



TheAnalyticsTeam

# Sprocket Central Pty Ltd

Data analytics approach

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# AGENDA

- Introduction
- Model Development
- Data Exploration
- Interpretation



# INTRODUCTION

- I shall present through this PPT the various aspects that would determine to select the top 1000 Customers for the Company
- I shall back up my points with some Data Exploration, Model Building & My Interpretations of the same
- I shall then provide some my advice regarding the company's target Customers



# MODEL DEVELOPMENT

The following points was considered while Building a model from Raw Data

First some Data Cleanup & Improvement strategies was sent your company and they were selected and official go ahead was procured,

Next I applied those strategies and built a model on the same.

The Salient Features of the Model are on the next slide



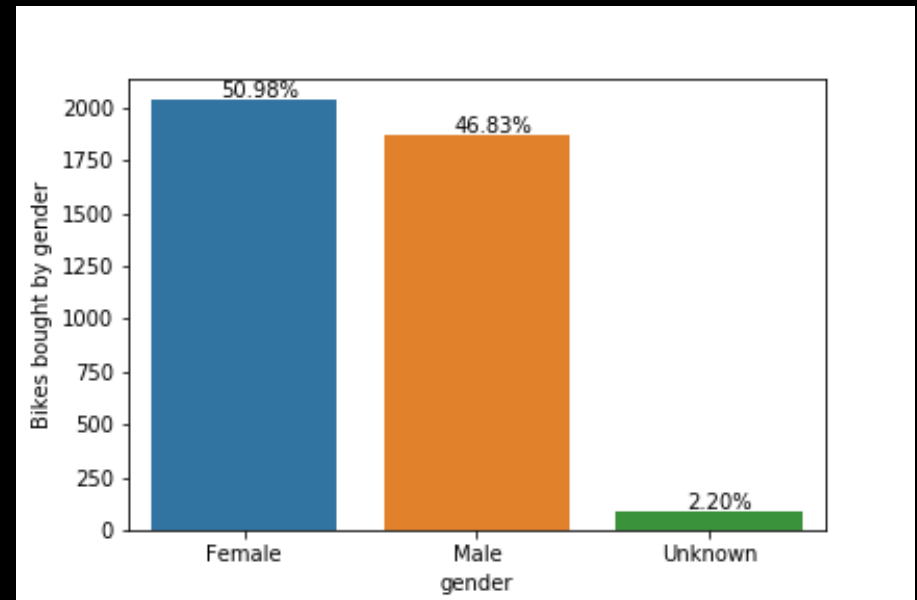
# MODEL DEVELOPMENT

- All inconsistency in Gender Data Field was resolved to Male, Female & Unspecified.
- Age Data Field was created from D.O.B data field and was further used for analysis. DOB data field was dropped from analysis.
- Age Groups were Created for Analysis : 0-20 Yr, 20-40 Yr, 40-60 Yr, 60-80 Yr, 80-100 Yr
- Job Industries, Wealth Segment & Owns A Car was taken for analysis
- Tenure Groups were Created for Analysis : 0-5 Yr, 5-10 Yr, 10-15 Yr, 15-20 Yr, 20-25 Yr
- Previous Bike related purchase Groups were Created for Analysis : 0-20, 20-40, 40-60, 60-80, 80-100

# DATA EXPLORATION

## Exploring How Gender affects the amount of Purchases.

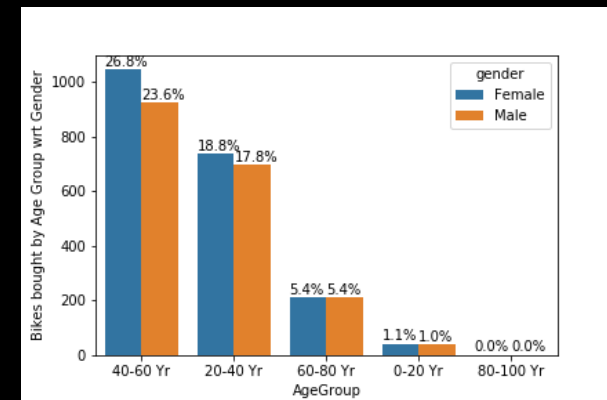
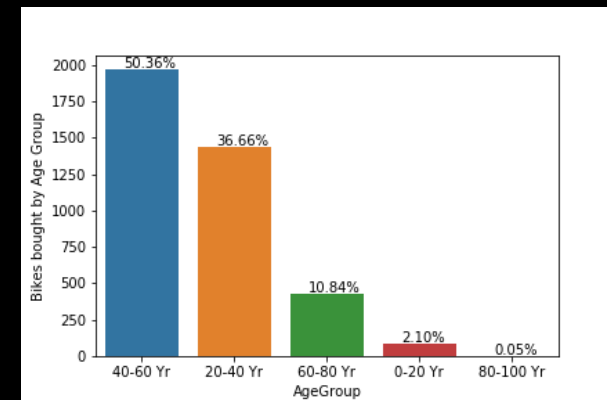
- Females have slightly more % of purchasing over males.



