



School of Full Stack

RCT and AB Testing

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Type of Study

Observational
(Correlation)

Experimental
(Causation)

Correlation **does not** imply
causation



Sun Rise



Chicken

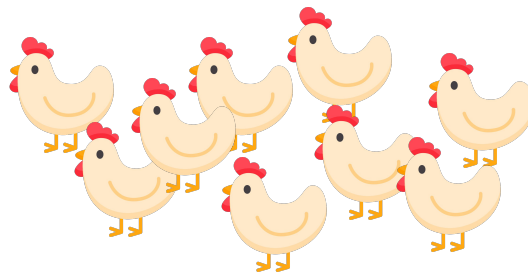
Reading —————> Exam Score



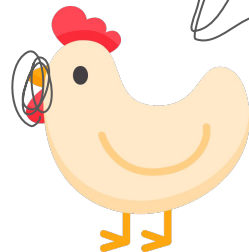


<https://www.kdnuggets.com/2019/09/risk-ai-big-data.html>

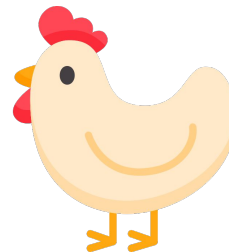
100 chicken



โจทย์ - ความน่าจะเป็นที่พระ
อาทิตย์ขึ้นเปลี่ยนหรือเปล่า?
เปรียบเทียบสองกลุ่ม



50 chicken
ไก่ไม่ขัน



50 chicken
ไก่ขัน



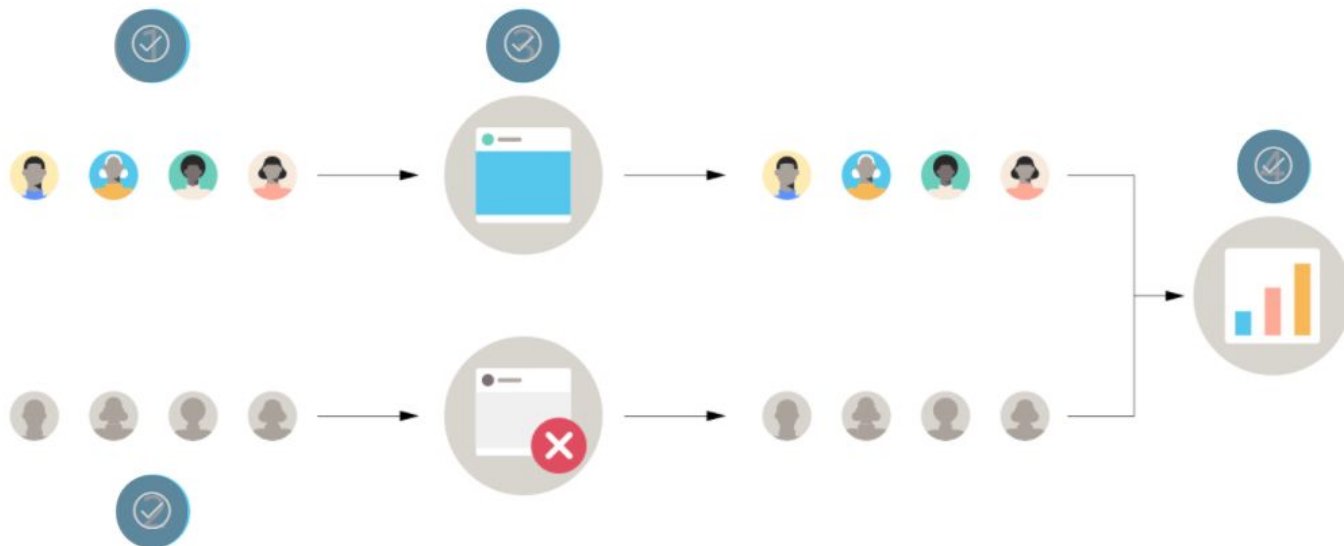
Golden Standard

to test causation is **RCT**

Randomized Control Trials

RCT

An RCT begins when your audience is divided into random, non-overlapping groups. Click on each hotspot to learn more about the methodology for conducting an RCT.



The group that could potentially be exposed to the treatment.

The group that won't be exposed to the treatment.

The variable that the test group is exposed to.

The true impact of an ad. Also known as "lift."

Test Group

Results

Treatment

Control Group

The group that could potentially be exposed to the treatment.

Test Group

The group that won't be exposed to the treatment.

Control Group

The variable that the test group is exposed to.

