

Data Analytics

XYZ North Ltd

# Agenda

1. Introduction
2. Data Exploration
3. Model Development
4. Interpretation

# Introduction

## Project recap

Boast the business of XYZ North Ltd by determining customer trends and behavior.

## Problem

Lack of prior transaction history of the new 1000 customers

## Data team

Senior investigator, Data scientist and Data analyst (myself)

# Process of data analysis



**Data understanding**



**Data exploration**



**Data modelling**



**Data visualisation**



**Data storytelling**

# Data Exploration

## Insights from the data

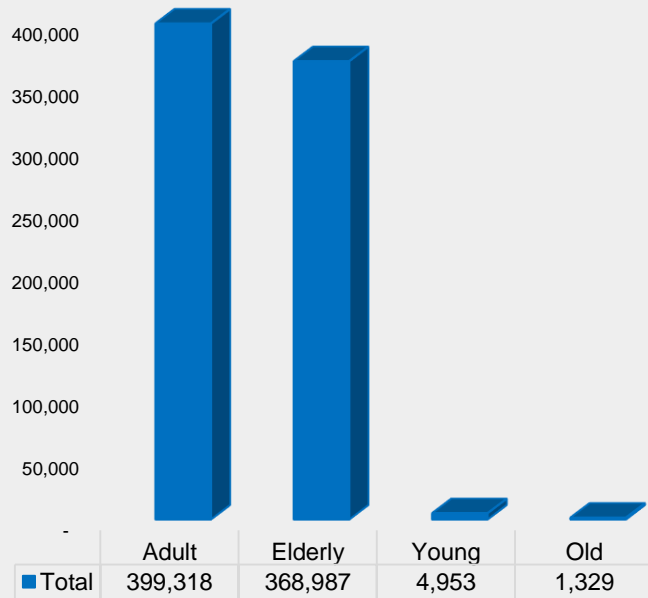
General customers =  
**387,474**

Age group **22 to 45** (Adults)  
purchased the most bike

Health, Finance, and manufacturing  
job categories purchased more bikes

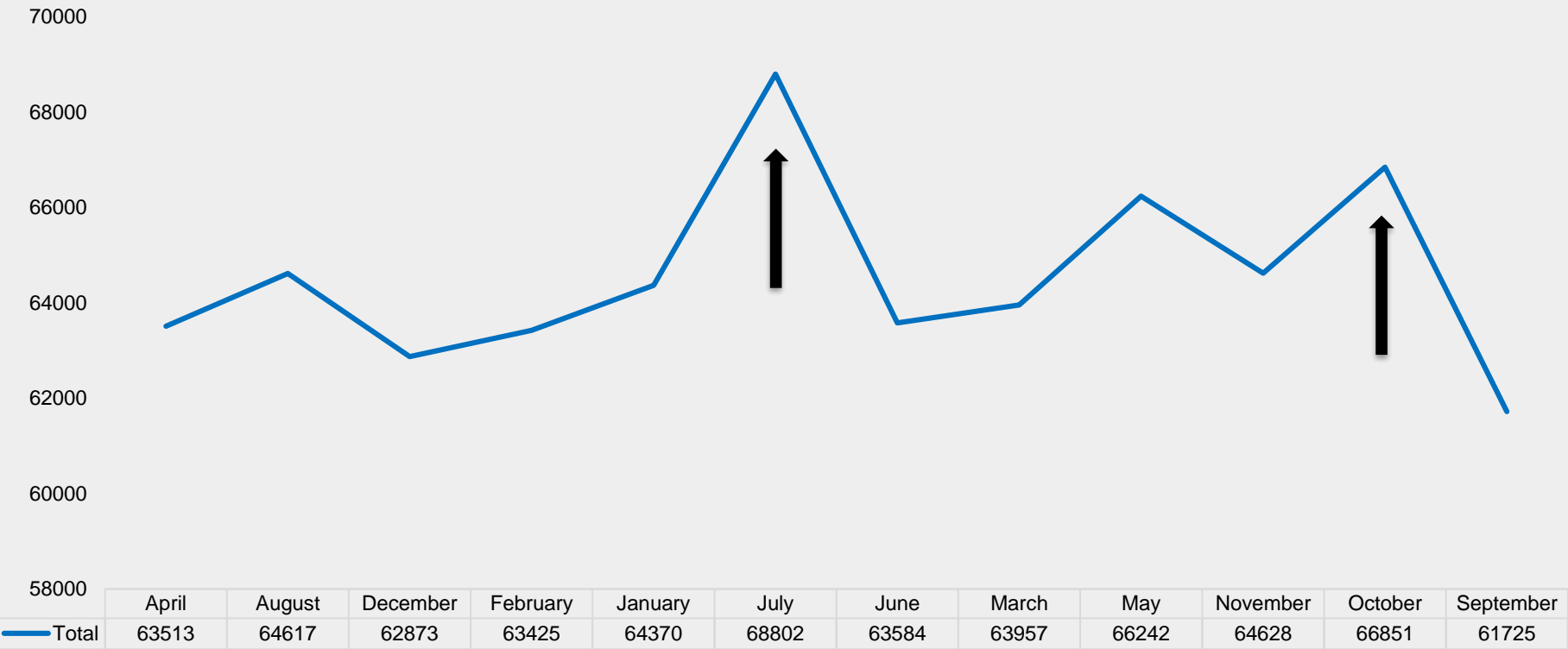
The highest purchase was made in  
the month of July

