

Analysis Summary

Merkle Sokrati - Internship - Assignment_1

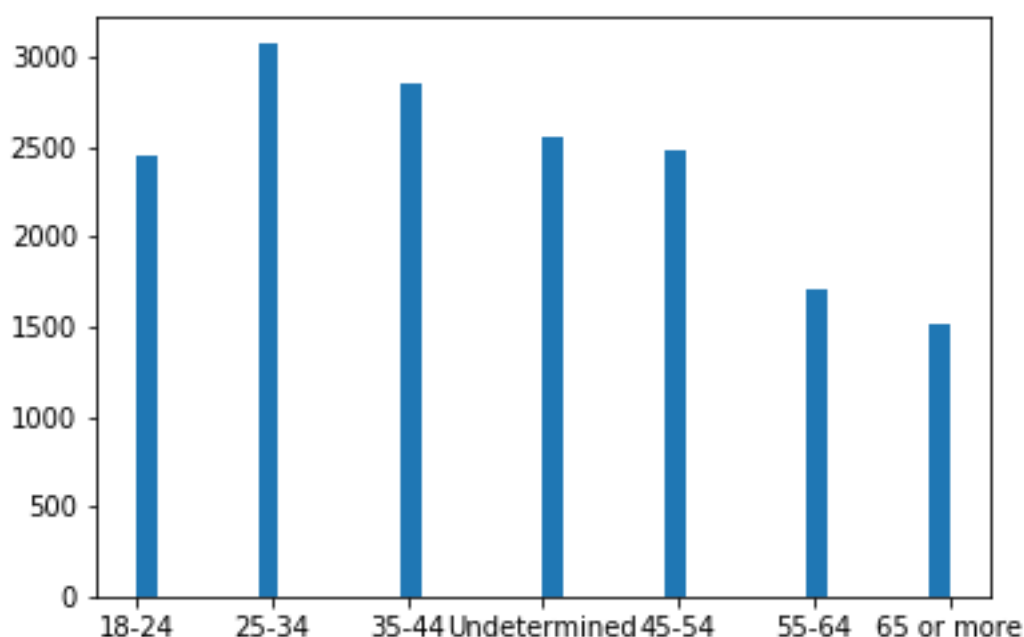
Problem Task:

I have to carry out EDA and build ML model to evaluate the insights automatically.

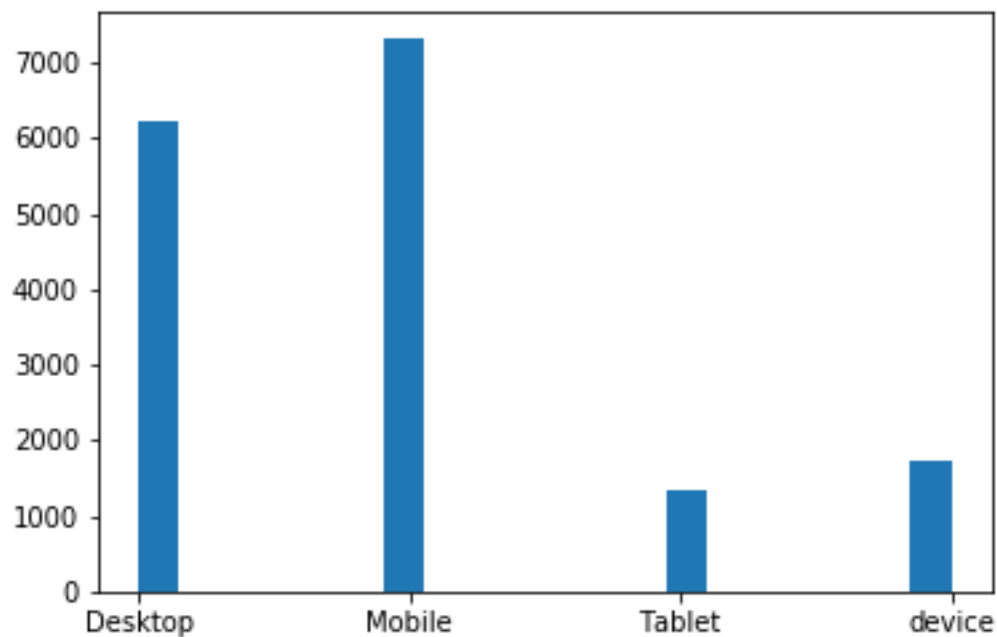
Inside relationships:

