

Starbucks project proposal

Domain Background

Starbucks is well versed retail company wherein the transactions are driven by customer's decisions.

Starbucks offer dataset is a collection of data that contains information on the various offers that Starbucks provides to its customers. The dataset includes information on the different types of offers such as discounts, buy-one-get-one-free deals, and free items. It also includes details on the duration of the offer, the channels through which the offer can be redeemed, and the minimum purchase amount required to avail the offer.

The Starbucks offer dataset can be used to analyze the effectiveness of different types of offers in terms of driving sales, customer retention, and loyalty. It can also be used to study customer behavior and preferences when it comes to redeeming offers.

The dataset can be useful for marketers and business analysts who are looking to optimize their promotional strategies and increase customer engagement. Researchers studying consumer behavior and marketing can also use the dataset to gain insights into the effectiveness of different types of offers.

A related academic research paper that could be cited in this context is "Analyzing the Effects of Sales Promotion Strategies on Customer Loyalty: Evidence from Starbucks" by H. Alhassan and M. Alsharidah published in the Journal of Retailing and Consumer Services in 2018.

Overall, the Starbucks offer dataset is a valuable resource for understanding the impact of promotional strategies on customer behavior and loyalty.

Problem statement

In this usecase based upon the data provided we need to predict customer's decisions from the data provided on what info customer's are intrested in or an exploratory data analysis can be done to derive a complete view on the types of customer's and their purchasing pattern

Solution Statement

Firstly, a lot of data analysis is done to decide upon the solution. And with respect to a solution standpoint a classification model is built to decide whether to send an offer message to customer or not based upon whether he has done a transaction atleast once.

Datasets and inputs

The datasets consists of 3 json files

Portfolio – consisting offer related details

Profile - consisting of details of all customers

Transactions – offer and transactions customer's make, amount speny

Benchmark model

As the data is very diverse it's hard to fix upon one model. So a lot of data analysis along with that a classification model is created to decide whether customer would respond to an offer or not.

Evaluation metrics

For now the conclusion points from the analysis.

Also, classification report from sklearn is used for evaluation of classification model.

Project design

Will analyse the data and provide the insights on the overall datasets using pandas and visulaizations using seaborn and matplotlib.