Experiments With Qualtrics

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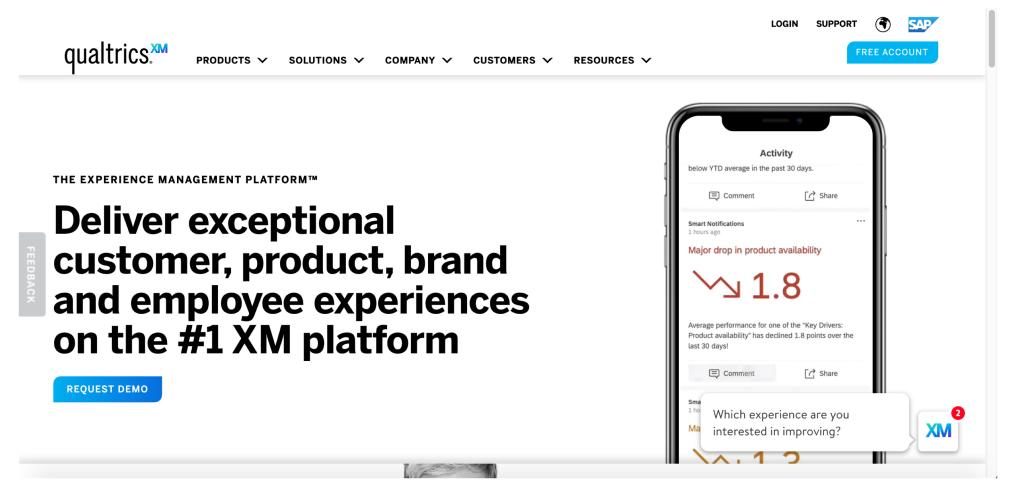
https://celss.iserp.columbia.edu/

April 2020

Today's Goals

- Learn about Qualtrics
- Establish a fundamental understanding so that building your experiment is the easy part
- Get an understanding for what is possible in Qualtrics in order to know what to ask and where to look

Qualtrics – What is It?



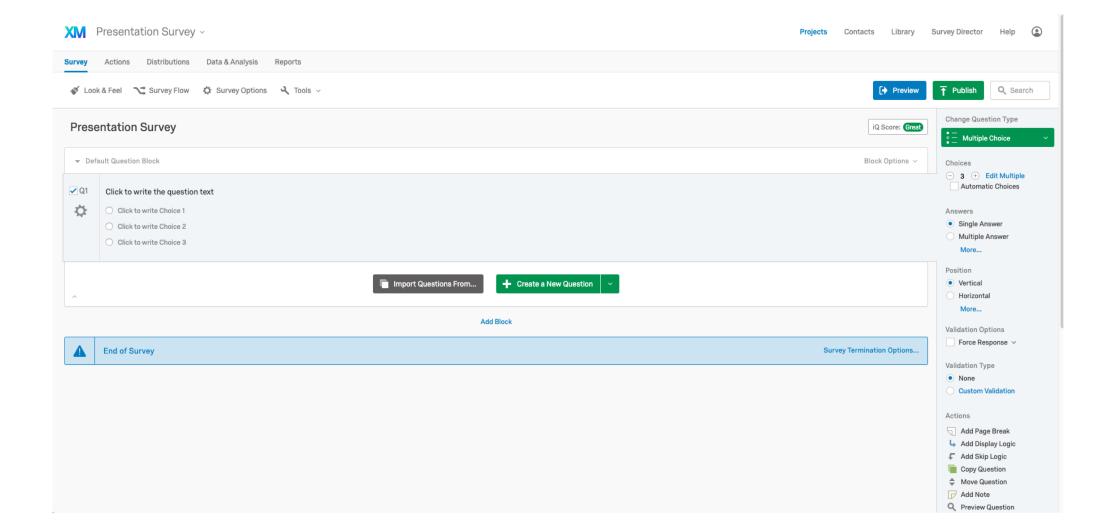
Qualtrics – What is It?

- Survey Tool
- More features/customizable than Survey Monkey, Google Forms
 - Timing Questions/Clicks
 - Embedded/Piped Data
 - Dynamic (Randomization, JavaScript)

Qualtrics – How do I get an account?