Sum 3 years bike purchase by Age group



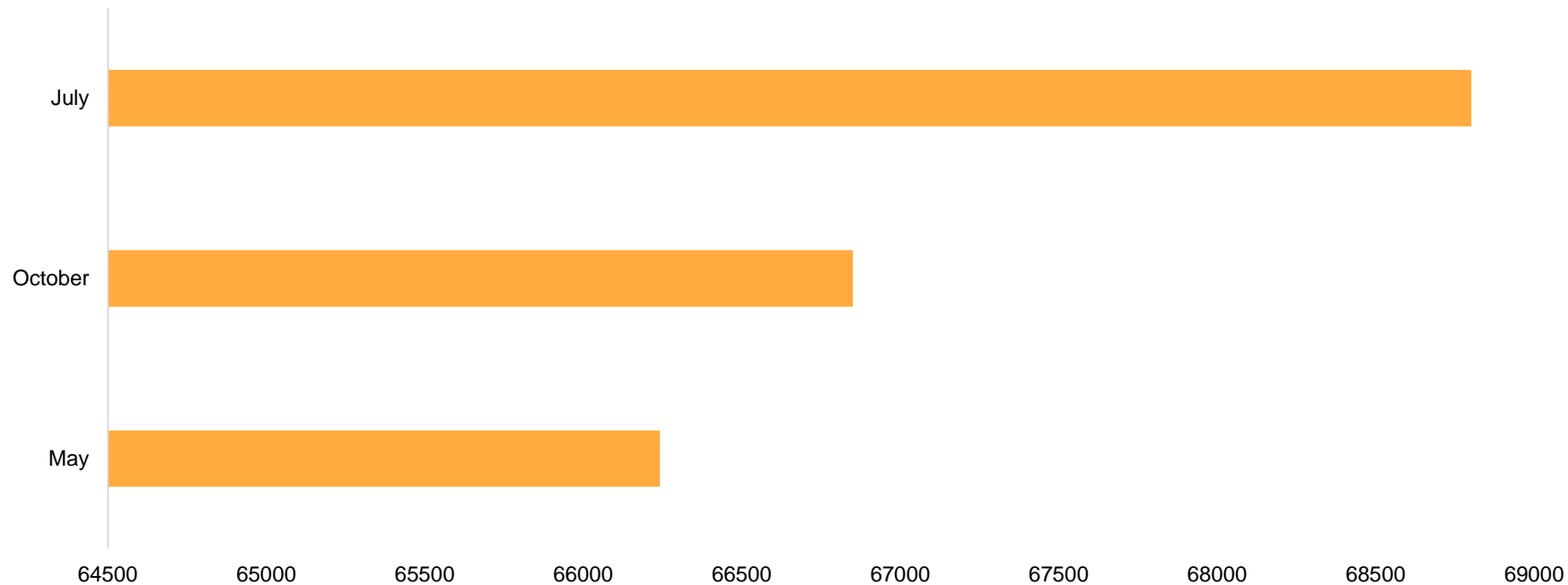
# Data Exploration

Sum of bike purchased by month



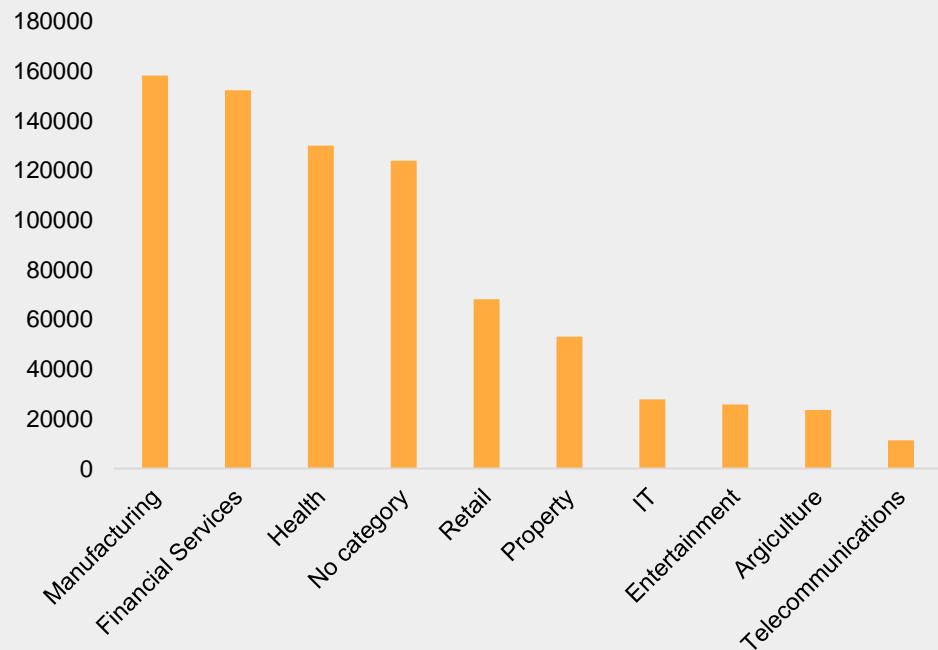
# Data Exploration

Top 3 months of bike purchase