- The people under the age group 25-44 are purchasing the things more than others.
- That people using mobile phone more to shop than any other devices such as 'desktop, tablet'.
- The people under the age group 25-64 are buying and spending money through Facebook Ads, other are only buying things through Google Ads.
- Impressions, clicks, link_clicks are all having positive correlation with spends. spends increases with this three increases.
- The high spends are done through Facebooks Ads with the age group 25-44. The age group from 25-44 are only spends money through Facebook Ads. Normally the Facebook Ads things are more expensive than Google Ads.
- People like to spend more money through Facebook Ads. They are more attracted by the Facebook Ads.

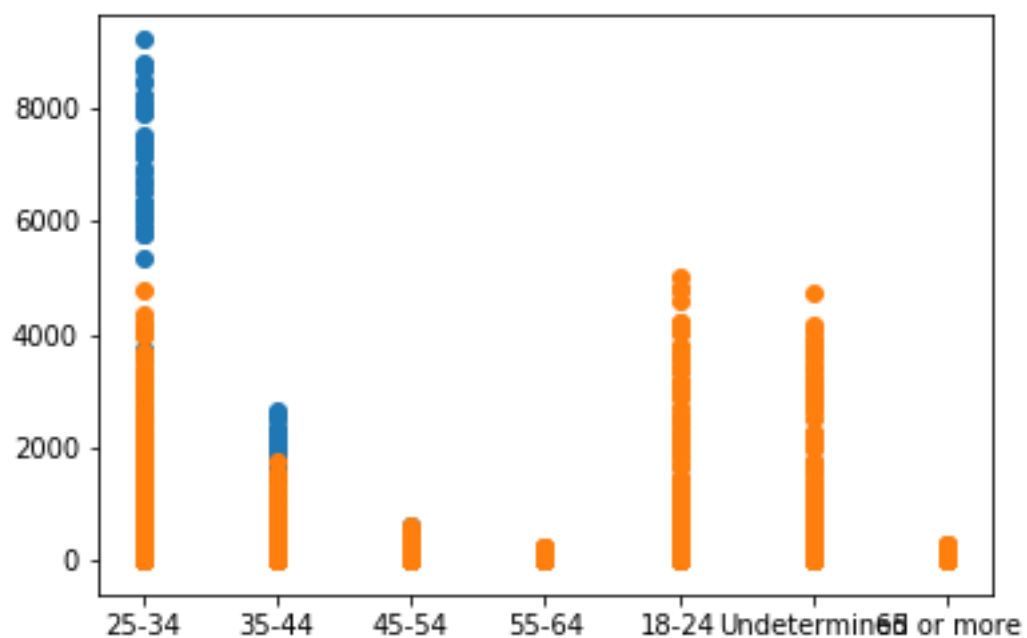
Visualizations:



- From this we can understand the age group of 25-44 spends more on online.



- People mostly using mobile phone than any other devices.



(blue- Facebook Ads

orange- Google Ads)

- The high spends are done through Facebooks Ads with the age group 25-44.
The age group from 25-44 are only spends money through Facebook Ads.
Normally the Facebook Ads things are more expensive than Google Ads.

Model trained:

We are trained our model by 3 diffetent model types and also I add the evaluation results here.

<i>Model Name</i>	<i>Mean absolute error</i>	<i>Mean square error</i>	<i>Root Mean square error</i>
Linear Regression	101.22035708691	58847.556535499	242.58515316379
Random Forest Regression	55.75667489123351	24540.7583018990	156.654901940217
Support Vector Regression	43.4356687	15062.357467	35.28734567

From this the SVR performs better on the dataset.