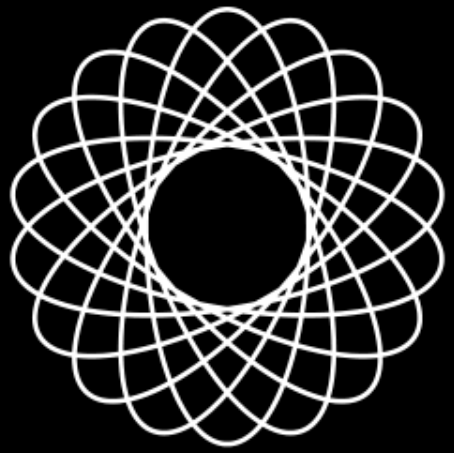
DATA SCIENCE



Agenda

Anova
- One Way
- Two Way
- Post Hoc Tests

Chi Square
- Association Tests
- Goodness-of-Fit Tests

Chi Square Parametric
- **Tests of Variance**

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- There are many kinds of non-parametric tests, an equivalent one for every parametric test
- Which types of test are preferable? Non-parametric, or parametric?

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  - Non-parametric tests are less powerful than parametric tests in the sense that they use more information and are sometimes less flexible in terms of testing different kinds of hypothesis
  - Also, as sample size increases, it turns out that non-parametric test distributions approximate normal distributions

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- The CLT posits that the distribution of sample means will follow a normal distribution
- What about the variance of the samples?
  - The variance of samples will follow a Chi Square distribution

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  – Is the new approach sufficiently different from the standard to justify investment in it?

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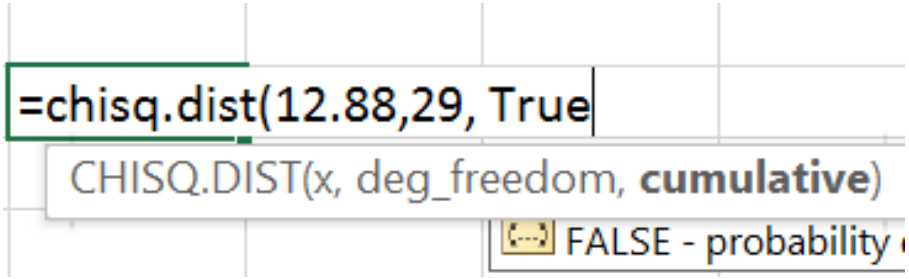

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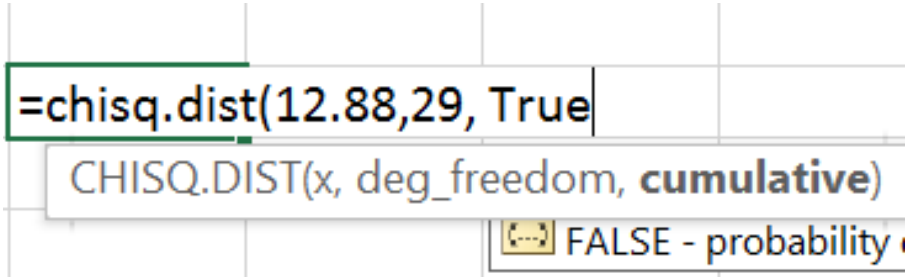

p-value = 0.002, therefore reject the null and conclude variance of calls has reduced

THANK YOU