



A/B TESTING

MARKETING CAMPAIGN

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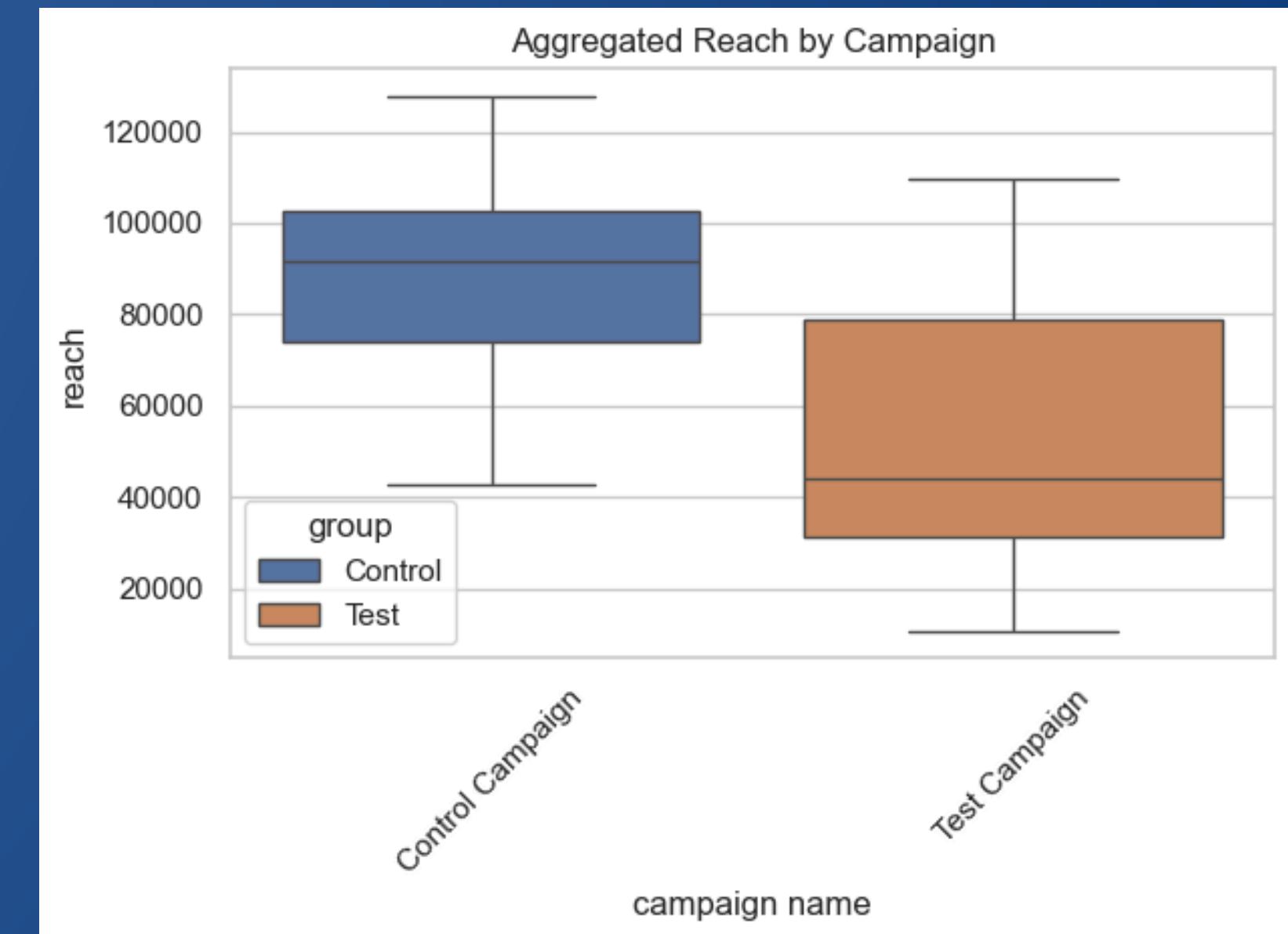
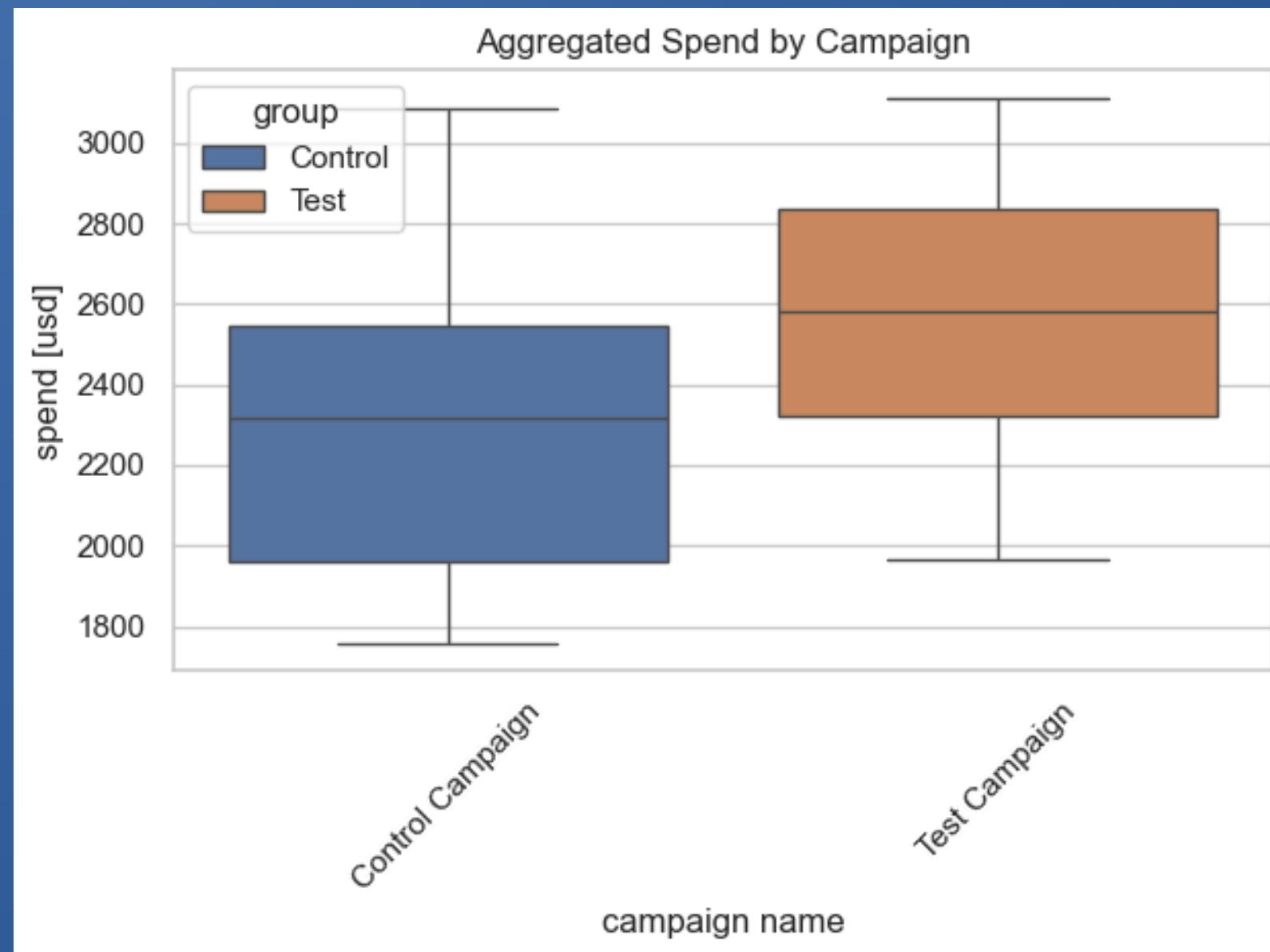
PROJECT OVERVIEW

