include customer (user) data, which Jamal will need to approve. Also the project might need approval by the teams that own specific product data, including

bike trip duration and bike identification numbers. So I need to make sure that stakeholders have data access to all datasets.

Roll-out plan:

- Week 1: Dataset assigned. Initial design for fields and BikeIDs validated to fit the requirements.
- Weeks 2–3: SQL and ETL development
- Weeks 3–4: Finalize SQL. Dashboard design. 1st draft review with peers.
- Weeks 5–6: Dashboard development and testing