

Supervised Machine Learning

Project

Problem Statement 1: Fyntra is the largest online clothing company in USA. It sells clothing online, but they also have in-store style and clothing advice sessions. Customers come into the store, have sessions/meetings with a personal stylist, then can go home and order either on a mobile app or website for the clothes they want.

Company wants to decide whether to focus the effort on mobile app experience or its website. As a drastic measure it is also evaluating to shut down the website.

You as a ML expert in the team will help the company make the right decision

Tasks to be performed:

Increase in profits as the focus on the optimal sales channel will result into the higher top line and the higher bottom line

1. Compute -- Use seaborn to create a jointplot to compare the Time on Website and Yearly Amount Spent columns. Is there a correlation?
2. Compute -- Do the same as above but now with Time on App and Yearly Amount Spent. Is this correlation stronger than 1st One?
3. Compute -- Explore types of relationships across the entire data set using pairplot . Based off this plot what looks to be the most correlated feature with Yearly Amount Spent?
4. Compute -- Create linear model plot of Length of Membership and Yearly Amount Spent. Does the data fits well in linear plot?
5. Compute -- Train and Test the data and answer multiple questions -- What is the use of random_state=85?
6. Compute -- Predict the data and do a scatter plot. Check if actual and predicted data match?
7. What is the value of Root Mean Squared Error?
8. Based on coefficients interpret company should focus more on their mobile app or on their website