# DATA EXPLORATION

## Exploring How Age Group affects the amount of Purchases.

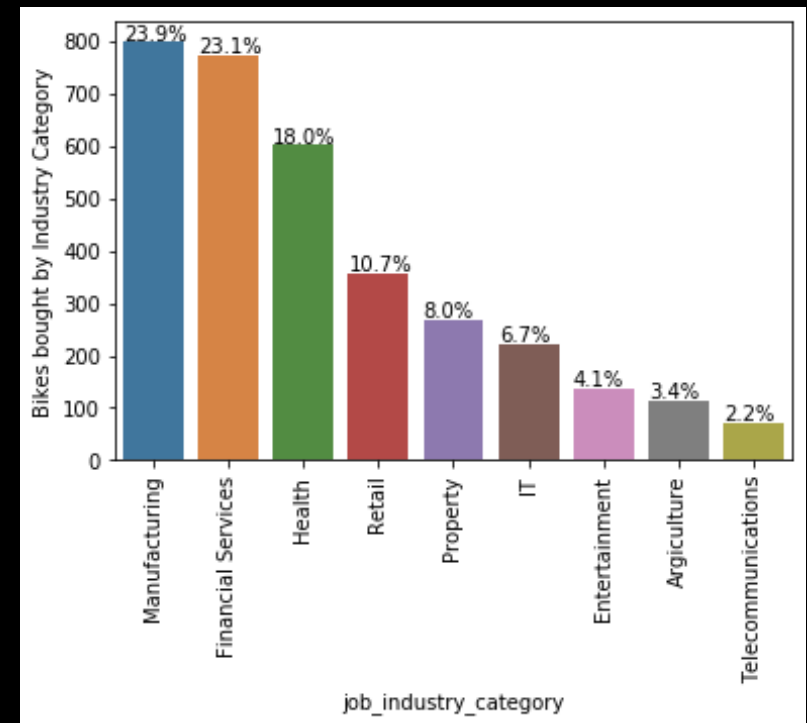
- As we see the most % of customers are from age group 40-60 & 20-40 years.
- Females of both these categories of age form the major part of the share.



# DATA EXPLORATION

## Exploring How Industry Type affects the amount of Purchases.

- The top 3 customer categories from specific industry are:
  - Manufacturing (24%)
  - Financial Services (23%)
  - Health (18%)

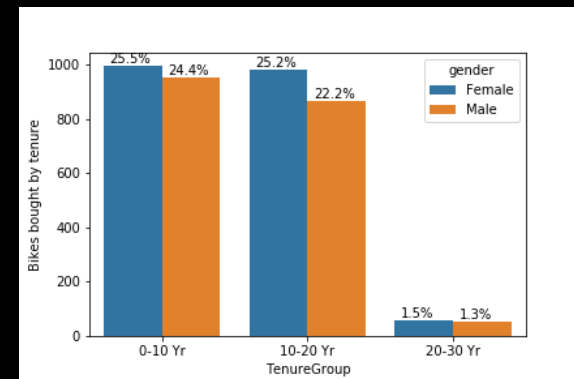
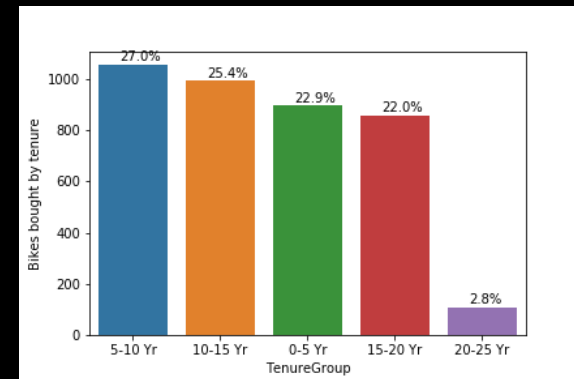




# DATA EXPLORATION

## Exploring How Tenure affects the amount of Purchases.

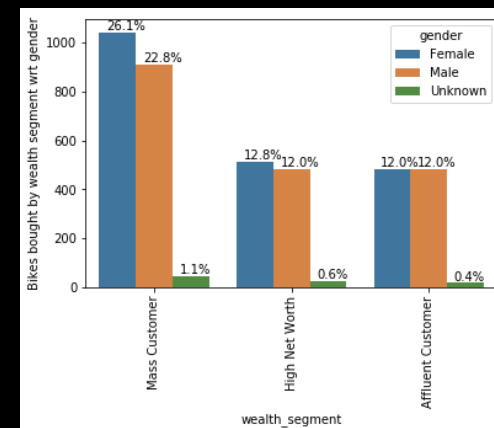
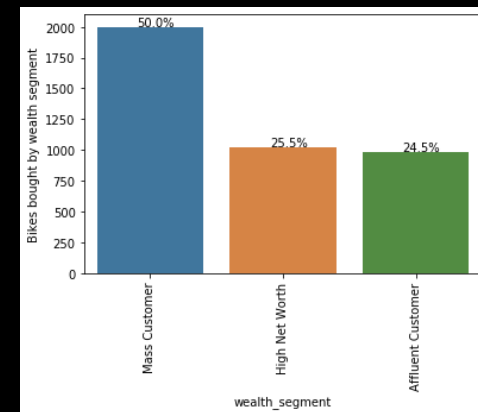
- As we see all tenure groups are more or less have equal contributions except 20-25 years of tenure
- Females again tend to dominate as a customer bracket from tenure point of view



