Project Requirements Document: [Grow Cyclistic's customer base ]

## **BI Analyst:** Marco Morettini

## **Client/Sponsor:** Cyclistic

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

## The purpose of this project is to grow Cyclistic's customer base by understanding how customers are using their bikes and applying customer usage insights to inform new station growth. This project will help the company increase its revenue, market share, and customer loyalty by offering a convenient, affordable, and sustainable transportation option to its customers. The company should invest resources in this project because it aligns with its mission and vision of providing shared bikes for easy travel between stations at different locations.

## **Key dependencies:** (Detail the major elements of this project. Include the team, primary contacts, and expected deliverables.)

## • The team: The project team consists of Adhira Patel, API Strategist; Megan Pirato, Data Warehousing Specialist; Rick Andersson, Manager, Data Governance; Tessa Blackwell, Data Analyst; Brianne Sand, Director, IT; and Shareefah Hakimi, Project Manager. The team is responsible for designing, developing, testing, and deploying the BI tool.

## • The primary contacts: The primary contacts are Adhira, Megan, Rick, and Tessa. They are the main points of communication between the project team and the stakeholders. They are also responsible for gathering and validating the data sources, creating and executing the SQL queries, designing and building the dashboard, and ensuring the quality and accuracy of the BI tool.

## • The expected deliverables: The expected deliverables are a BI dashboard that summarizes key insights from the trip data, a data dictionary that explains the data fields and metrics used in the dashboard, a technical documentation that describes the data sources, queries, and visualizations used in the dashboard, and an executive summary that highlights the main findings and recommendations from the BI tool.

## **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.)

• The dashboard must be accessible, with large print and text-to-speech alternatives. (R)

• The dashboard must include data that spans at least one year to capture seasonality effects. (R)

• The dashboard must include visualizations that explore starting and ending station locations, aggregated by location. (R)

• The dashboard must include visualizations that show which destination locations are popular based on trip duration. (R)

• The dashboard must include visualizations that focus on trends from the summer of 2015. (R)

• The dashboard must include visualizations that show the percent growth in the number of trips year over year. (R)

• The dashboard must include visualizations that calculate the net of start and ending trips per station per day. (R)

• The dashboard must include visualizations that show the number of trips across all starting and ending locations. (R)

• The dashboard must include visualizations that show peak usage by time of day, season, and the impact of weather. (R)

• The dashboard must not include any personal information of customers. (R)

• The dashboard should segment customers by user type (subscriber vs. non-subscriber) and location. (D)

• The dashboard should identify customer preferences and behaviors based on trip data. (D)

• The dashboard should optimize bike availability and distribution across stations. (D)

• The dashboard should forecast customer demand and growth across seasons and locations. (D)

• The dashboard should measure customer satisfaction and retention. (D)

• The dashboard could include additional data sources, such as customer feedback, social media, or competitor analysis. (N)

• The dashboard could include interactive features, such as filters, drill-downs, or alerts. (N)

• The dashboard could include advanced analytics, such as predictive modeling, clustering, or sentiment analysis. (N

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

A possible answer is:

Success criteria: The success of this project will be measured by the following SMART criteria:

• The dashboard will be completed and delivered within 6 weeks from the start date.

• The dashboard will meet all the stakeholder requirements and expectations, as verified by their feedback and approval.

• The dashboard will provide accurate, reliable, and relevant insights from the trip data, as validated by the data quality and governance standards.

• The dashboard will help the customer growth team understand how customers are using their bikes and apply customer usage insights to inform new station growth, as evidenced by the increase in customer base, revenue, market share, and loyalty.

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

The current user experience and the ideal future experience are:

• Current user experience: The customer growth team relies on manual and ad hoc analysis of the trip data, which is time-consuming, error-prone, and incomplete. They have limited visibility into customer demand, preferences, behaviors, and satisfaction. They have difficulty identifying opportunities and challenges for new station growth. They lack a clear and consistent way of communicating their findings and recommendations to the stakeholders and the leadership team.

• Ideal future experience: The customer growth team uses the BI dashboard to access and analyze the trip data in an easy, fast, and comprehensive way. They have full visibility into customer demand, preferences, behaviors, and satisfaction. They can identify opportunities and challenges for new station growth based on data-driven insights. They can communicate their findings and recommendations to the stakeholders and the leadership team in a compelling and concise way.

## **Assumptions:** (Explicitly and clearly state any assumptions you are making.)Some of the assumptions that are made for this project are:

## • The trip data is complete, accurate, and up-to-date.

## • The station data is complete, accurate, and up-to-date.

## • The weather data is complete, accurate, and up-to-date.

## • The stakeholder requirements are clear, consistent, and stable.

## • The BI tool is compatible with the data sources and formats.

## • The BI tool is secure, scalable, and maintainable.

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

Some of the compliance, privacy, or legal dimensions to consider are:

• The project must comply with the company's data policies and standards.

• The project must comply with the city's regulations and agreements on bike sharing.

• The project must comply with the applicable laws and ethics on data protection and privacy.

• The project must not include any personal information of customers or employees.

• The project must anonymize users to avoid bias or discrimination.

• The project must have appropriate security and privacy controls to prevent unauthorized access or modification of the data or the dashboard.

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

• The dashboard must be accessible, with large print and text-to-speech alternatives.

• The dashboard must use clear and simple language and terminology.

• The dashboard must use appropriate colors, fonts, sizes, and contrasts.

• The dashboard must use descriptive titles, labels, legends, captions, and tooltips.

• The dashboard must use meaningful icons, symbols, images, and charts.

• The dashboard must use consistent and intuitive layout and navigation.

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

• Scope: The project scope includes designing, developing, testing, and deploying a BI dashboard that summarizes key insights from the trip data. It also includes creating a data dictionary, a technical documentation, and an executive summary for the BI tool.

• Priorities: The project priorities are based on the stakeholder requirements. The required requirements are the highest priority, followed by the desired requirements, followed by the nice-to-have requirements. Within each category, the requirements are prioritized by their impact on customer growth and satisfaction.

• Timeline: The project timeline is 6 weeks from the start date. It is divided into four phases: planning (1 week), development (2 weeks), testing (1 week), and deployment (2 weeks). Each phase has its own milestones, deliverables, tasks, dependencies, risks, and contingencies.