Presentation: How Does a Bike-Share Navigate Speedy Success?

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Slide 1: Title Slide

How Does a Bike-Share Navigate Speedy Success?

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Slide 2: Introduction

遵循資料分析流程的步驟:

- 詢問

- 準備

- 處理

- 分析

- 分享

- 行動

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Slide 3: Scenario

Role: Data analyst in the marketing analytics team at Company, a bike-share company in City.

Goal: Increase the number of annual memberships to maximize profitability.

Objective: Understand usage patterns of casual riders vs. annual members to design a marketing strategy that converts casual riders into annual members.

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Slide 4: About Company

- Service: Bike-sharing across City with over 10,000 bikes at 1,000 stations.

- Pricing: Flexible options including single-ride, day passes, and annual memberships.

- Challenge: Increase annual memberships for higher profitability.

- Strategy: Convert existing casual riders into members.

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Slide 5: Deliverables

1. Business Task: Identify usage differences to inform marketing strategies.

2. Data Sources: Public data from divvy\_tripdata.

3. Data Cleaning: Documentation of data cleaning and manipulation using Python.

4. Analysis Summary: Key insights on usage patterns.

5. Visualizations & Key Findings: Graphical representation of data.

6. Recommendations: Top three actionable strategies based on the analysis.

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Slide 6: Ask Process

Business Task: Determine usage differences between casual riders and annual members to inform strategies for converting casual riders into annual members.

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Slide 7: Prepare Process

Data Sources:

- Publicly available data from divvy\_tripdata.

- Data requires cleaning but is readable and conforms to ROCCC standards.

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Slide 8: Process Process

Data Cleaning Documentation:

- Used Python in Jupyter Notebook for efficient data cleaning and manipulation.

- Documented each step to ensure reproducibility and transparency.

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Slide 9: Analyze Process

Summary Analysis:

- Average Trip Duration: Casual riders have shorter average trip durations than members.

- Seasonal Trends: Both casual and member rides peak during summer months.

- User Distribution: Majority are member users; classic bikes are most popular.

- Bike Preferences: Casual riders prefer docked bikes, members prefer classic bikes, and members use e-bikes twice as much as casual riders.

- Weekly Trends: Casual riders have longer rides on weekends; members' ride lengths are consistent throughout the week.

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Slide 10: Visualizations

Graphs:

- Average Ride Length Member vs Casual in 2023

- Average Ride Length Member vs Casual on Month of Year

- Percentage of Total Users

- Rideable types compare to riders

- Average Ride Length Member vs Casual on Day of Week

- Monthly Ridership

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Slide 11: Share Process

Usage Differences:

1. Trip Frequency and Duration:

- Casual Riders: Fewer but longer rides, especially on weekends, indicating leisure use.

- Annual Members: More frequent, shorter rides, indicating commuting or errands, with longer rides on weekends.

2. Bike Type Preference:

- Casual Riders: Prefer classic bikes, use docked bikes for short trips.

- Annual Members: Prefer both classic and electric bikes, indicating a mix of commuting and leisure use.

3. Seasonality: Both groups ride most frequently during summer months.

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Slide 12: Act Process

Recommendations:

1. For Casual Riders:

- Promote the convenience and affordability of classic bikes for leisure.

- Offer weekend promotions or discounts.

- Target docked bike usage in popular sightseeing or recreational areas.

2. For Converting Casual Riders to Annual Members:

- Highlight cost savings of annual membership over frequent casual rides.

- Showcase the versatility of classic and electric bikes for various uses.

- Focus marketing efforts during the peak summer months.

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Slide 13: Formula for Success

A + B = C

A: Understanding Usage Patterns

- Trip duration

- Seasonal trends

- Bike preferences

- Weekly trends

B: Targeted Marketing Strategies

- Promotions and discounts

- Highlighting cost savings

- Seasonal marketing campaigns

C: Increased Annual Memberships and Success

- Higher profitability

- Enhanced customer engagement

- Sustainable growth for the company

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Slide 14: Data Source

Data Source: [divvy\_tripdata](https://divvy-tripdata.s3.amazonaws.com/index.html)

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