We have come to save humans from Digital Experiences that suck

General instructions

In the following slides there are experimentation related problems or tasks to solve. There is not necessarily one correct answer to these.

We are interested in your argumentation and your thought process. And of course in the reasoning behind your choice of statistical method. Please prepare accordingly.
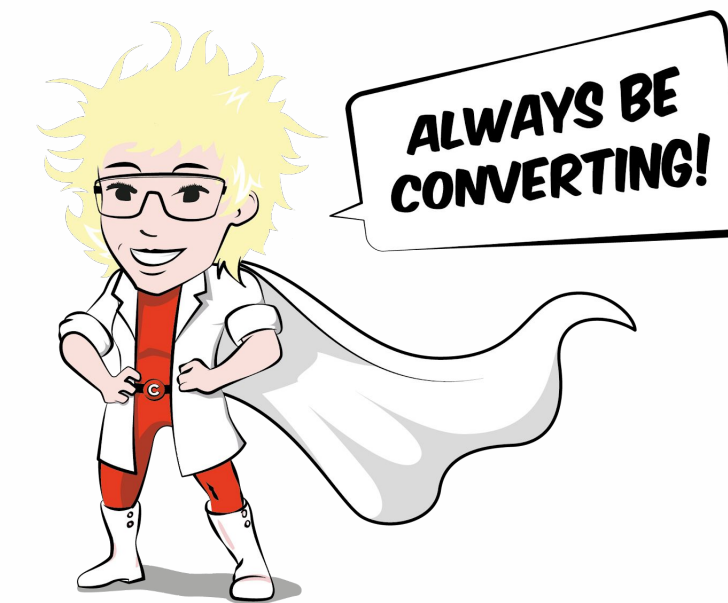
Subscription based SAAS company

You've been given two csv files from *AwesomeApp* that contains session data and sign-up data from the time period when an experiment was conducted. The experiment is called "Experiment 037". In the experiment the variant groups (variant 1 and 2) was exposed to a social proof element derived from user research.

In addition to the results table the business intelligence unit has provided you with estimated lifetime value figures for all subscription types.

What would your recommendation be based on the data given?

The data set is provided separately as two .csv files named
Session_data.csv
Signup_data.csv

	LTV *
Free adbased subscription	$3,120
Subscription basic	$5,280
Subscription advanced	$21,800

* Numbers based on whole group estimate, including probability for individuals within group to change subscription type.

Campaign flip switch

The company *myshinyphone.com* is planning to run a campaign on 10 of their best selling accessories. The market department campaign team is interested in testing a "3 for 2" offer versus a "30% off" offer.

They know from experience that a lot of customers will start their journey on one device and finish their purchase on another, so they can't do a randomized A/B-test, cause that would mean that 50% of these users will first see one offer and when they change device see another.

What information would you ask the campaign team for to help you decide on an appropriate experiment to run?
What are potential experiments you think could work?

Multifactorial experimentation

A product team at *myshinyphone.com* needs your help, they have run four different experiments following what they believed was the appropriate next experiment to run. When looking at the situation you could conclude that they have tried three different design elements (A, B and C) in different combinations in four different experiments.

All experiments were completely randomized A/B-tests. The numbers you've got are for unique conversions (users with at least one purchase).

The team wants to know. What should be implemented? What should be the next experiment to run?

		Users	Users with purchase
Experiment 1	ctrl	15328	786
	A	15503	730
Experiment 2	ctrl	17324	871
	A + B	17102	873
Experiment 3	ctrl	22319	1141
	C	21981	1230
Experiment 4	ctrl	18248	916
	B + C	18432	993

Across markets

The company *AwesomeApp* is planning to test new functionality relating to their in app purchases, but because of technical difficulties they will not be able to release it as an A/B-test. For that reason they are now thinking about releasing the feature to all customers on some of their markets.

You've been given a data set with traffic (users per month) and in app purchases by country.

Given this data set, how would you select an appropriate group of countries to test the new feature on?
Would you have wanted some other data?

The data set is provided separately as a .csv named
"**dataset - data by country.csv**".