In this project I was tasked to review the effects of a new marketing campaign by taking into exam 2 groups: **Control** and **Test**.

Success has been achieved via EDA and statistical testing.



EDA



The graphs above show how for the Test group there was a higher average spent on ads. Although this the Control group appeared to have higher Reach.

H0

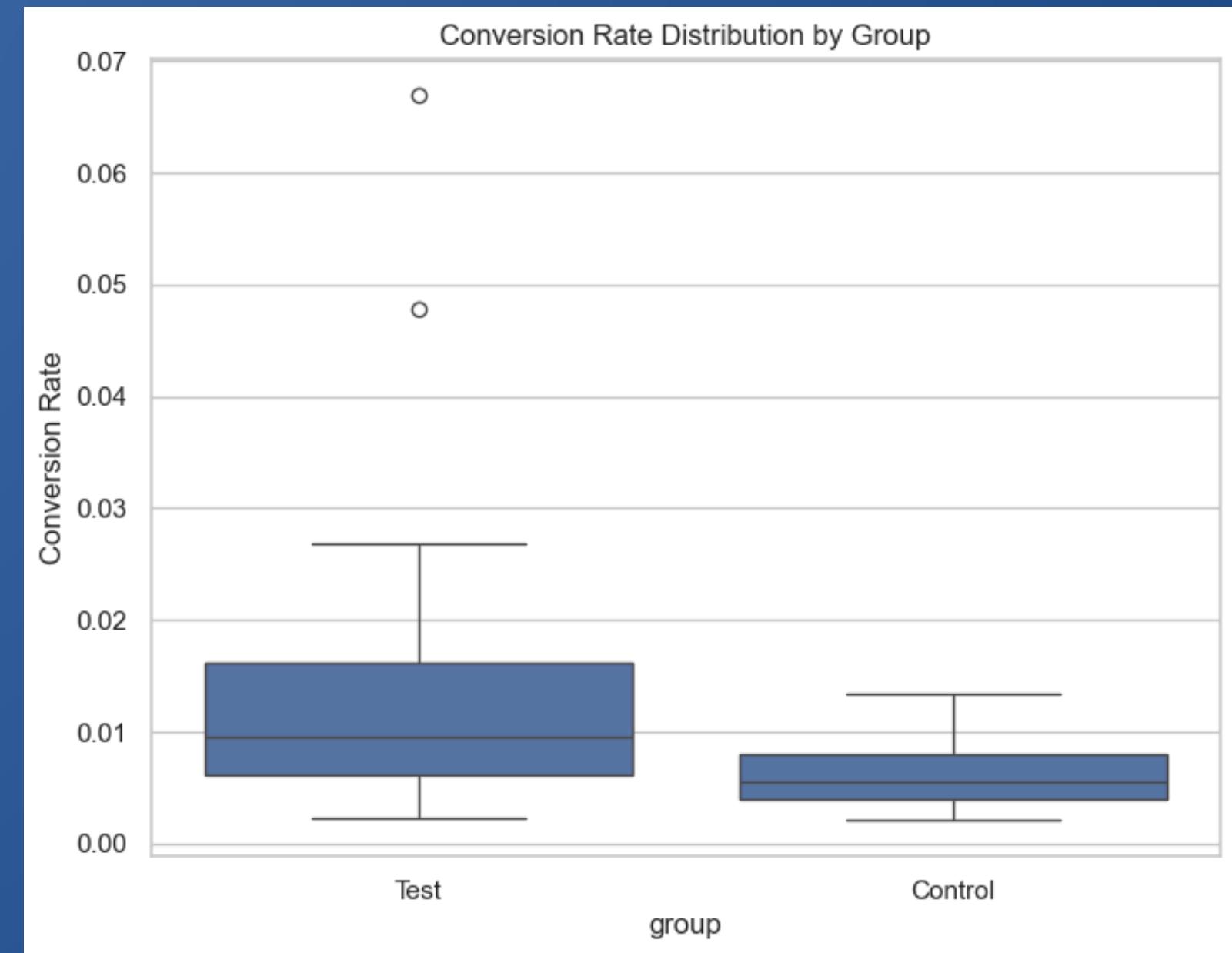
The test group has higher conversion rate than the control group.

H1

The test group has lower conversion rate than the control group.

T-TEST RESULTS

T-statistic: 3.0805
P-value: 0.0042



The T-statistic results show a strong difference in the average Conversion rate between the Test and Control group.
The low P-value confirms that we can safely accept the H₀.

Considering that the Test group has higher Conversion rate I also wanted to check the overall ROI seen the Reach level per group.