- Basic account is free
 - Great for learning and thinking about if Qualtrics is right for your experiment
- Extra features require a paid account, typically issued through a license
 - For CELSS affiliates, accounts are issued through ISERP
 - http://iserp.columbia.edu/content/request-qualtrics-account
 - Other research groups (such as Columbia Business School) also have licenses

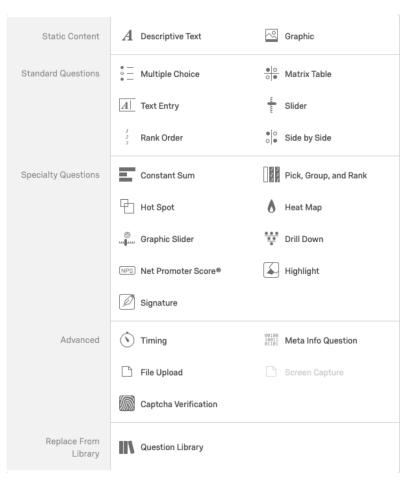
Qualtrics – What is It?



Qualtrics - Vocabulary

- Question
 - A single question: multiple-choice, text, description, etc.
- Question Block or just "Block"
 - A group of questions that are presented/moved/copied as a unit
- Survey Flow
 - Overall survey map
 - Main tool for structuring/organizing

Qualtrics – Question Types

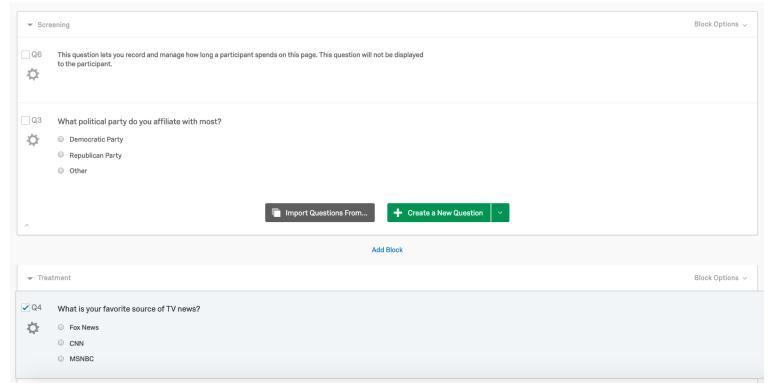


- Basic Multiple Choice, Text Entry Questions
- Sliders, matrices
 - All customizable
- More advanced options
 - File Uploads
 - Captchas
 - Highlighting

Qualtrics – Questions Demo

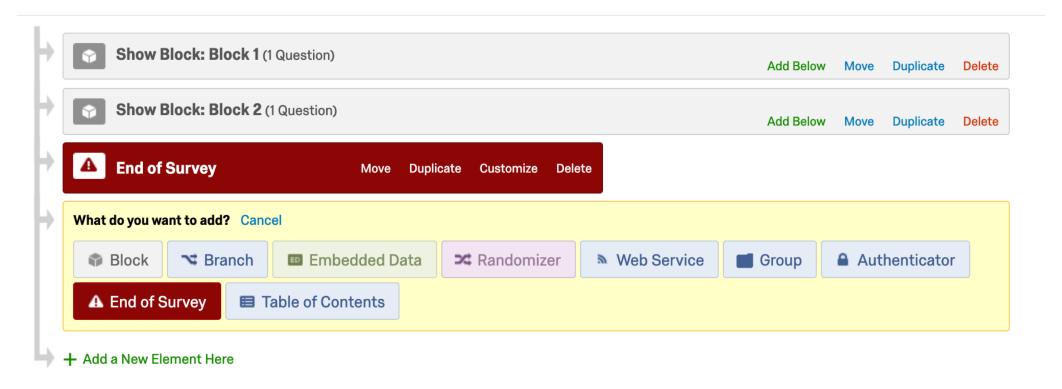
Qualtrics — Basic Structure

- Question Blocks
 - A set of questions that are moved as a single unit
 - Add features like timing to an entire block
 - Good for moving around questions and duplicating entire blocks



