Assignment 2

1. Evidence on the validity of the experiment / showing that the randomization was successful.

A screenshot of a computer

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1. An exhibit showing the means of all outcomes in each treatment arm, as well as 95% confidence intervals for the means.

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1. An exhibit showing the ATEs for each outcome, as well as 95% confidence intervals for the ATE.

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1. Plots showing the results

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1. A brief (1-3 sentence is fine) discussion of the business implications of the experiment. What should we do with the findings.

* The findings from this experiment suggest that adopting either of the new sales strategies could lead to a significant increase in purchases. Based on the effects and business objectives, treatment 2 seems to be the more effective option, although treatment 1 still provides a meaningful improvement.

1. A brief (1-3 sentence is fine) about possible issues. Is the outcome metric ideal, or what would be better? Did you spot anything troubling in the balance checks or results?

* Purchase rate as the metric seems appropriate for the goal of understanding sales effectiveness but maybe a more longer-term metric like customer retention or profit per customer would be more useful. One issue that I saw with the results from my regression model was that the R-squared value is quite low at .028. This means that the model doesn't explain much of the variability in the outcome. This could show the need for more predictors or interaction terms in future models.