H0

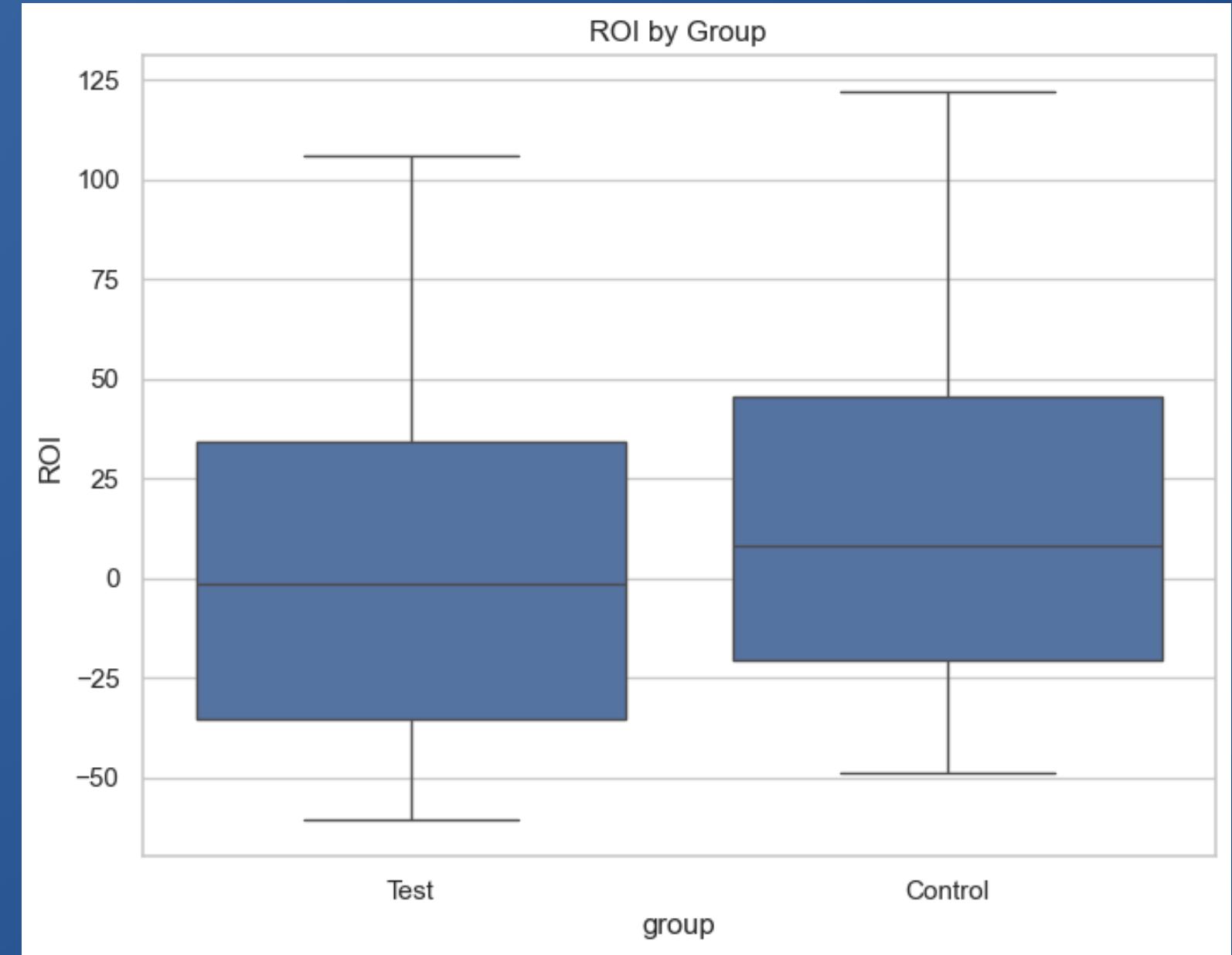
The test group has
a higher ROI than
the control group

H1

The test group has
a lower ROI than
the control group

T-TEST RESULTS

T-statistic: -1.0904
P-value: 0.2801



The T-statistic results show a difference in the average ROI rate between the Test and Control group.
The low P-value confirms that we can safely reject the H0.

CONCLUSIONS

The Test Group has higher expenses overall.

The Test Group presents lower Reach.

The Test Group has higher Conversion rate.

The Control Group has higher ROI overall.



THANK YOU

<https://github.com/MC993>