Qualtrics — Survey Flow

Survey Flow Presentation Survey

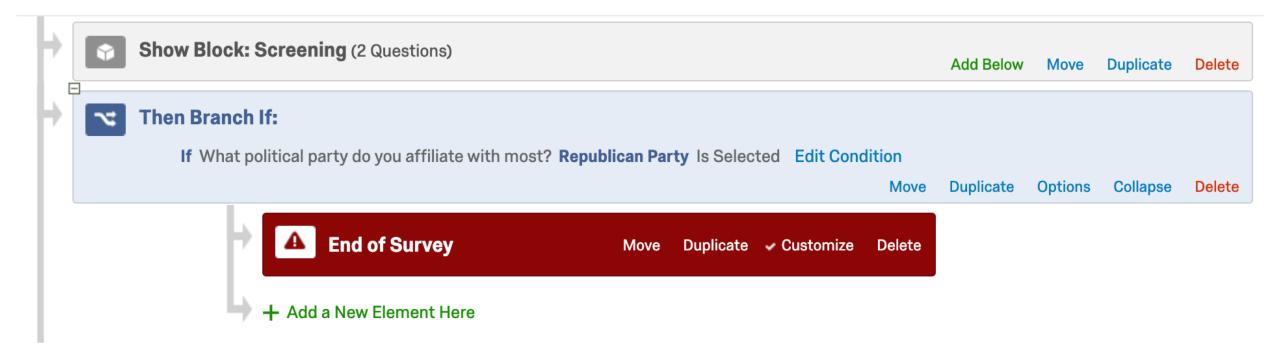


Qualtrics — Survey Flow

- Good for keeping experiment structure organized
 - (Screening, Treatment, Control)
- Branch Logic
 - Present questions conditionally (if age < 40, ask this...)
 - Custom survey ends
- Randomization
 - Can randomize subjects' treatment groups
 - Can put randomizers within randomizers
 - Allows subjects to get a random sample from question bank

Qualtrics — Survey Flow (Screening)

Survey Flow Presentation Survey

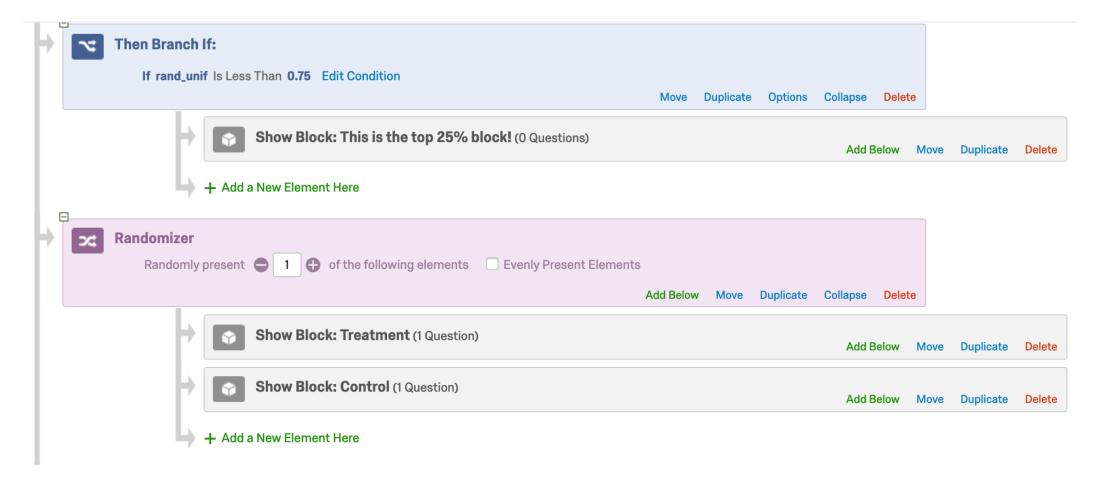


Qualtrics – Survey Flow (Screening)



Qualtrics — Survey Flow (cont.)

