Analyze A/B Test Results

REVIEW

HISTORY

Meets Specifications

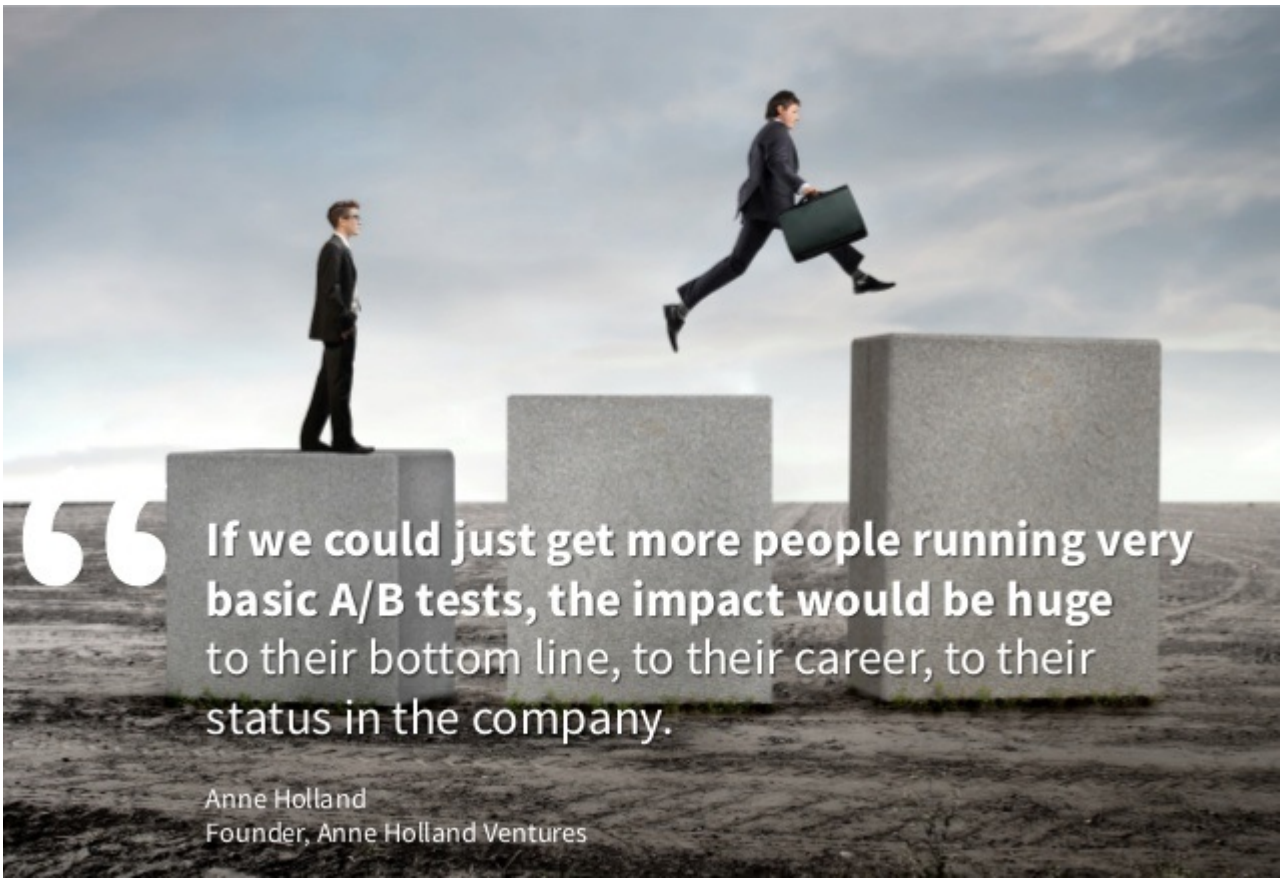
> importing the statsmodels.api in my python script generated the following warning:
> "miniconda2/lib/python2.7/site-packages/statsmodels/compat/pandas.py:56: FutureWarning: The pandas.core.datetools module is deprecated and will be removed in a future version. Please use the pandas.tseries module instead.
> from pandas.core import datetools"
> As per https://github.com/statsmodels/statsmodels/issues the related issue tickets were cited in the notebook for reference.

Hi Udacious,

Congratulations! You nailed it this time 👏 ✨

- Thank you for your valuable feedback I think this issue should be fixed by upgrading statsmodels version. **Your submission is considered one of the well organized and details-oriented projects.** You have met all the requirements for this project. I really appreciate the hard work you put into this project in particular, **regarding implementing the interaction between country and page correctly, and also getting the correct `p-values` through all tests.** 👌 Keep up the great work and good luck with your upcoming project(s).
- Further readings to ensure covering the topic:
  - A/B Testing Guide
  - The Complete Guide To A/B Testing & Split Testing

Stay safe, keep learning, and stay Udacious



Code Quality

✓

All code cells can be run without error.

✓

Docstrings, comments, and variable names enable readability of the code.

Statistical Analyses

✓

All results from different analyses are correctly interpreted.

- In "Part II - A/B Test", student should correctly interpret the test statistic and p-value.
- In "Part III - A regression approach", student should correctly analyze the interaction effects on all of p-value and statistical significance to predict conversions.

✓

All statistical numeric values are calculated correctly.
Tip: Students can optionally attempt the classroom quizzes to ensure they are calculating the right value in many

cases.

- 🟢 Well done! You searched and solved summary's problem by using `summary2()`. This is considered a problem solving technique. Keep it up. 👋
- 🟢 In addition, in part III: 1(h), you got **the interaction** between page and country correctly, however many learners tend to ignore it.
- 💡 **[Suggestion]** In part II: 2(m), good job! Kindly just note it's recommended to use `alternative='larger'` in this `ztest` since this is **a one right tailed test**, and also since the alternative hypothesis assumes that `pnew > pold`, but you will need to swap the order of parameters, as a result you should get **a negative** `z-score` = `-1.3` which is consistent with **the negative** actual difference (`-.0015`)

```
sm.stats.proportions_ztest([convert_new, convert_old],[n_new, n_old],alternative='larger')
```

📚 **Further Reading**
The Documentation of proportion.proportions_ztest()

✓

Conclusions should include both - statistical reasoning and practical reasoning for the situation.

DOWNLOAD PROJECT

RETURN TO PATH

Rate this review

START