

Strategy Document: RideWise: Cyclistic Insights Dashboard

Sign-off matrix:

| Name | Team / Role | Date |
|---------------------|-----------------|------------|
| Khalid Adan Mohamed | BI Professional | 24.10.2024 |

Proposer: Khalid Adan Mohamed, BI Professional

Status: Under review

Primary dataset: **NYC Citi Bike Trips** (includes bike trip data such as start/end times, locations, customer types, etc.)

Secondary dataset: **Census Bureau US Boundaries** (provides geographic details such as zip codes, neighborhoods, and boroughs for location analysis)

User Profiles

Intended Audience:

- Marketing Team (Sara Romero, VP Marketing): To target campaigns based on customer usage patterns and high-demand locations.
- Product Development Team (Ernest Cox, VP Product Development): To optimize station placements and manage bike fleet based on real-time data insights.
- Customer Data Team (Jamal Harris, Director): To analyze customer behavior trends and ensure data compliance.
- Procurement Team (Nina Locklear, Director): To manage bike availability by understanding station congestion and demand trends.
- Customer Growth Team: To strategize new station growth and customer acquisition efforts.

Expected Usage:

- Marketing Team: Will use the dashboard to identify high-traffic areas for marketing campaigns, focusing on key times and locations where demand is highest.
- Product Development: Will analyze bike usage data to make informed decisions on adding or removing stations and upgrading bike models.
- Customer Data: Will explore customer segmentation (subscribers vs. one-time users) and usage behavior to refine service offerings and maintain privacy compliance.
- Procurement: Will use station congestion data to balance bike distribution across locations and avoid supply issues.

- Customer Growth: Will use insights on year-over-year growth and trends to inform business plans and expansion efforts.

Dashboard Functionality

| Dashboard Feature | Your Request |
|--|---|
| Reference dashboard (Should this dashboard be modeled on an existing dashboard? If so, provide a link and describe the similarity.) | If this dashboard is to be modeled after any existing dashboards, I suggest using dashboards from popular ride-share or transportation companies like Uber Movement or Citi Bike's own dashboard (if they have one publicly available). Describe similarity: It could share similarities in visualizing high-traffic locations, customer behavior segmentation, and time-of-day usage patterns. |
| Access (How should access to the dashboard be limited? Who needs to have access?) | Access should be limited to key stakeholders and the project team : <ul style="list-style-type: none"> • Sara Romero (VP, Marketing) • Ernest Cox (VP, Product Development) • Jamal Harris (Director, Customer Data) • Nina Locklear (Director, Procurement) • Team members: Adhira Patel, Megan Pirato, Rick Andersson, Tessa Blackwell, Brianne Sand, Shareefah Hakimi. Guest access can be granted to higher management or other stakeholders as required. |
| Scope (What data should be included or excluded in this dashboard?) | Include data on bike trip start and end locations, trip duration, customer type (subscribers vs. non-subscribers) , and time-based usage patterns (hour of the day, season) . |

| | |
|--|---|
| | Exclude any personally identifiable information (PII) , focusing only on anonymized trip and customer data. |
| Date filters and granularity (Should the dashboard include date filters? If so, what time frame should be displayed by default? Should the dashboard include a "granularity" drop-down? If so, what granularity should be selected by default?) | The dashboard should include date filters allowing users to filter data by day, week, month, or year . By default, the dashboard should display data for the last 12 months . Include a "granularity" drop-down for users to adjust data viewing by day, week, month, or year , with the monthly view selected as the default. |

Metrics and Charts

Create a table for each chart that you'd like to include in the dashboard. If you'd like to break the dashboard under different headers, feel free to list those here as well.

Chart 1

| Chart Feature | Your Request |
|--|--|
| Chart title | Top Starting and Ending Bike Stations |
| Chart type (What type of chart needs to be created?) | Map Chart or Heatmap (to visualize geographical station usage) |
| Dimension(s) (What dimensions does this chart need to include?) | Station locations (Latitude/Longitude) Station names Time (Day/Month/Year) |
| Metric(s) (What metrics are relevant to this chart?) | Number of trips per station Total trip duration Trips per hour of the day (for time analysis) |

Chart 2

| Chart Feature | Your Request |
|--|---|
| Chart title | Peak Trip Times by Hour and Season |
| Chart type (What type of chart needs to be created?) | Line Chart (to show the trends of bike usage by hour and season) |
| Dimension(s) (What dimensions does this chart need to include?) | Time of day (Hour) Season (Winter, Spring, Summer, Fall) User type (Subscriber vs. Non-subscriber) |
| Metric(s) (What metrics are relevant to this chart?) | Number of trips per hour Percentage of total trips during peak hours |

Chart 3

| Chart Feature | Your Request |
|--|--|
| Chart title | Year-over-Year Trip Growth |
| Chart type (What type of chart needs to be created?) | Bar Chart (to show growth comparisons between years) |
| Dimension(s) (What dimensions does this chart need to include?) | Year Customer Type (Subscriber vs. Non-subscriber) |
| Metric(s) (What metrics are relevant to this chart?) | Total number of trips per year Percentage increase/decrease in trips year-over-year |

