Project Requirements Document: Cyclistic

BI Analyst: Alan

Client/Sponsor: Jamal Harris, Director, Customer Data

Purpose: The goal of this project is to get an overview of Cyclistic's current reach, and to expand its customer base. Stakeholders will primarily be interested in using the dashboard to understand customer wants, aspects of a successful product, and how new stations may be able to alleviate demand problems in busier areas. As well, they would like to understand how the current line of bikes is being used across different users (e.g. subscribers vs non-subscribers). Using this information, they can uncover user tendencies, as well as trends across locations, and strategize how to grow its customer base (e.g. market towards non-subscribers with promotional deals)

Key dependencies:

Team members:

- Adhira Patel, API Strategist
- Megan Pirato, Data Warehousing Specialist
- Rick Andersson, Manager, Data Governance
- Tessa Blackwell, Data Analyst
- Brianne Sand, Director, IT
- Shareefah Hakimi, Project Manager

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

- Ensure that stakeholders have access to all datasets, since teams that own specific datasets will need to approve of their use

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.)

- A table or map visualization exploring starting and ending station locations, aggregated by location. I can use any location identifier, such as station, zip code, neighborhood, and/or borough. This should show the number of trips at starting locations. **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**

Success 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: As the goal of this project is to gain a deeper understanding of how customers use the Cyclistic bike system, a deeper investigation should allow us to uncover more insights and work towards improving user experience

Assumptions:

- Additional information regarding location, such as zip, neighbourhood, etc will be provided in another dataset (supports normalization)
- Time of precipitation is not recorded, but we must assume that any precipitation that did occur did indeed affect customer's willingness to ride

- 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: The data must not include any personal data such as name, email address, phone number, or physical address. The user provides this data as part of their device activation but is not necessary for this project. It is paramount that the users be anonymized to avoid any bias.

Accessibility: According to Sara, the dashboard must have large font size, and text-to-speech alternatives for those that have accessibility requirements

Roll-out plan:

- Week 1: Dataset assigned. Initial design for fields and BikeIDs validated to fit 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