Survey Flow Presentation Survey



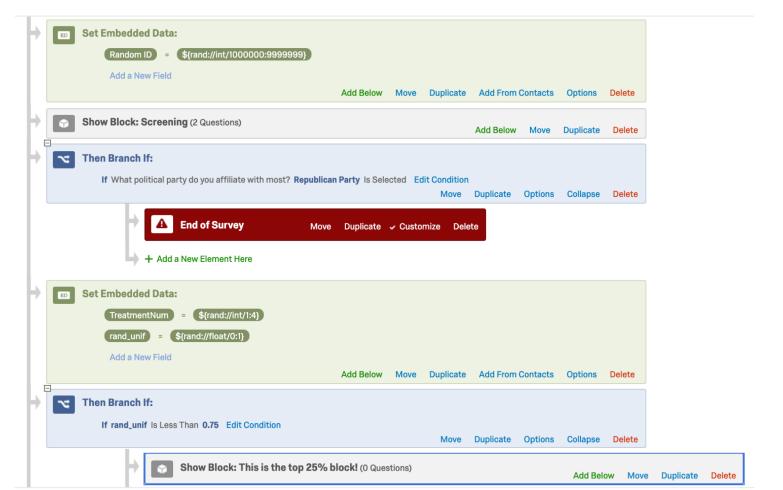
Qualtrics – Survey Flow Demo

Qualtrics – Embedded Data

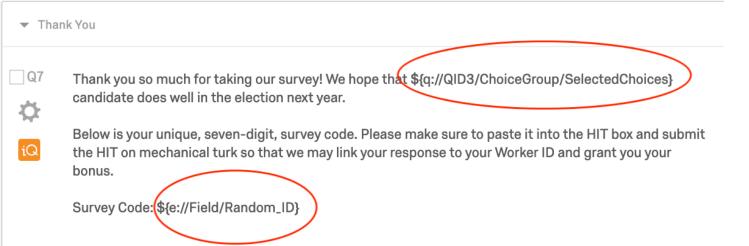
- Data that is created or "set" at any point during the survey
- A randomly generated number
 - Treatment number
 - Survey ID to keep track of subjects (more on this later with MTurk)
 - A number to create a probability distribution for questions
- A value (numeric or otherwise) that is set and inserted into a future question
- Can be pulled from web or set with JavaScript (more later)

Qualtrics – Embedded Data

Survey Flow Presentation Survey



Qualtrics – Embedded Data/Piped Text





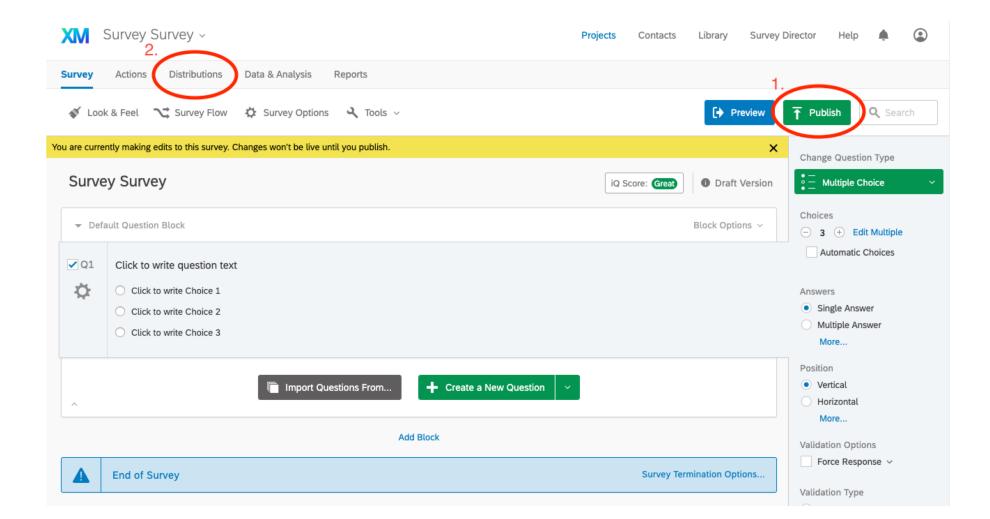
Thank you so much for taking our survey! We hope that the Democratic Party candidate does well in the election next year.