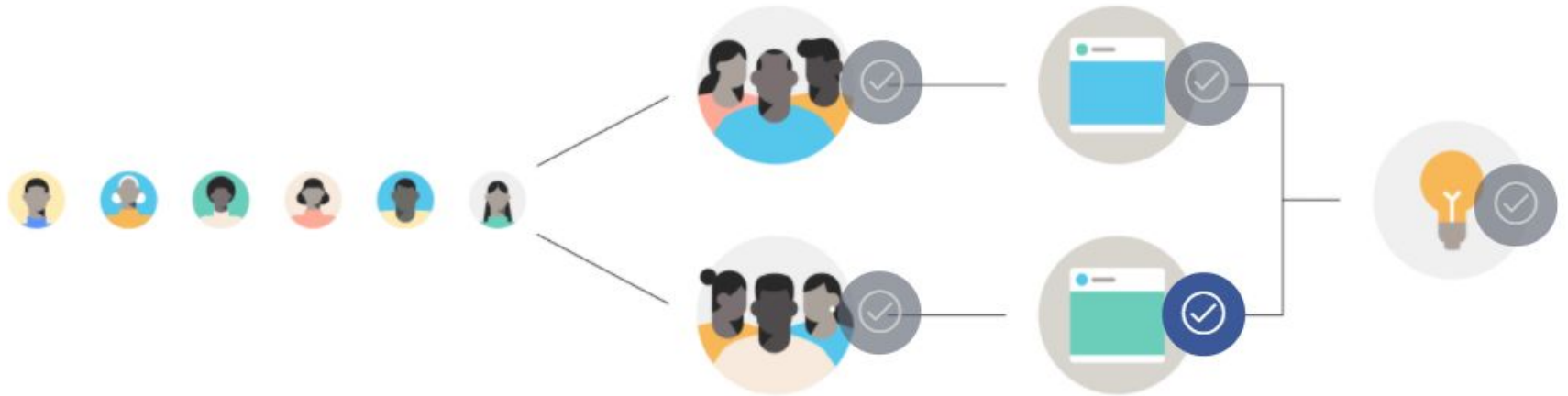
Treatment

The true impact of an ad. Also known as "lift."

Results

AB Testing

Click on each hotspot to learn more about how Facebook conducts A/B tests.



This type of experiment lets you test different versions of your ads so you can see what works best and improve future campaigns.

The random, non-overlapping audiences in an experiment.

This is what happens when Facebook duplicates your ads and changes the variable you choose.

Shows which ad produced the lowest cost per result.

AB Test

Test Group

Ad Versions

Results

This type of experiment lets you test different versions of your ads so you can see what works best and improve future campaigns.

AB Test

The random, non-overlapping audiences in an experiment.

Test Groups

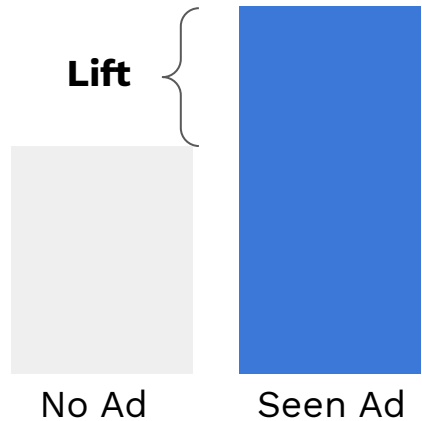
This is what happens when Facebook duplicates your ads and changes the variable you choose.

Ad Versions

Shows which ad produced the lowest cost per result.

