



**CAMPAIGN BOOT CAMP:  
DATA AND TECHNOLOGY**  
*DECEMBER 4, 2019*

# WHAT WE'RE COVERING TODAY

- Some technology tools you should know about
- Advanced Excel skills
- Securing your data
- Predictive models
- Testing and other best practices

# TECH TOOLS

zapier



**KLAVIYO**



Google Tag Manager

# ZAPIER

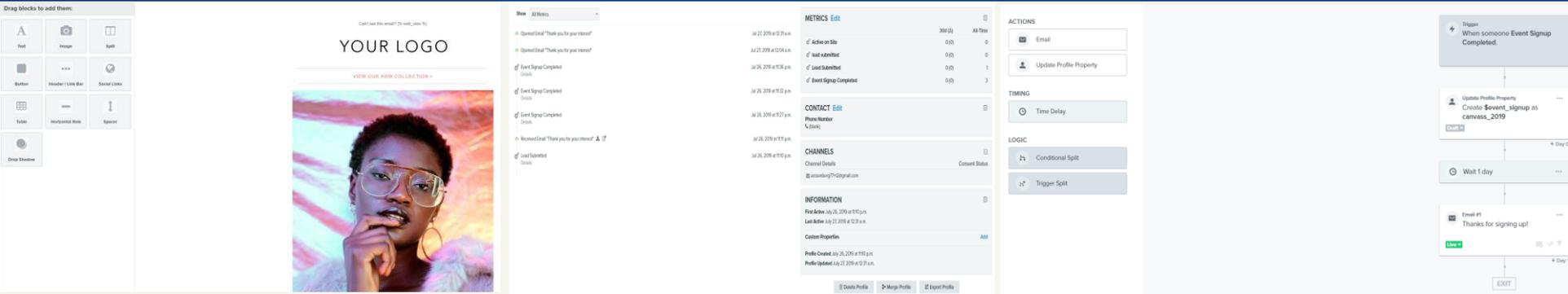
**I can wire anything directly  
into anything!**



**I'm the PROFESSOR!!**

- Most web-based apps provide a code-based interface for programmers called an API.
- Zapier provides a visual way for non-programmers to take advantage of these APIs.
- You can use Zapier to automate tasks and create complex workflows.

# KLAVIYO (OR SIMILAR EMS)



- Easy-to-use WYSIWYG editor
- Extensive library of quality templates
- Robust customization options for intermediate-to-advanced users.
- Powerful CRM
- Limitless list and segment creation
- Auto-sync lists with Facebook Ads to consistently target your messaging.
- Visual editor for automated email series.
- Event and property-based triggers
- A/B Testing

# GOOGLE TAG MANAGER

The screenshot displays the Google Tag Manager workspace management interface. It features three main panels: 'New Tag' (blue), 'Now Editing' (blue), and 'Live Version' (green). The 'New Tag' panel includes a search bar and an 'ADD A NEW TAG' button. The 'Now Editing' panel shows 'Workspace Changes' with 2 Modified, 1 Added, and 0 Deleted items, and a 'MANAGE WORKSPACES' button. The 'Live Version' panel shows 'Version 40' published 6 days ago and a 'LATEST VERSION' button. A red 'Conflict found' banner is visible, with a 'RESOLVE' button. Below the banner is a table of workspace changes:

| Name                | Type | Change   | Last Edited | User                   |
|---------------------|------|----------|-------------|------------------------|
| Custom HTML         | Tag  | Conflict | 3 days ago  | simo.s.ahava@gmail.com |
| Universal Analytics | Tag  | Added    | a month ago | simo.s.ahava@gmail.com |