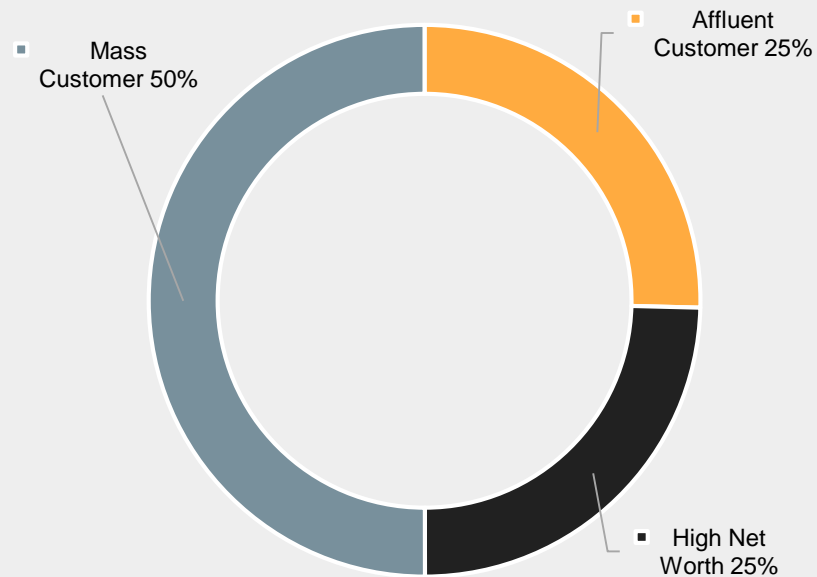


# Model Development

## Sum of bike purchase by job category



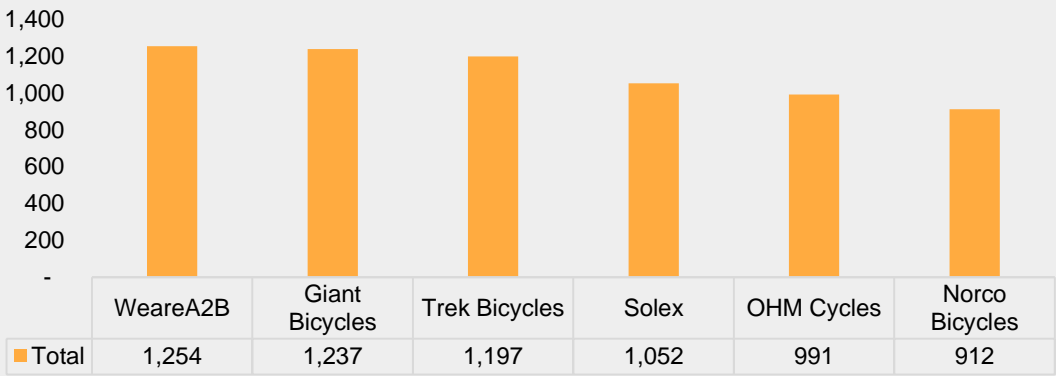
## Sum of bike purchase by wealth segment