Results

The Difference between RCT vs. AB Test



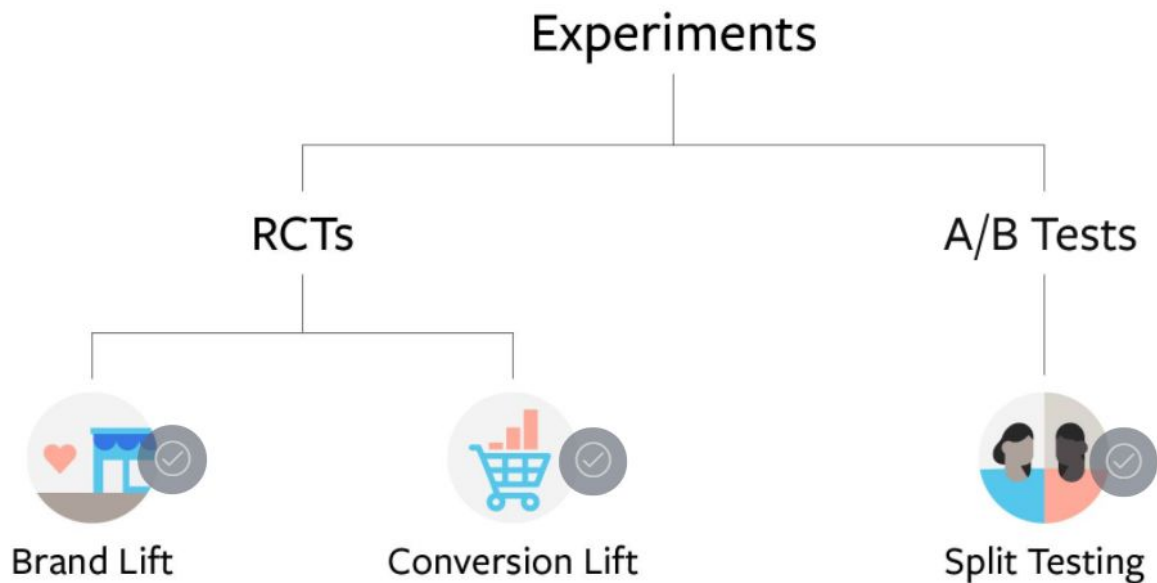
RCT



AB Test

Facebook solutions for RCTs and A/B Tests

Facebook offers solutions for conducting an RCT or A/B Test. Click on the hotspots to learn more.

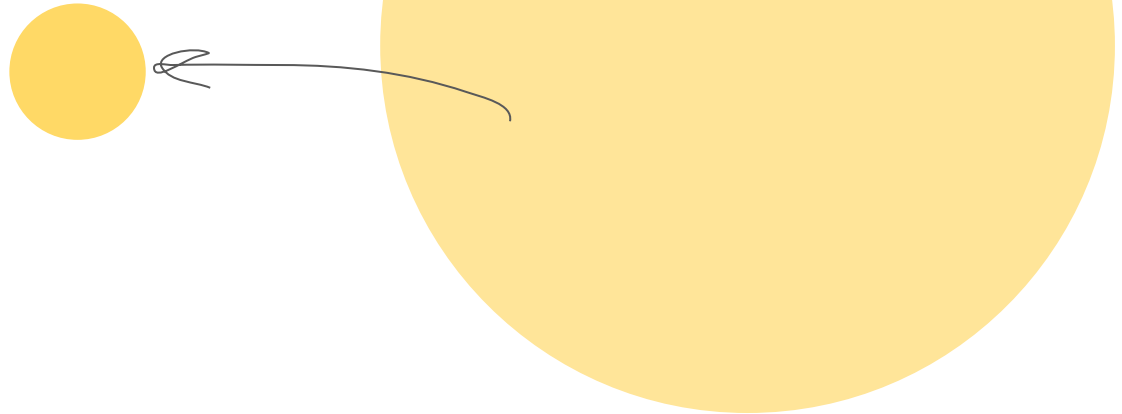


This is Statistics

Sample vs. Population

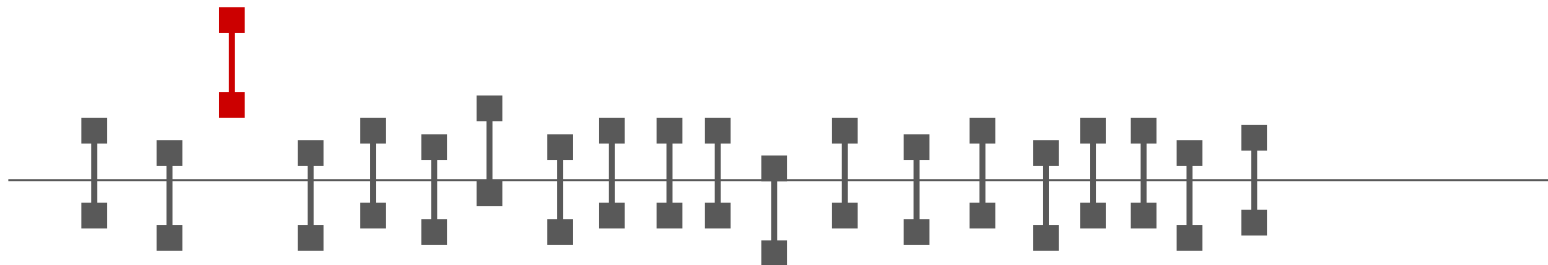
\bar{x}

μ



$$19 / 20 = 0.95 = \mathbf{95\% \text{ Confidence Interval}}$$

True
Rating
TENET



Each Sample



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<https://datarockie.com>