## Tags

The screenshot displays the Google Tag Manager 'Tags' section. It features a 'New' button and a table of tags with columns for Name, Type, Firing Triggers, Folder, and Last Edited. The tags listed are:

| Name                      | Type                | Firing Triggers             | Folder           | Last Edited |
|---------------------------|---------------------|-----------------------------|------------------|-------------|
| AdWords Remarketing       | AdWords Remarketing | All Pages                   | Adwords          | a month ago |
| Crazy Egg                 | Crazy Egg           | All Pages                   | UX Tracking      | a month ago |
| Email Click Event         | Universal Analytics | Email Click Trigger         | UX Tracking      | 25 days ago |
| External Link Click Event | Universal Analytics | External Link Click Trigger | UX Tracking      | 25 days ago |
| Facebook Pixel            | Custom HTML         | All Pages                   | Social           | a month ago |
| GA Pageview               | Universal Analytics | All Pages                   | Google Analytics | a month ago |
| PDF Download Tag          | Universal Analytics | PDF Download Trigger        |                  | 10 days ago |
| Scroll Top Event          | Universal Analytics | Scroll Top Click Trigger    | UX Tracking      | 25 days ago |
| Telephone Click Event     | Universal Analytics | Telephone Click Trigger     | UX Tracking      | 25 days ago |
| YouTube Embed API Tag     | Custom HTML         | All Pages                   |                  | 11 days ago |
| YouTube Embed Events Tag  | Universal Analytics | YouTube Video Event         |                  | 11 days ago |

- Tag website once, rather than once per app. Deploy updates without assistance from a web developer.
- Reuse tags, variables, and triggers in any combination, saving time deploying multiple apps.
- Browser extension available for robust quality assurance.
- Standardized naming and tagging means consistent data across apps.
- Version control makes it fast and easy to revert changes that don't work as expected.

# EXCEL SKILLS



# ADVANTAGES TO SPREADSHEETS

In a political campaign, some common use of spreadsheets are:

- Analyzing voter data
- Tracking staff and volunteers' progress
- Merging datasets
- Formatting datasets for import/export to different systems

We will be discussing how to best use spreadsheets to accomplish these tasks, as well as when it would be better to use your voter system, instead of a spreadsheet to accomplish your tasks.

# ANALYZING VOTER DATA

- Past Election Results
  - Available via flat file through the Registrar of Voters
  - Available at the consolidated precinct level
- Voter Feedback
  - Download Current Results from your Voter Data System for more complexed analysis
    - Examples: Analyse by precinct or community totals to find targets and outliers
- Voter Demographical Data
  - Available through your voter system at a voter level
    - Examples of Demographic Data Available: Party, Age, Race, Sex, Language Preference, and much more
  - Analyze precinct or community totals

# SPREADSHEET FUNCTIONALITY

- Filtering (by any column in your dataset)
  - Example: Filter a spreadsheet of precinct level data to precincts in a particular community or zip code
- Ranking your data by any column
  - Example: Rank precincts by number of target voters, yes IDs, or past election results
- Sub-categorizing with other values
  - Example: In a precinct-level spreadsheet, the top 25 precincts (ranked by number of target voters) would be Priority 1, the next 25 precincts would be Priority 2, etc.

# SPREADSHEET FUNCTIONALITY

- Using pivot tables for a sums, counts, and averages
  - You can create aggregate views of the data using a pivot table. This allows you to see overall totals by a category.
    - Example: In a spreadsheet of precinct-level data, with a column for community, you can see total targets by community.

# TRACKING YOUR TEAM'S PROGRESS

## Examples of Data You Might Want to Track:

- Tracking progress by region/community/precinct
- Daily tracking of number of calls/contacts/vol. signups
- GOTV precinct tracking

## Online security / change-tracking

- Often status spreadsheets are Google sheets or Office 365 spreadsheets in the cloud
- This allows for viewing by multiple people, data entry only by certain people, and change-tracking to revert the spreadsheet back in case someone makes a mistake.
- Cloud-based spreadsheets ensures that everyone is viewing the same version of the data

# MERGING DATASETS

- There are many instances where you may wish to bring together multiple types of data, such as creating a spreadsheet of precinct level data that combines both demographic and past election result data.
- Spreadsheets are an quick and easy way to combine data that has the same key (often precinct number or consolidated precinct number).
- The most common function to merge datasets is the VLOOKUP, which looks up a a value defined in a cell in a table of values on another worksheet, or workbook, and returns the corresponding value from the lookup table.

