TheAnalyticsTeam

Sprocket Central Pty Ltd

Data analytics approach

Chirag Patel

Agenda

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

Introduction

Detailed approach for strategy behind each of the 3 phases

Activities involved in each phase are

- Understanding the data distributions

- feature engineering

- data transformations

- modelling

- results interpretation and reporting.

Data Exploration

Exploring & Analyzing required data -:

- Understand the characteristics of given fields in the underlying data such as variable distributions, whether the dataset is skewed towards a certain demographic and the data validity of the fields.
- There are some limitations in the given datasets like some values are missing and some data types are different according to their value.
- transformation of required data so that it is in an appropriate format for analysis. This may include steps such as ensuring that the data types are appropriate and rolling data up to an aggregated level.
- Document assumptions, limitations and exclusions for the data; as well as how you would further improve in the next stage if there was additional time to address assumptions and remove limitations.

Model Development

Strategy for developing required model -:

1.First of all, we have to determine a hypothesis related to the business question that can be answered with the help of existing data. Perform statistical testing to determine if the hypothesis is valid or not.

2.Create calculated fields based on existing data, for example, convert the D.O.B into an age bracket

3. Test the performance of the model using factors like residual deviance, AIC, ROC curves, R Squared). Appropriately according to the model performance, assumptions and limitations.

Interpretation

Interpretation of data -:

Visualization and presentation of findings. This may involve interpreting the significant variables and co-efficient from a business perspective.

With the help of this slide, we get an idea around the business issue and support our case with quantitative and qualitative observations.

Appendix

Appendix

This is an optional slide where you may place any supporting items.