

Ulabox Customer Purchase Analysis

Moody Billah

Company Background

- ◆ Ulabox is an online grocery start-up in Spain.
- ◆ €1 million in monthly revenue
- ◆ 10,000 unique customers
- ◆ 8 product categories

Category	Sales
Drinks	24%
Food	23%
Fresh	20%
Home	14%
Baby	11%
Beauty	6%
Health	1%
Pets	1%

Answering Business Question

- ◆ How can Ulabox increase the monthly spending from existing customers? An average increase of €20 per customer can raise monthly revenue by €200,000.
- ◆ Answer this question in a way that is easy to obtain from the available data.
- ◆ Predict the share of spending in each category when a customer starts shopping.
- ◆ Recommend products based on the predicted share of each category.

Analysis & Results

- ◆ Data:
 - ◆ Day of week
 - ◆ Time of day
 - ◆ Discount
 - ◆ Total items
 - ◆ % spend per category
- ◆ Model: Naïve Bayes classifier is used to predict % spend per category.
- ◆ Result: Given the data and question, even the best possible model is not very accurate.

Category	Average Error
Drinks	17%
Food	16%
Fresh	20%
Home	13%
Baby	17%
Beauty	8%
Health	2%
Pets	2%

Recommendations & Next Steps

- ◆ Although this model lacks accuracy, it should be put into production since that is better than not having any model for product recommendations.
- ◆ The inadequate model performance is due to the lack of depth in the available data.
- ◆ In the future, more in-depth data on customer purchases should be collected, which will help build better performing models.
- ◆ The production process created for the current model will make it easier to implement any future models into production.

Questions?