# FORMATTING FOR IMPORT/EXPORT

Different systems often use different data formats.

- Example: The voter data system PDI outputs precinct numbers with a two-digit county tag at the front, while the Votebuilder system does not.

If you are importing data from PDI into Votebuilder, or vice-versa, the easiest way to make one dataset compatible with another data set is to edit the exported data in Excel to make it compatible with the system you are importing it to.

- In this example, precinct numbers in a spreadsheet to add or remove the county code from the precinct number.

# WHEN NOT TO USE SPREADSHEETS

Rule: Do not store data in spreadsheets that can be stored in your voter system.

When data is stored in your voter data system, the system can augment these records automatically with voter/volunteer demographic data, past contact data, etc., that would not be available to you if you stored it in disparate spreadsheets.

Data that would be better stored in your voter system:

- Voter feedback notes
- Volunteer signups at an event
- Records of who volunteered at an event
- Results of individual contact with voters

# SECURITY



"IT USED TO BE THAT IF YOU WORRIED ABOUT UNSEEN FORCES YOU WERE CONSIDERED PARANOID. NOW YOU'RE A SECURITY EXPERT."

# THE 10 COMMANDMENTS OF SECURITY

- Select one person as security program manager.
- Have a written Incident Response Plan (IRP).
- All staff will complete the Security Checklist.
- All staff will use strong 2FA—preferably security keys.
- All staff will use encrypted communications (ie. Signal, Zoom).
- Select one person to monitor and react to disinformation. Send trends, best practices and alerts to disinfo@dnc.org.
- Organizations will monitor staff laptops and mobile devices.
- Send any security alerts to security-alert@dnc.org.
- Do not run your own services—they can't be secured.
- Take advantage of the shared knowledge and security ecosystem.

# INCIDENT RESPONSE PLANNING



# CYBERSECURITY INCIDENTS

- It's important to discuss ahead of time how your team will handle potential incidents and create response plan templates. Templates should include:
  - Key contacts for external responders, tech vendors, and stakeholders
  - Internal Incident Response Team information
  - Decision making chain of command in an incident
- Approve the plan with leadership, ensuring all decision makers are fully informed. The candidate and/or campaign manager should also sign the plan. Print and keep copies of the plan.

# COMMUNICATIONS RESPONSES

- In a breach, only attorneys or qualified campaign security officers should talk to law enforcement.
  - Document your one-sentence policy for staff and stakeholders on legal response and where they can direct questions
  - Note any legal obligations and compliance measures to take should data be stolen
  - There is a tension between releasing information to be transparent and having to update wrong information later on. Prepare an initial immediate statement below, which can be adapted
    - *“We have received reports that [general information]. We are working with stakeholders and experts to understand what may have happened and what actions we need to take...”*

# PREDICTIVE MODELS

- Many voter systems, including Votebuilder and PDI, include built-in data models for targeting for upcoming election cycles. Data models allow you to quickly select a intelligent targets of voters for your campaigns outreach.
- Examples of ways to use data models in Votebuilder are “Scores” and “Targets.” Examples of data models in PDI are “Pre-defined Universes”.

# VOTE BUILDER - SCORES

- Scores are ratings of voters based on predictive models created by the DNC/DCCC to rate the propensity of voters to engage in a certain behavior (generally, likeliness to vote or support a democratic candidate).
- Predictive modeling is the process of training a statistical (or machine learning) model to predict probabilities of outcomes, or future events, largely informed by a lot of additional, related data. In our case, many of our predictive models predict something about a registered voter.
- Since we are dealing with probabilities, or the likelihood of some event occurring, the model is used to calculate individual predicted probabilities, or “scores.” These scores are usually on a scale of 0-100, or 0-1, with zero indicating no likelihood of the event occurring, and 100 or 1 indicating absolutely certainty of an event occurring.