Below is your unique, seven-digit, survey code. Please make sure to paste it into the HIT box and submit the HIT on mechanical turk so that we may link your response to your Worker ID and grant you your bonus.

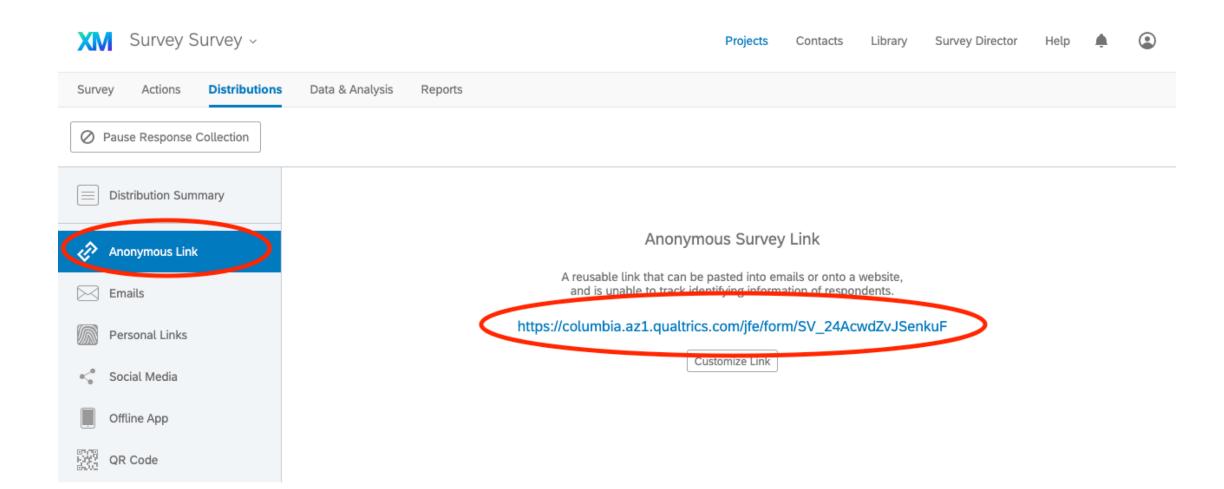
Survey Code: 3332863

Qualtrics – Embedded Data Demo

Qualtrics — Distributing Your Survey

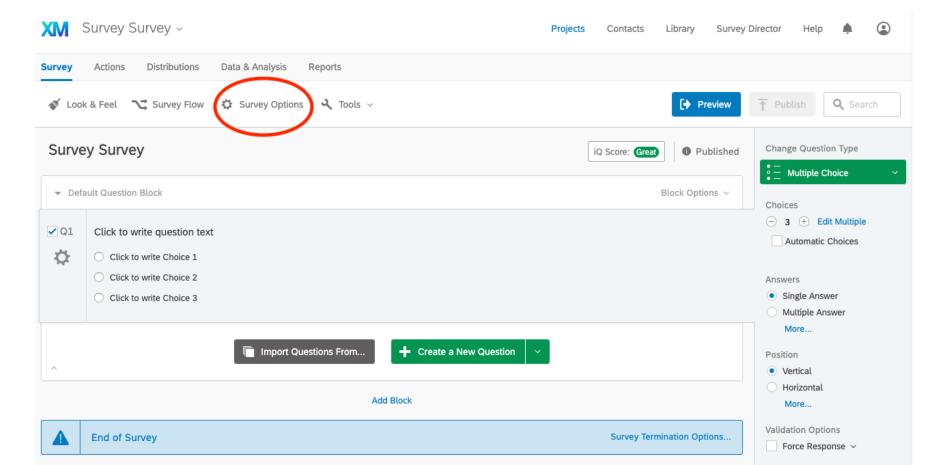


Qualtrics — Distributing Your Survey



Qualtrics — Distributing Your Survey

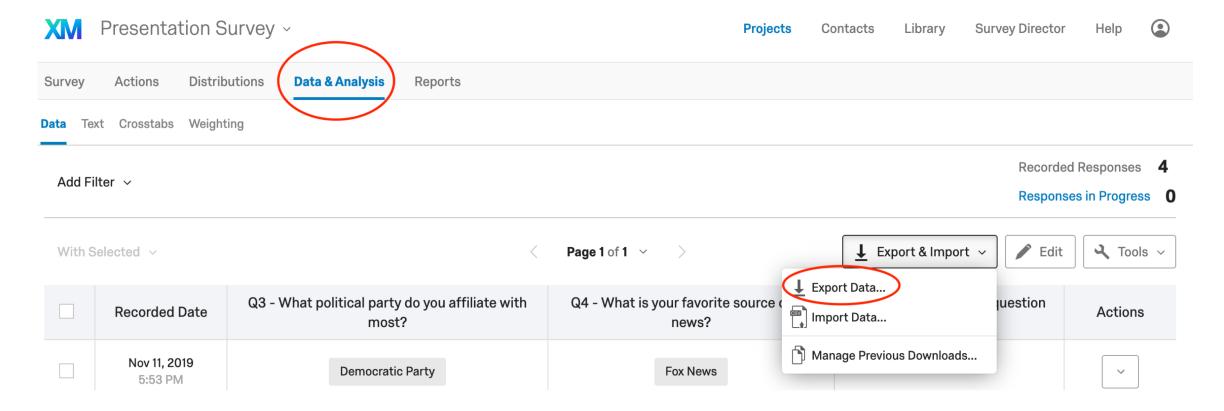
"Survey Options" lets you password-protect, prevent repeat responses, and more



Qualtrics – Distribution Demo

Qualtrics – Getting Your Data

Download the raw data as a CSV file



Qualtrics – Getting Your Data

