

## PROJECT

## Design an A/B test

A part of the Data Analyst Nanodegree Program

NOTES PROJECT REVIEW Meets Specifications SHARE YOUR ACCOMPLISHMENT f Dear student, your submission is flawless, it's very seldom happens for students to pass this exam at first trial, you did an excellent job. There is just a minor wording issue regarding the net conversion. Though formally correct the follow-up experiment could have been more daring and original as well. That being said you showed a sound understanding of the complex concepts involved in this exam, congratulations on your excellent work! Metric Choice A good set of metrics have been selected for the experiment, without missing any necessary or valuable metrics. Each metric has a clear and well-reasoned explanation of why it was or was not chosen as an invariant metric and as an evaluation metric. The report clearly states what results we look for in order to launch the experiment and the stated results are aligned with the experiment goals. Excellent, just a minor wording issue here, you write: "...without a decrease of payments: gross conversion should decrease while net conversion stays the same." In order for payments not to decrease we need for the net conversion not to decrease as well, we would welcome an increase, therefore "stays the same" should be replaced with "doesn't decrease" Variability The standard deviations for all evaluation metrics have been correctly calculated. Each evaluation metric has a clear and correct explanation of whether the analytic variability is likely to match the empirical variability. Sizing The number of pageviews given is correct given the students choice of whether to use the Bonferroni correction. A well-reasoned argument about how risky the experiment will be is made and a fraction of traffic to divert is chosen accordingly. The duration of the experiment is correctly calculated given the fraction of traffic to divert that was chosen. Sanity Checks The sanity checks have been correctly calculated for all chosen invariant metrics. The passing or failure of all sanity checks have been evaluated. If sanity checks failed, analysis has been performed to discover why the sanity checks may have failed and the experiment has not been continued. **Effect Size Tests** Correctly calculated confidence intervals have been reported for the difference in all evaluation metrics. Statistical and practical significance have been correctly reported for all evaluation metrics. Sign Tests P-value and statistical significance have been correctly reported for all evaluation metrics. **Results Summary** The report provides good justification for the choice of whether to use the Bonferroni correction. A well-reasoned and plausible explanation for each discrepancy between the effect size tests and the sign tests has been provided. Recommendation A recommendation is made that is well-reasoned and supported by the data. Follow-Up Experiment A plausible experiment that would be worth testing has been made. A hypothesis for results of the experiment is clearly stated. The experiment logic is identical to the one proposed in the exam. Ideally you might want to design something more original and innovative, please remember that this project will be showcased in your portfolio to a potentially professional audience, don't miss the chance to impress that audience! The metrics chosen in the report will be sufficient to evaluate the hypothesis of the experiment, would be possible to measure under most infrastructures, and are well-supported by reasoning in the report. The report describes a reasonable unit of diversion and gives good support for this choice. **■** DOWNLOAD PROJECT

Student FAQ