# VOTEBUILDER - SCORES

Scores can be found in the “Scores” system under Create/Edit List.

▼ Scores

▼ Democratic National Committee (10 Scores)

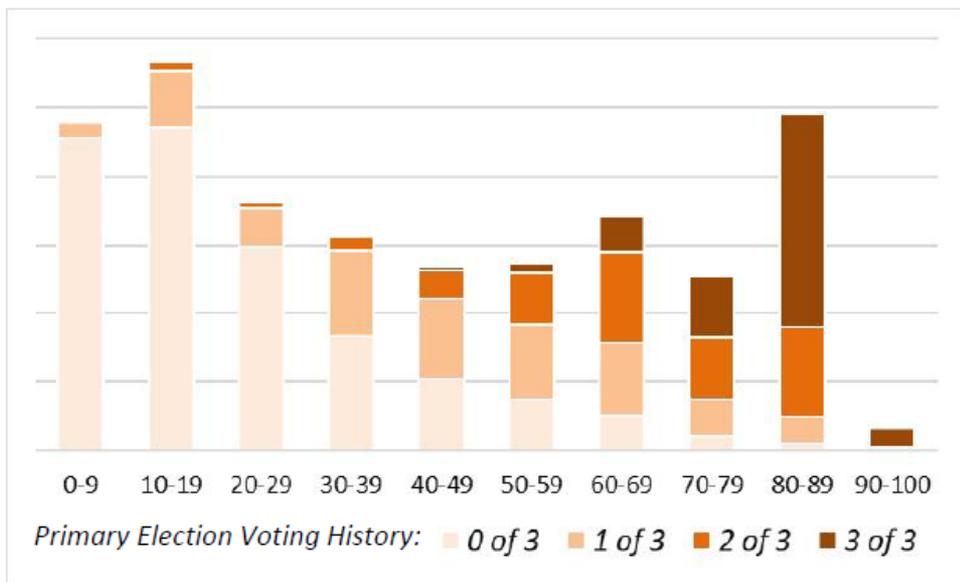
|                                                |                                   |    |                                     |
|------------------------------------------------|-----------------------------------|----|-------------------------------------|
| 2020:DNC Volunteer Propensity Overall ?        | <input type="text" value="0.00"/> | to | <input type="text" value="100.00"/> |
| 2020:Civis Spanish Language Preference ?       | <input type="text" value="0.00"/> | to | <input type="text" value="100.00"/> |
| 2018 DNC Dem Support ?                         | <input type="text" value="0.00"/> | to | <input type="text" value="100.00"/> |
| 2018:TargetSmart:Midterm General Turnout ?     | <input type="text" value="0.00"/> | to | <input type="text" value="100.00"/> |
| 2018:TargetSmart:National Partisanship ?       | <input type="text" value="0.00"/> | to | <input type="text" value="100.00"/> |
| 2018:TargetSmart:Non Pres Year Primary Turnout | <input type="text" value="0.00"/> | to | <input type="text" value="100.00"/> |

# WHY USE SCORES?

Using predictive models is much more efficient for targeting voters for voter contact than targeting via vote history alone.

Remember, predictive models typically rely on algorithms to analyze hundreds, of data points related to voters in order to predict outcomes. These data typically include voting history, previous field IDs, demographics, consumer information, etc. A model that is well-validated can not only save countless hours, but can also help you target voters you would not have otherwise targeted when limited to Votebuilder queries alone.

