



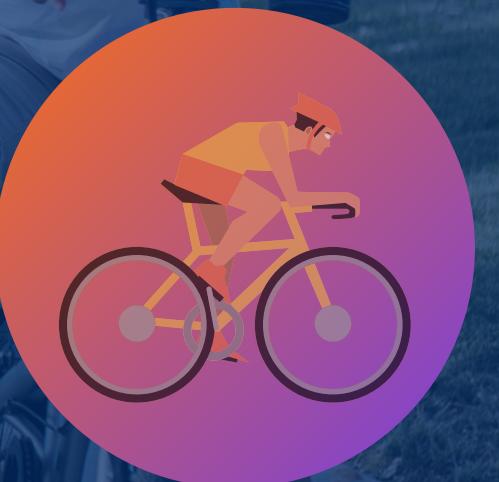
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# Sprocket Central Pty Ltd

DATA ANALYTICS APPROACH

**Mubashir M Bello - Data Analyst**



# Agenda

**01**

## Introduction

This is the first agenda where we talk a little about the organization, the problem statement and all about the company data

**02**

## Data Exploration

Here we look deeply into the data and draw some statistical insight from all the dataset mostly Univariant statistics

**03**

## Model Development

Creating the Model of all the dataset

**04**

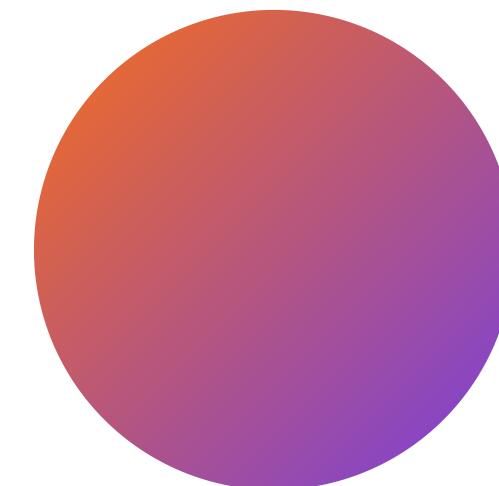
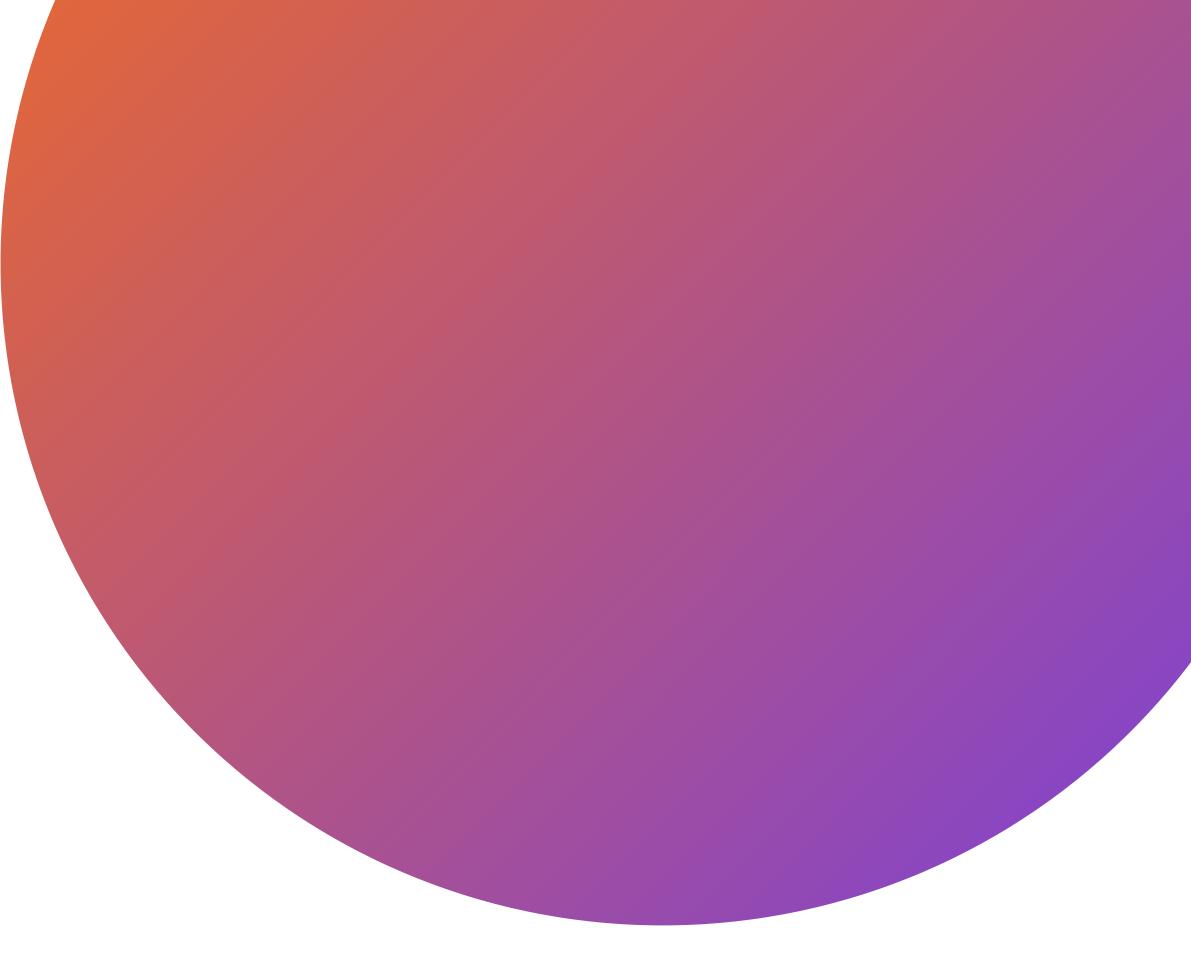
## Model Interpretation