# DATA EXPLORATION

## Exploring How Wealth Group affects the amount of Purchases.

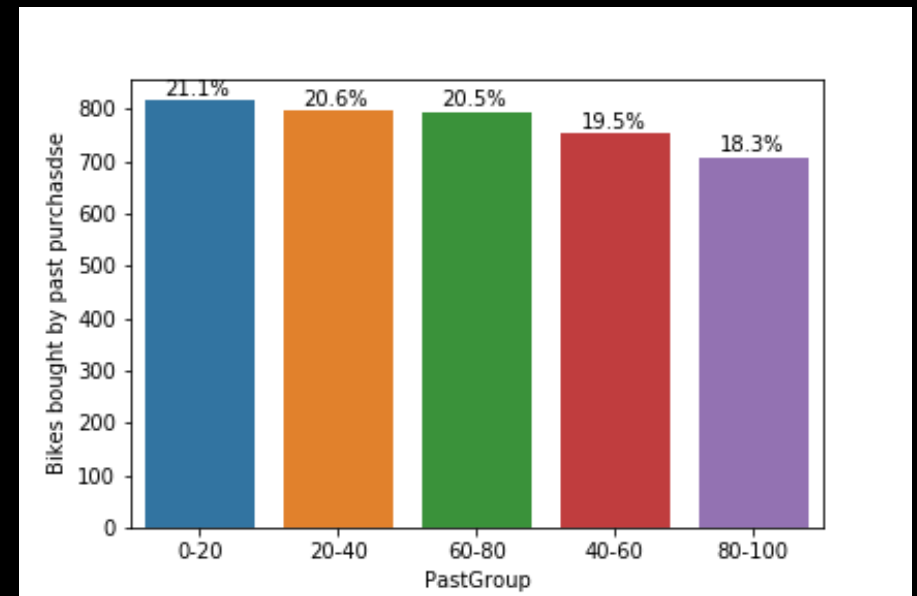
- Mass Customers contribute to the maximum of Customers %
- Females & Males have generally equal contributions here.



# DATA EXPLORATION

## Exploring How Past Purchases affects the amount of Purchases.

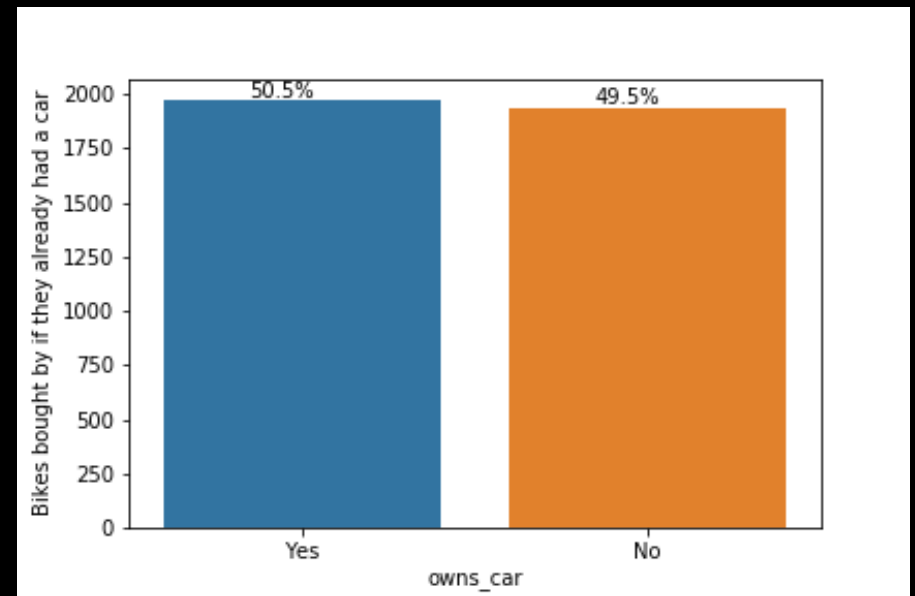
- Amount of Past Bike related purchases doesn't affect much on the next purchase.
- Although the general trend is People with less bike related past purchase have higher chances of making a new purchase



# DATA EXPLORATION

**Exploring How Having a car affects the amount of Purchases.**

If a person owns a car or not has no Relation with if he makes a purchase Or not.





# INTERPRETATION

- **Females tend to have higher chances of making a purchase.**
- **Age group between 20-60 Years have the highest chances of making a new purchase.**
- **People from Manufacturing , Financial Services & Health have the highest chances of making a new purchase.**
- **Mass Customers tend to purchase the most amount of goods.**
- **People with less than 20 years of tenure are the largest consumers.**



# **METHODS USED**

Data Analysis with Python using Pandas

Exploration of Graphs using Seaborn Library

Personal Interpretations



**THANK  
YOU**

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