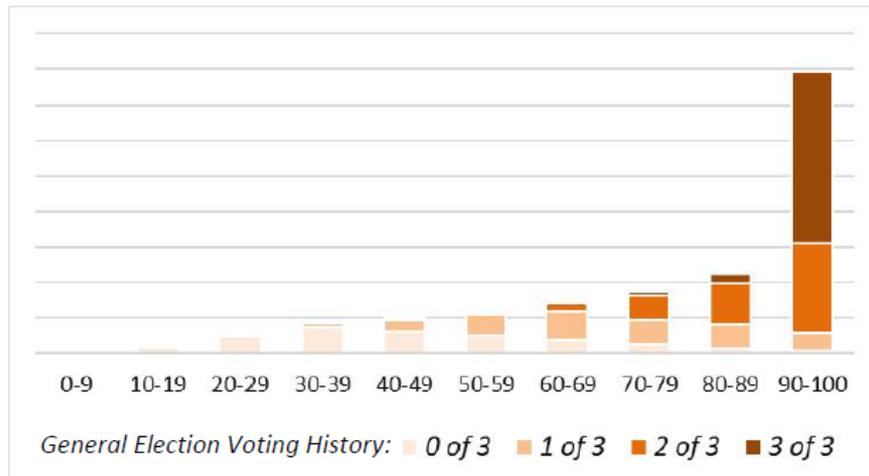
## TargetSmart Presidential Primary Turnout



### NOTES ON USAGE

- Represents a rank-ordered prediction of a voter's likelihood to turn out in the 2020 Presidential Primary Election.
- Targets in the 20-40 score range are likely to yield the greatest impact from get-out-the-vote outreach in the Primary.
- Persuasion outreach should focus on voters with higher scores.
- For the best insights, review the distribution of scores in a particular district (via Counts and Crosstabs) in light of the estimated turnout in that district.

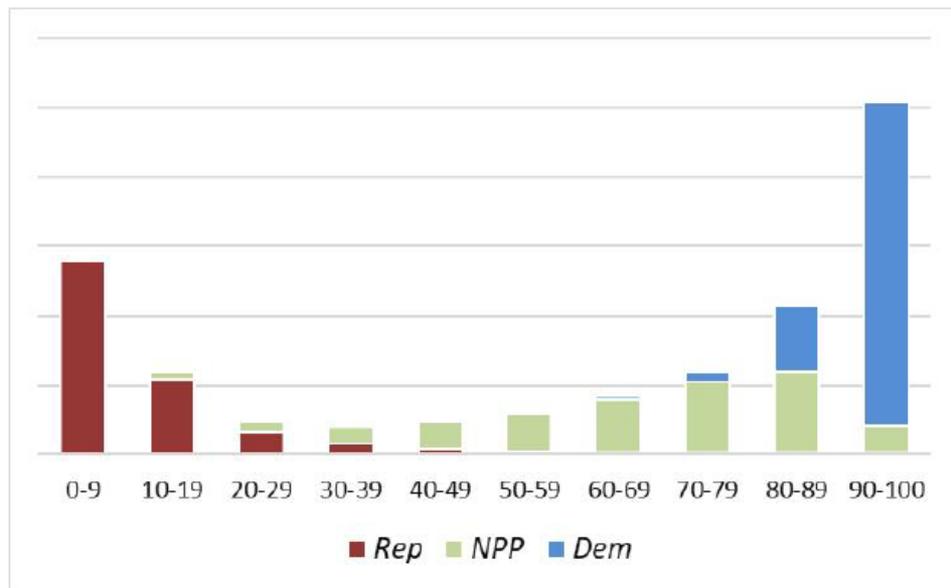
## TargetSmart Presidential General Turnout



### NOTES ON USAGE

- Represents a rank-ordered prediction of a voter's likelihood to turn out in the 2020 Presidential General Election.
- Targets in the 40-70 score range are likely to yield the greatest impact from get-out-the-vote outreach in the General Election.
- Persuasion outreach should focus on voters with higher scores.
- For the best insights, review the distribution of scores in a particular district (via Counts and Crosstabs) in light of the estimated turnout in that district.

