Exploring Marketing Strategies for Mall Business Owners

Problem Statement

Consider that you want to or already own a business in a mall. You probably have or will have customers every single day. You want to make changes or know more about your potential customers to better serve them and make more benefit by developing marketing strategies. However, you have no idea about the characteristics of your target customers. This study aims at bringing a perspective on marketing strategies for mall business owners based on different features, such as age, gender, annual income, and spending scores.

Potential Stakeholders

The primary stakeholders of this study are the current or future business owners, who can use the learning model developed in this study to develop marketing strategies. The secondary stakeholders are the customers who shop in malls. They are secondary because they will not be directly affected until business owners make action and apply marketing strategies.

Data and Deliverables

The was obtained from a Kaggle competition (https://www.kaggle.com/vjchoudhary7/customer-segmentation-tutorial-in-python). There are five features in total with 200 data points. However, CustomerID will not be considered as a feature because it is a label feature for customers. Figure 1 summarizes the first five data points in the dataset. The features are: gender, age, annual income in dollars, and spending score between 1 and 100. According to the Kaggle definition, 'Spending Score' is something you assign to the customer based on your defined parameters like customer behavior and purchasing data.

	CustomerID	Gender	Age	Annual Income (k$)	Spending Score (1-100)
0	1	Male	19	15	39
1	2	Male	21	15	81
2	3	Female	20	16	6
3	4	Female	23	16	77
4	5	Female	31	17	40

Figure 1. Summary of the first five data points in the dataset

Potential Model Application

In this study, I am planning to use an unsupervised learning model because I will draw inferences from the provided dataset consisting of input data without labeled responses. I will cluster the data using the K-Means method to explore the number of clusters. Finally, I will create stories based on each cluster to offer marketing strategies for business owners.