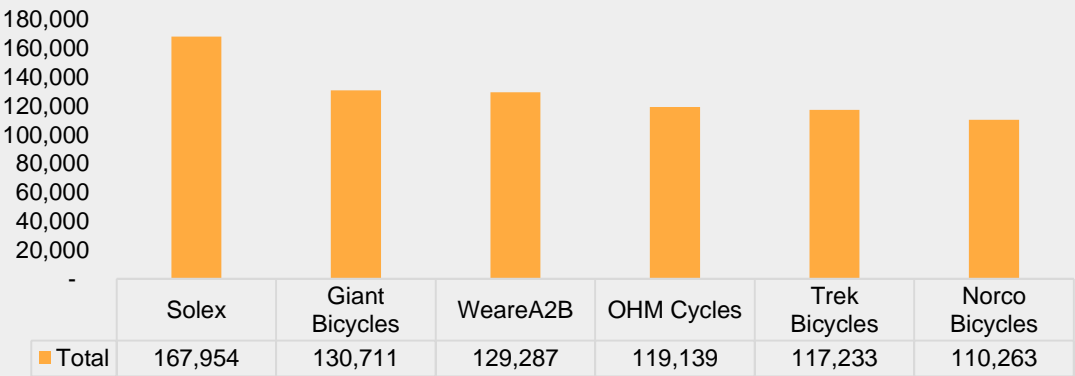


# Model Development

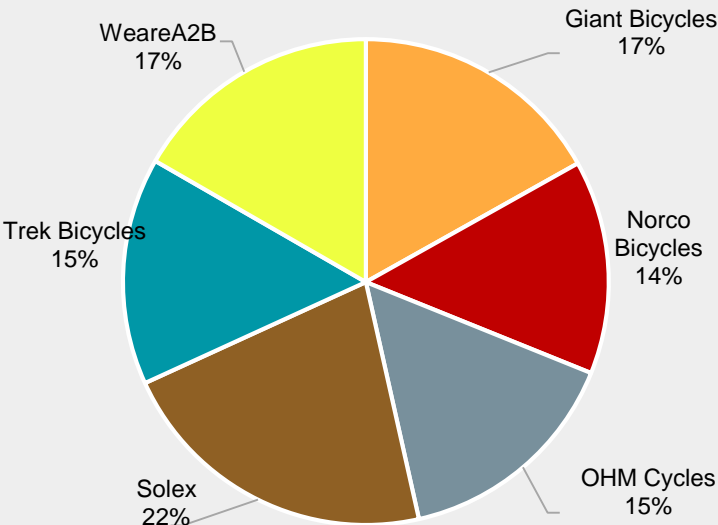
Avg. sum price of purchased bike by brand



Sum of bike purchased by brand




Purchased bike by brand




# Summary

## Analysis




XYZ North Ltd has an agenda of boasting its business by understanding its customer's activities.

## Insight



Health, finance, and manufacturing job categories purchased the most bikes. Mass customers within the wealth segment make up for the purchase. The months of July, October, and May are the period of most sales. Adults between the ages of 22 to 45 ride more bikes than the other age groups. The Solex bike brand which is one of the cheapest is mostly bought and has the highest purchase count



Considering the insight drawn from this study, to boost market sales, we recommend that more Solex bike brands be made available for customers. Campaigns and adverts should be placed in the months of July and October targeting age group 22 to 45. This approach will target the age group with the potential to buy and use bikes. If possible a few percent discount be allotted to individuals who work outside of the 3 most popular job categories using bikes. Applying this method, will attract those with less potentials of buying bikes to do so eventually due to the promotion set in place

## Moving forward

These preliminary studies have shown great insight into XYZ Ltd business and the numerous potentials it holds. We will be happy to work with you moving forward in order to better optimize the opportunities within your company.

# Appendix

# Appendix

Count of gender by age group of bike purchasers

