Stakeholder Requirements Document: Cyclistic BI Dashboard

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Client/Sponsor: Sara Romero, VP, Marketing

Business Problem

Cyclistic, a fictional bike-share company in New York City, is working to expand its customer base. The Customer Growth Team needs to understand how customers use their bikes to make data-driven business decisions. The primary objectives are:

- Identifying customer demand at different station locations.
- Understanding customer usage patterns, including differences between subscribers and non-subscribers.
- Analyzing station congestion and peak usage times.
- Using customer insights to plan for new station locations and optimize existing ones.
- Evaluating the impact of weather and seasonality on bike usage.

Stakeholders

1. **Sara Romero** - VP, Marketing (Project Sponsor)
2. **Ernest Cox** - VP, Product Development
3. **Jamal Harris** - Director, Customer Data
4. **Nina Locklear** - Director, Procurement
5. **Adhira Patel** - API Strategist
6. **Megan Pirato** - Data Warehousing Specialist
7. **Rick Andersson** - Manager, Data Governance
8. **Tessa Blackwell** - Data Analyst
9. **Brianne Sand** - Director, IT
10. **Shareefah Hakimi** - Project Manager

Primary Contacts: Adhira Patel, Megan Pirato, Rick Andersson, Tessa Blackwell

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Stakeholder Usage Details

- **Marketing Team (Sara Romero & Team):** Uses insights from customer behavior to tailor marketing campaigns and encourage ridership growth.
- **Product Development (Ernest Cox & Team):** Leverages data to enhance bike-sharing product offerings and user experience.
- **Customer Data & IT Teams (Jamal Harris, Brianne Sand):** Ensure data accessibility, governance, and integration with existing infrastructure.
- **Procurement & Logistics (Nina Locklear & Team):** Uses station congestion data to determine fleet distribution and new station placements.
- **BI Team (Adhira, Megan, Rick, Tessa):** Develops and maintains the dashboard, ensuring it meets accessibility and analytical needs.

Primary Requirements

1. **Dashboard Features:**
   - A **map or table visualization** to analyze trip start and end locations.
   - A **visualization of popular ending locations** based on trip duration.
   - A **trend analysis** for summer 2015 to identify seasonal usage patterns.
   - A **year-over-year growth analysis** to evaluate Cyclistic's expansion.
   - A **congestion insights feature** to determine net bike availability per station.
   - A **time-based analysis** of peak usage by time of day, season, and weather conditions.
2. **Data Requirements:**
   - **Primary dataset:** NYC Citi Bike Trips
   - **Secondary dataset:** Census Bureau US Boundaries (to enrich geographic insights)
   - **Weather data:** Integrated to assess how precipitation impacts ridership.
   - **Geospatial data:** Latitude/longitude of stations, with additional geographic aggregation such as borough or neighborhood.

3. **Accessibility Requirements:**
   - Dashboard must include **large print and text-to-speech alternatives**.
4. **Data Privacy & Compliance:**
   - No personal information (name, email, phone, address) should be included.
   - Data should be anonymized to avoid bias and ensure privacy protection.
5. **Project Timeline & Success Metrics:**
   - **6-week development timeline**
   - Analyze data from at least **one year** to evaluate seasonality and trends.
   - Provide **insights on customer usage** by segment (subscribers vs. non-subscribers).
   - Ensure **data-driven decision-making** for new station locations.

Access & Rollout Plan

- **Dashboard Viewing Permissions:**
  - Allowed users: Adhira, Brianne, Ernest, Jamal, Megan, Nina, Rick, Shareefah, Sara, Tessa.
  - Dashboard should be **secure but easily accessible** to stakeholders.
- **Development Phases:**
  - **Week 1:** Dataset validation & initial field design.
  - **Weeks 2-3:** SQL & ETL development.
  - **Weeks 3-4:** Dashboard design & first draft review.
  - **Weeks 5-6:** Dashboard testing & finalization.

This document will be updated as additional stakeholder feedback is gathered and new insights are developed.