

"DISCOVERING THE GAPS AND INSIGHTS FROM THE DEMAND-INFLUENCING FACTORS OF THE OVERALL SINGAPORE MOBILITY MARKET."

Team CDG

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CLIENT OVERVIEW



ComfortDelGro was established in 2003, is one of the largest land transport companies in Singapore, as well as globally, with a global shareholder base and outlook, operating in other countries such as Malaysia, China, and the United Kingdom.

ComfortDelGro's businesses include bus, taxi, rail, car rental and leasing.

CLIENT VALUE

Gain a better understanding of the Singapore transportation landscape and discover the gaps in the current market.

2

TARGET AUDIENCE & MOTIVATION

TARGET AUDIENCE



Tertiary Students in Singapore

MOTIVATION

Aim to optimise their market supply strategies and fill the gaps in the market.



Lack of market research demand of the targeted behavior and perception.

3

RESEARCH ON OVERALL MOBILITY DEMAND

97.54 MIL.

Record high of a total of 7.54 million trips made on buses or trains each day in 2018.

84 MINS

Singaporeans spend an average of 84 minutes commuting on public transport during weekdays.

5 MIL.

Average public transport ridership fell to 5 million passengers a day in 2020 due to pandemic.

4

APPROACH



Data Collection

Sources include Reddit, CSISG, primary survey and focus group.



Data Pre-Processing

Includes transformation of raw data into readable format, importing of libraries, handling missing values, encoding categorical variables.



Exploratory Data Analysis

Using of matplotlib, plotly to visualize and finding correlations between variables.



Data Analysis

- Text Analysis
- Factor Analysis
- Clustering Analysis
- Correlation Analysis
- Geospatial Analysis



Visualization on Power BI

A consolidated platform with multiple charts to allow users to extract insights and draw conclusion.



Generating useful insights to transform into key business goals.

5

DASHBOARD FEATURES



1 UNDERSTANDING PERCEPTIONS

Identify top keywords of different sub-sectors and type of sentiments to discover possible gaps.

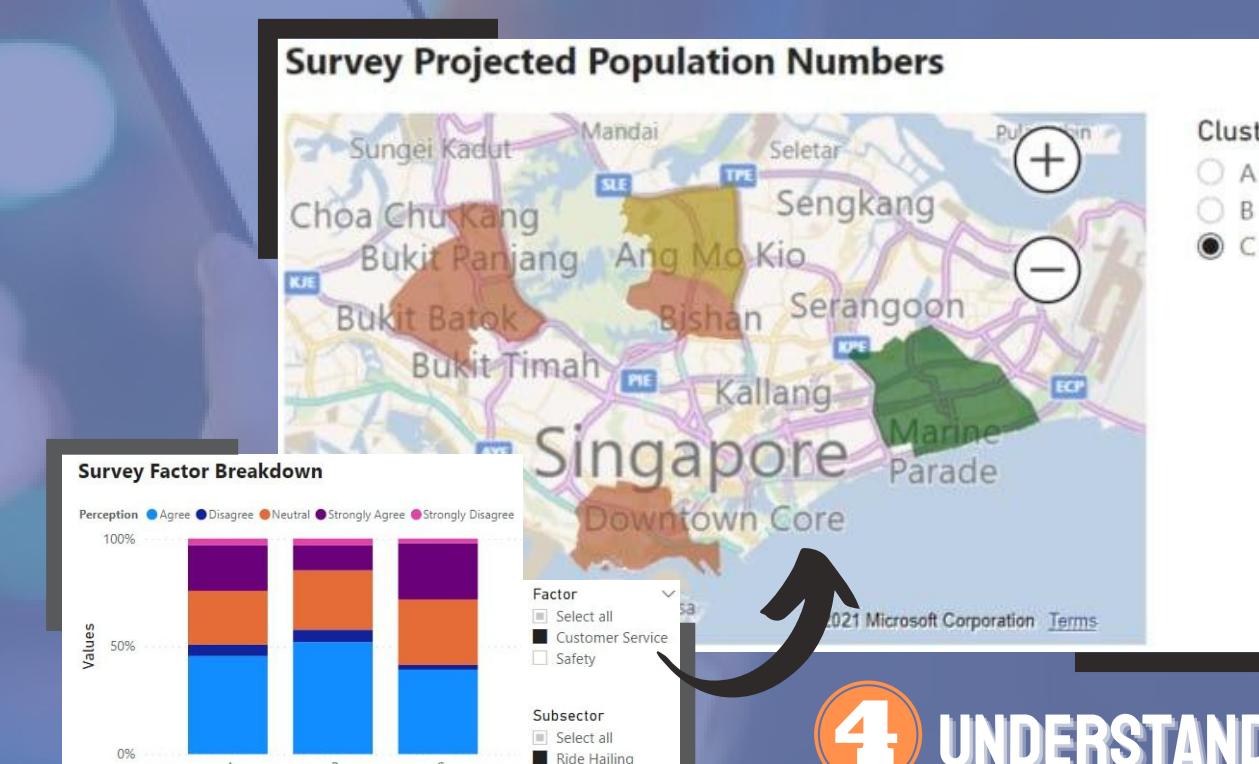
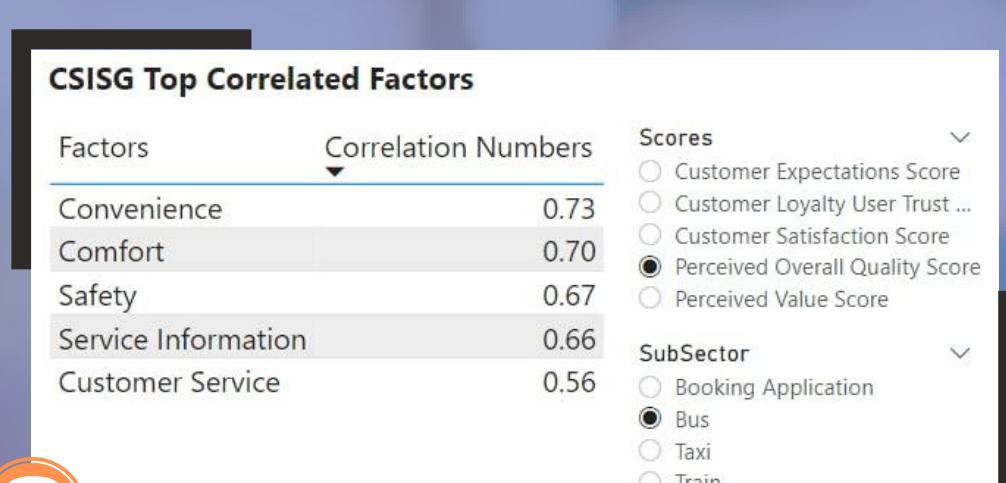


