

Student: William Wager Johnsen

Cohort: Cohort 1

Business Insight

1. If we look at the difference in correlation to our target variable (CROSS_SELL_SUCCESS) between cancellation before noon and cancellation afternoon, we can see that those who can cancel before noon tend to go for the *Halfway There* deal. This might be a cause of the cancellation policy stating that you will get fully refunded before noon, but if you cancel after you will only receive a partial refund. According to Barnazzani¹, the customer journey is a big part of being able to cross-sell products or services, so if the customer always has to pay for their cancellation, the probability of them staying a customer will decrease.
2. There seems to be a big problem with junk emails that the company has in their system, so if the customer have provided what they define as junk email, the chance of them being able to get a cross-sell decreases drastically. We could also say that emails with a parentheses will also decrease the possibility of being able to sell *Halfway There* because the intended marketing campaign won't reach the person.

Recommendation

In the analysis that has been done, it is clear the most influential variable that is impacting cross-sell is the followed recommendation percentage. As a result of this, I would recommend improving the suggestions that are provided to clients are as good as possible because this is driving more sales. This might require the hiring of a proper data analyst that has strong knowledge in more in-depth techniques within machine learning which can implement a higher level of learning². This implementation can besides provide a more domain knowledge to the business. After looking at different visuals, it is hard to identify different customer groups, so more in-depth analysis might make it easier to classify different customer groups, which can help provide a proper customer journey when it comes to appropriate recommendations.

Best AUC score: 0.742

¹ Barnazzani, S. (n.d.). Cross-Selling and Upselling: The Ultimate Guide. Retrieved from <https://blog.hubspot.com/service/cross-selling>

² Six ways to use Data Science to drive your cross-sell and upsell activity. (2019, September 17). Retrieved from <https://www.ibm.com/blogs/nordic-msp/six-ways-use-data-science-drive-cross-sell-upsell-activity/>