Project Requirements Document: Cyclistic

BI Analyst: Burhan Uddin

Client/Sponsor: Jamal Harris, Director, Customer Data

Purpose: (Briefly describe why the project is happening and why the company should invest resources in it.)

Cyclistic's Customer Growth Team is creating a business plan for next year. The team wants to understand how their customers are using their bikes; their top priority is identifying customer demand at different station locations. The dataset includes millions of rides, so the team wants a dashboard that summarizes key insights. Business plans that are driven by customer insights are more successful than plans driven by just internal staff observations. The executive summary must include key data points that are summarized and aggregated in order for the leadership team to get a clear vision of how customers are using Cyclistic.

Key dependencies: (Detail the major elements of this project. Include the team, primary

contacts, and expected deliverables.)

Jamal Harris, Director, Customer Data, will approve datasets. The project may require approval by different teams at Cyclistic for different kinds of data to be handed for the purpose of the BI project.

Primary contacts: Adhira, Megan, Rick, and Tessa.

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.)

1. R: A table or map visualization exploring starting and ending station locations, aggregated by location. This should show the number of trips at starting

locations.

2. R: A visualization showing which destination (ending) locations are popular based on the total trip minutes.
3. D: A visualization that focuses on trends from the summer of 2015.
4. D: A visualization showing the percent growth in the number of trips year over year.
5. N: Gather insights about congestion at stations.
6. R: Gather insights about the number of trips across all starting and ending locations.
7. D: Gather insights about peak usage by time of day, season, and the impact of weather.

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.)

Cyclistic aims to provide customers a great bike-sharing experience. Digging into customer ride sharing trends will help the growth team to understand how current customer base is using Cyclistic`s bikes and how the company can further improve the bike-sharing experience for customers.

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

1. The weather data provided does not include what time precipitation occurred; it's possible that on some days, it precipitated during off-peak hours. However, for the purpose of this dashboard, I should assume any amount of precipitation that occurred on the day of the trip could have an impact.
2. Starting bike trips at a location will be impossible if there are no bikes available at a station, so we might need to consider other factors for demand.

Compliance and privacy: (Include compliance, privacy, or legal dimensions to consider.)

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.

Accessibility: (List key considerations for creating accessible reports for all users.)

Dashboard must be accessible. Must have large print and text-to-speech alternatives.

Roll-out plan: (Detail the expected scope, priorities and timeline.)

The project has to be completed in 6 weeks with a BI tool available for stakeholders to gain customer insights.

- 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