Explaining the model.



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# Introduction





# About Sprocket Central

Sprocket Central Pty Ltd is a long-standing KPMG client that specializes in high-quality bikes and accessible cycling accessories for riders.



# Problem Statement

1. The marketing team is looking to boost business by analyzing its existing customer dataset to determine customer trends and behavior.
2. With the 3 datasets provided, the aim is to identify and recommend 1000 customers that the cycling company should target to drive sales.





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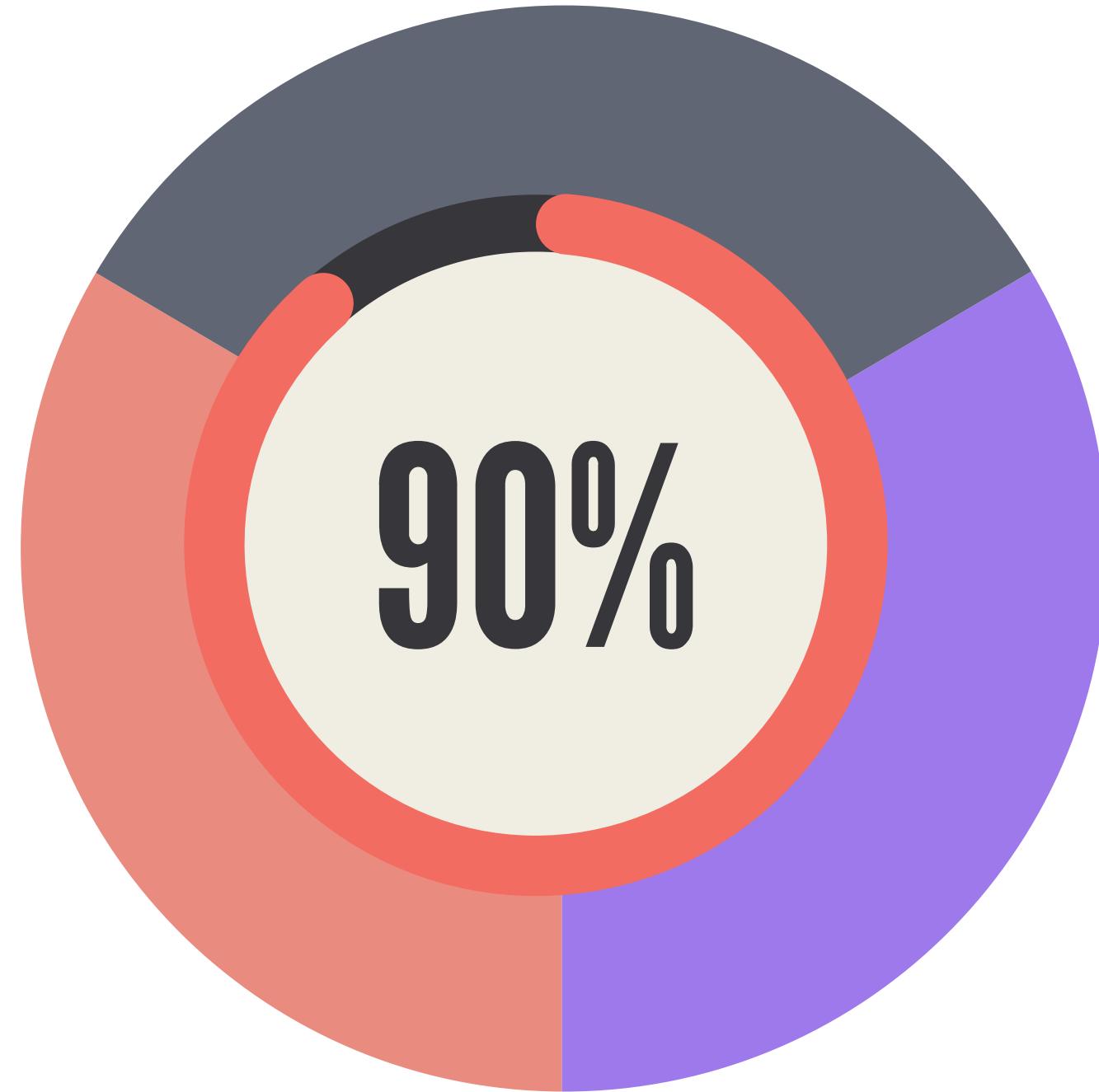
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# **Data Exploratory**



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# Exploratory Analysis

on the Sprocket, the dataset involves understanding the characteristics of each given field such as variable distributions, checking each demography of each user, etc also checking for more insight in order to get more information on the dataset for decision making. There are some limitations in the given data like missing values, inconsistent datatype, and many more.