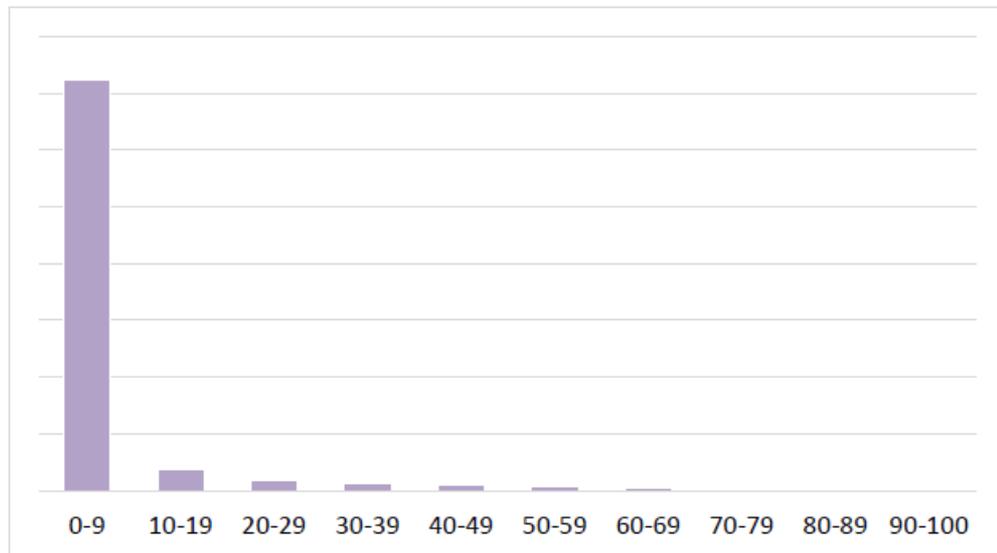
## 2020: Civis Partisanship



### NOTES ON USAGE

- Predicts a voter's probability of self-identifying as a Democrat (not necessarily intensity of support).
- Can be used to identify likelihood of Democratic support among unaffiliated or minor-party voters, or to identify Republicans who behave more like Democrats and vice versa.
- A universe for generic Democratic GOTV could include support scores of 80+.
- Voters in the middle-score range are not necessarily "persuadable," but rather people of unknown partisanship.

## 2020: Civis Spanish Language Preference



### NOTES ON USAGE

- The score estimates the probability of an individual's preference to communicate verbally in Spanish.
- Since the vast majority of voters have a single-digit score in this model, those with scores of 10+ (about 12% of all voters countywide) will be most likely to have a Spanish language preference.

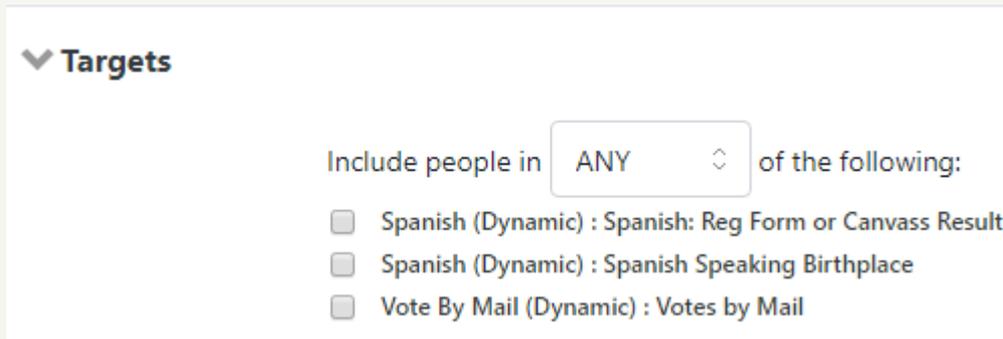
# VOTEBUILDER TARGETS

Targets encapsulate a number of criteria including scores, voter history and demographics and many others.

