

## ① Metrics

- a) Business
- b) Proxy
- c) Offline

## ② Sampling

- a) Randomized
- b) Stratified

## ③ Groups

- a) Independent
- b) Paired
  - Simple Design
  - Crossover Design

## ④ Robustness

- a) Reverse Experiment
- b) A/A Testing

## ⑤ Sample Size

$$n = \frac{Z^2 \cdot p(1-p)}{C^2}$$

1. the **effect size**
2. the sample size ( $N$ )
3. the **alpha** significance criterion ( $\alpha$ )
4. **statistical power**, or the chosen or implied **beta** ( $\beta$ )

All four parameters are mathematically related. If you know any three of them you can figure out the fourth.