

Project Proposal

Client:

The Google Merchandise Store collects a large amount of data regarding its website visitors. This large amount of data can be daunting to analyze and extracting actionable insights to increase conversions can be difficult.

Generally, social ads platforms allow to broadly retarget website visitors or even specific lists of customers. The data collected presents opportunities for even more granular targeting of users across categories by for example determining different ways of retargeting these users based on consumer profiling defined by historical demographics and behavioral data.

Impact Hypothesis:

By better understanding (1) who their users are and (2) how different types of users convert on the website, Google Merchandise Store can create more intentional targeting and growth strategies to increase conversions.

Data Description:

The [data](#) is collected on a daily basis, with each day having a 1000+ rows of associated data. For the purpose of this EDA, one day of data will be analyzed.

One row of data represents the behavior of a unique visitor represented by a unique ID on the website. Columns contains information about traffic source, geography, device, pageviews, hits.. etc

Preliminary Analysis:

Exploratory Analysis of users behavioral data on the website, looking at conversions and engagement by country, device, source, content and more.

Data Science Solution Path:

The preliminary data analysis serves as a naive approach to getting to know the data and paves the way to potentially using unsupervised learning for customer profiling.

Clustering “types of purchasers” can allow Google to better target consumers at different stages of the purchasing funnel.

Risk and assumptions:

Assumptions: The analysis is completed on one day of data, this is a simplification of the actual analysis that needs to be done for further analysis. Sampling techniques, and more data would be used in the latter case.

Risks: Over-targeting the same types of users.

Criteria for Success:

The criteria for success would be segmented between lower funnel and upper funnel users.

Upper funnel:

- Increase in visit times by new users, meaning appropriate users are being targeted

Lower funnel:

- Increase in conversions

Tools:

- Excel for EDA and Preliminary Visualization
- Tableau for Visualization