Research on Customer Personality Analysis – Milestone 1

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Project Title: Customer Personality Analysis.

Customer Personality Analysis is a detailed analysis of a company's ideal customers. It helps a business to better understand its customers and makes it easier for them to modify products according to the specific needs, behaviors, and concerns of different types of customers and it also helps a business to modify its product based on its target customers from different types of customer segments.

Business Problem: Is it possible for a company to develop its business by researching the personality of its ideal customers?

My main objective is to create a solution or build a model to address this problem of understanding the customer's attributes like their purchases, income or location and provide a helpful insight to a company that implement this solution.

Data sets:

The dataset I retrieved is from an online source Kaggle, where it provides the attributes of the Customers, Companies products details, Promotions offers by the company and the mode of purchases by the customers. The dataset contains each individual customer and with respective provide data, number of purchases etc. We will get through the data in detailed as we dig deep into data and clean it for our analysis.

Source: https://www.kaggle.com/datasets/imakash3011/customer-personality-analysis?datasetId=1546318

Methods:

I am planning to use a Multi Linear Regression model. In our dataset multiple features that are interdependent. Multiple Linear Regression (MLR) is basically indicating that we will be having many features and our output feature.

Ethical Considerations:

We have the complete personal data of the customers. There is always a challenge of getting the consent of the customers to use it for this research/project. And this data will be disclosed in this project so there will be a privacy concern as well.

Challenges/Issues:

Currently I am thinking to apply Multiple Linear Regression model as a right fit for this project. We might have to review a possibility of using a better model.

References:

These are the websites which I would compare my results to.

 $\underline{https://www.cobuildlab.com/blog/ai/customer-personality-analysis-and-machine-learning-introduction}$

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https://www.stat.cmu.edu/capstoneresearch/fall2021/315files_f21/team25.html