Generally, the party makes available a field target for Go-Team members to use to know which individual are targetted in their precinct.

Targets are an easy way for field operations to know exactly which voters to target for outreach, regardless of other the list criteria they utilize.

A feature of Targets is that they can be shown in your reports and in your phone banks.



▼ Targets

Include people in  of the following:

- Spanish (Dynamic) : Spanish: Reg Form or Canvass Result
- Spanish (Dynamic) : Spanish Speaking Birthplace
- Vote By Mail (Dynamic) : Votes by Mail

# PDI PRE-DEFINED UNIVERSES

With the PDI Voter Data System, users can use pre-defined universes for targeting, which create a voter selection targets based on a voters voting history and registration history.

PDI Pre-Defined Universes do have the ability not incorporate statistical models that take into account polling and demographic data.

| PDI Universes        |                          |
|----------------------|--------------------------|
| Predefined Universes |                          |
| <input type="text"/> |                          |
| Predefined Universes |                          |
| 20P1                 | (Statewide 2020 Primary) |
| 20P2                 | (Statewide 2020 Primary) |
| 20P2A                | (Statewide 2020 Primary) |
| 20P3                 | (Statewide 2020 Primary) |
| 20P4                 | (Statewide 2020 Primary) |
| 20P4A                | (Statewide 2020 Primary) |
| 20P5                 | (Statewide 2020 Primary) |

# A/B TESTING

## Why Test?

- Improve ROI on organic and paid marketing efforts. Don't waste dollars with things that aren't working.
- Avoid wasting impression with uninspired messaging and imagery.
- Optimize the usability & experience of your website, emails or ads.

\* Sometimes a test recipe is disastrous and you have to kill it. Use good judgment.

## Principles

- Test Big Things. Test language, imagery, and major UX changes. Avoid testing minor changes that likely won't have an impact.
- Test where the value is. Spend your effort on tuning the pages with the highest traffic or the best revenue (or other goal) potential – that's where you are likely to get the most impactful results.
- Run tests to completion\*. Don't peek at results before the test is “fully baked”. Set a target population size and let tests run to completion.

# A/B TESTING CONT.

## Tools

- Google Optimize. Almost all other tools are pretty expensive these days, and may not be appropriate for your campaign.
- EMS & Facebook Ads. Facebook, and most marketing-focused email services, offer the ability to easily test any element of your emails and ads.
- Samples Size calculator. I like Evan Miller's — <https://www.evanmiller.org/ab-testing/sample-size.html>
- Test Results Calculator. <http://www.abtestcalculator.com/>

## Math

- Use a two-sided test for assessing results. One-sided tests only consider improvements, but your changes might be worse than baseline. There is no right or wrong answer for Statistical significance, just degrees of risk.
- Remember that test results are not a guarantee. Even a statistically significant result should be read as “There is a 95% likelihood that the results we are seeing are the result of a relationship between treatment (what we did) and the response (what we observed).”

# RESOURCES

- Get in touch with the DNC Security Team!
  - Disinformation? Email [disinfo@dnc.org](mailto:disinfo@dnc.org) and the team will assess and help.
  - Security issue? Email [security-alert@dnc.org](mailto:security-alert@dnc.org) to alert the group and we will find an issue. An alert to one is an alert to all.
  - More questions or specific needs? Email Alison Goh at [goha@dnc.org](mailto:goha@dnc.org)
- Digidems
  - Contact the Digidems for help at [Security-support!@digidems.org](mailto:Security-support!@digidems.org)
- RagTag
  - Many helpful guides can be found at [CampaignHelpdesk.org](http://CampaignHelpdesk.org)
  - Can also submit a help ticket through this website
- Cybersecurity Response Planning
  - Belfer Center's *Cybersecurity Campaign Playbook*