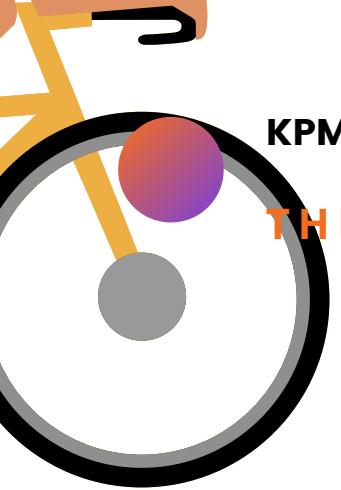




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# **Model Development**

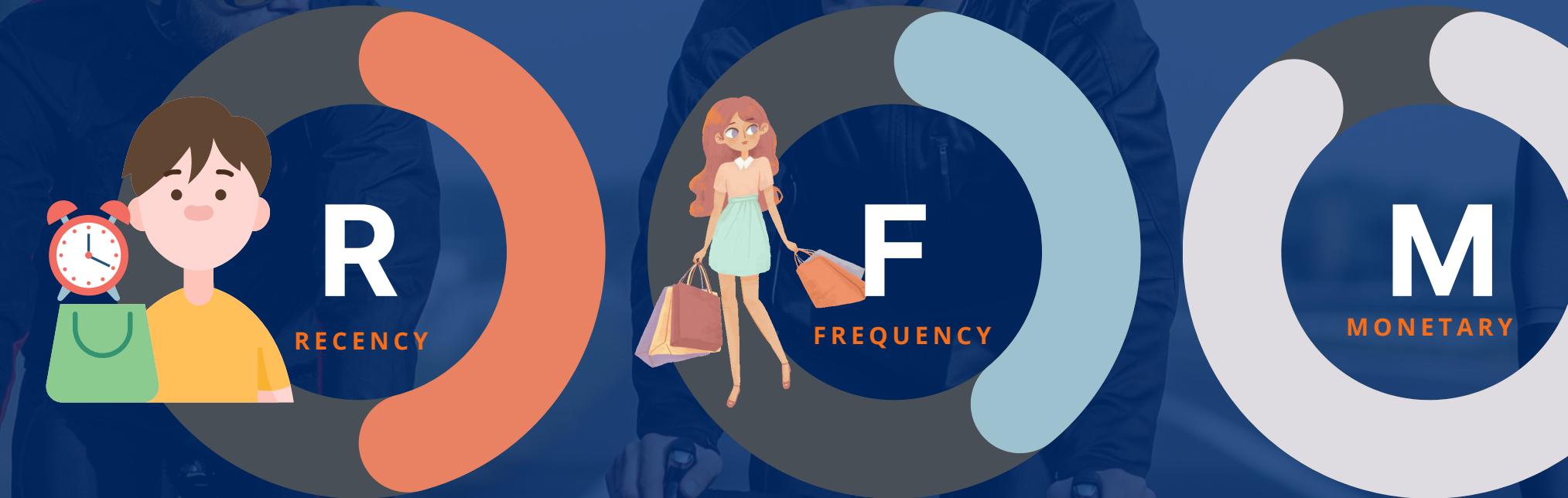


# Model Development's

the process of designing, developing, and testing a mathematical or computational model that represents a system or process of interest. The goal of model creation is to generate a model that can predict or explain the behavior of the system under different conditions.



# Model Used



RFM is a segmentation model used to divide up customers based on their behavior or other criteria



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# **Interpretation & Result**

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Interpretation involves the process of analyzing and making sense of data in order to derive insights that can be used to make better business decisions. This may involve visualization and presenting findings and interpreting the significant of important variables.

A Dashboard will be created in order to aid stakeholders to get a full glance at what the data is all about.



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**With the help of this slide, we get an idea of the business issue of the company.**



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# Appendix



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# About Data

	No Of Records	Unique Ids
Customer Demographic	4002	4002
Transaction Data	20002	3495
Customer Adress	4001	4001



# Data Quality Issues



	<b>Accuracy</b>	<b>Completeness</b>	<b>Consistency</b>	<b>Currency</b>	<b>Relevancy</b>	<b>Validity</b>	<b>uniqueness</b>
<b>Customer Demographic</b>	<ul style="list-style-type: none"> <li>▪ DOB – Inaccurate</li> <li>▪ Age missing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Job title- Blanks</li> <li>▪ Customer id- incomplete</li> </ul>	<ul style="list-style-type: none"> <li>▪ Gender- Inconsistent</li> </ul>	<ul style="list-style-type: none"> <li>▪ Deceased Customer- Filter out</li> </ul>	<ul style="list-style-type: none"> <li>▪ Default column- Deleted</li> </ul>		
<b>Customer Address</b>		<ul style="list-style-type: none"> <li>▪ Customer Id- Incomplete</li> <li>▪ Tenure - Blanks</li> </ul>	<ul style="list-style-type: none"> <li>▪ State - Inconsistent</li> </ul>				
<b>Transactions</b>	<ul style="list-style-type: none"> <li>▪ Profit missing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Customer ID- Incomplete</li> <li>▪ Online Order –Blanks</li> <li>▪ Product Line –Blanks</li> <li>▪ Product Class- Blanks</li> <li>▪ Product Size –Blanks</li> <li>▪ Standard Cost- Blanks</li> <li>▪ Product First Date Sold- blanks</li> </ul>			<ul style="list-style-type: none"> <li>▪ Product First Sold Date- Format</li> <li>▪ List Price - Format</li> </ul>		