Project Planning

Stakeholder Requirements Document .

BI Professional: Hind Cherrat .

Client/Sponsor: Jamal Harris, Director, Customer Data .

Business problem: The Customer Growth Team at Cyclistic aims to create a data-driven business plan for the upcoming year. Their focus is on understanding customer behavior to optimize operational efficiency and expand service offerings.

Stakeholders:

- Sara Romero, VP, Marketing .
- Ernest Cox, VP, Product Development.
- Jamal Harris, Director, Customer Data.
- Nina Locklear, Director, Procurement.

Stakeholder usage details: To effectively plan new station locations, the team aims to analyze how customers currently use the bike system. They will leverage this BI tool to gain insights from data generated by the bikes during customer usage.

Primary requirements:

- A visualization showing which destination (ending) locations are popular based on the total trip minutes.
- A visualization showing the percent growth in the number of trips year over year.
- Gather insights about congestion at stations.
- Gather insights about the number of trips across all starting locations.

Project Requirements Document:

BI Analyst: Hind Cherrat

Client/Sponsor: Jamal Harris, Director, Customer Data .

Purpose: 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 .

Key dependencies: This project will require a dataset of customer data, so the Director of Customer Data 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 :

- A visualization showing which destination (ending) locations are popular based on the total trip minutes. R
- 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 locations.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.
Action-oriented: These outcomes must prove or disprove the theory that location, time, season, and weather impact user demand.
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.

User journeys: The main purpose of Cyclistic is to provide customers with a better bike-share experience.

Assumptions: The dataset includes latitude and longitude of stations but does not identify more geographic aggregation details like zip code, neighborhood name, or borough. The team will provide a separate database with this data.
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, you should assume any amount of precipitation that occurred on the day of the trip could have an impact.
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.
Accessibility: The dashboards should offer text alternatives including large print and text-to-speech.

Roll-out plan: The stakeholders have requested a completed BI tool in six weeks:

● Week 1: Dataset assigned. Initial design for fields and BikeIDs validated to fit the
requirements.
● Weeks 2-3: SQL & ETL development

● Weeks 3-4: Finalize SQL. Dashboard design. 1st draft review with peers.
● Weeks 5-6: Dashboard development and testing .

Strategy Document:

Sign-off matrix:

Name	Team / Role	Date
Hind Cherrat	BI analyst	12/9/2024

Proposer: Jamal Harris, Director, Customer Data .

Status: Draft .

Primary dataset: NYC Citi Bike Trips

Secondary dataset: Census Bureau US Boundaries

User Profiles :
Sara Romero, VP, Marketing .
Ernest Cox, VP, Product Development .
Jamal Harris, Director, Customer Data.
Nina Locklear, Director, Procurement.
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.

Dashboard Functionality :

Dashboard Feature	Your Request
Reference dashboard	Build a new dashboard to display the starting and ending locations, aggregated by location. This should show the number of trips at starting locations.
Access	Access will be provided as read-only to the user profiles listed in this document.
Scope	Fields include: station, zip code, neighborhood, and/or borough, year, month, trip count, weather
Date filters and granularity	Data filters can be applied for the following: Date, Month, Year Granularity: Any chart with user detail metrics should have the ability to click on that metric to view specific information.

Metrics and Charts :

Chart 1

Chart Feature	Your Request
Chart title	Trip Totals
Chart type	Line
Dimension(s)	Date
Metric(s)	Trip count

Chart 2

Chart Feature	Your Request
Chart title	Trip Counts by Starting Neighborhood
Chart type	Table
Dimension(s)	Neighborhood, month
Metric(s)	Trip count

Chart 3

Chart Feature	Your Request
Chart title	Total Trip Minutes
Chart type	Bar
Dimension(s)	Zip code, borough, neighborhood, usertype
Metric(s)	Trip minutes