2 GEOGRAPHICAL MAPPING FOR SCORES

Visualize the target audience's expectations, loyalty, quality, satisfaction and value scores based on the varying sub-sectors and planning areas.

3 DEMAND-INFLUENCING FACTORS

Identify the impact of factors to each respective scores based on the correlation results.



Visualize the density of the clusters' population based on its respective planning areas.

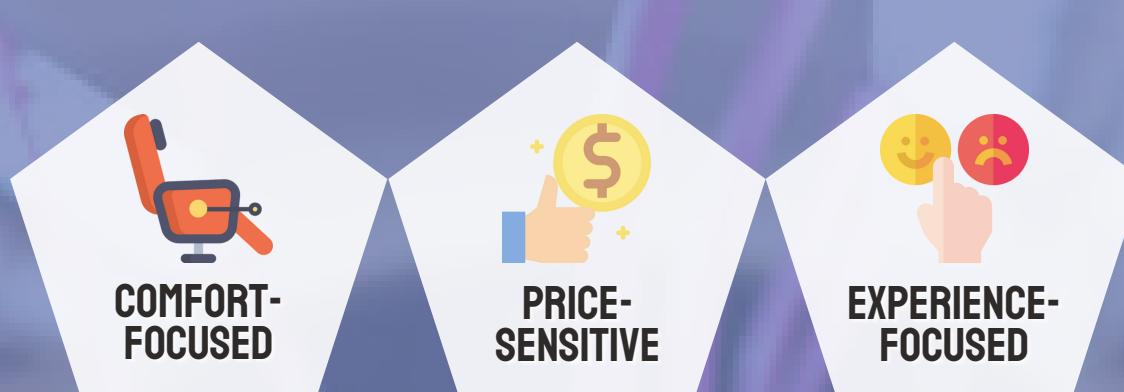
4 UNDERSTANDING CLUSTERS

By comparing the results, one can understand the behaviour of each cluster and point out the gaps of the market.

6

INSIGHTS

Main Profiles of Target Audience



Top Insights

While safety is not the target audience's top concern, safety will always be a prevalent factor that affect their demand of mobility market.

Although the target audience has neutral to happy sentiments, they are relatively sensitive to cost of service which entails factors such as affordability and promotion.

Generally, the target audience are aware of the various car rental service providers, but there is still a predominantly low take-up rate of these services.

7

FUTURE WORK



Use more complex machine learning models for analysis



Automation for Scrapping



Direct Data Pipeline for Dashboard

OUR STAKEHOLDERS



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