- Pro Tip: Under "More Options" you can
 - Turn off .zip download (annoying when you're doing a lot of downloading)
 - Turn on/off viewing order for surveys with any randomness in order

Qualtrics — Getting Your Data

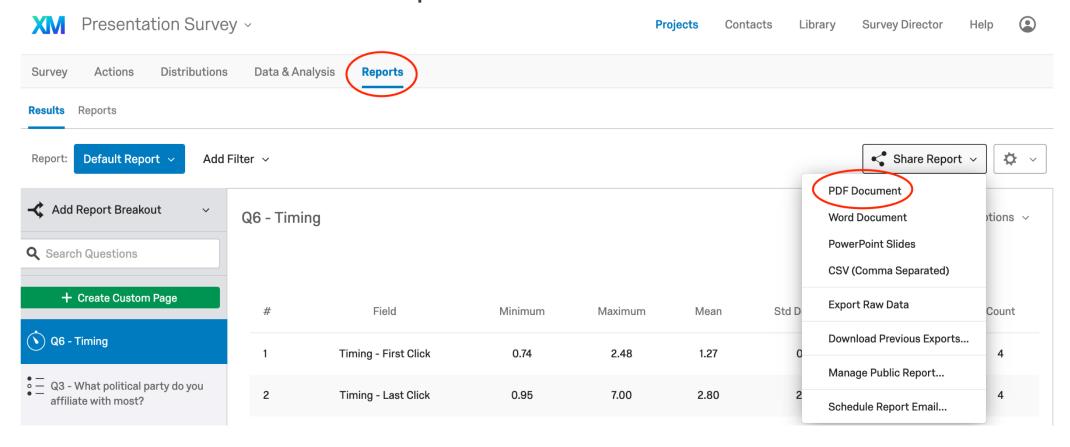
All answers, embedded data, meta data (can be a good number of columns)

R	S	Т	U	V	W	Х	Y	Z	A.
Q6_First Click	Q6_Last Clic	Q6_Page Sub	Q6_Click Cou	Q3	Q4	Q5	Random_ID	TreatmentN	rand_ι
Timing - First Click	Timing - Last	Timing - Pag	Timing - Clic	What political party do you affiliate with most?	What is your	Click to write	Random_ID	TreatmentN	rand_ι
"{"ImportId":"QID6_FIRST_CLICK"}	{"ImportId":	{"ImportId":	{"ImportId":	{"ImportId":"QID3"}	{"ImportId":	{"ImportId":	{"ImportId":	{"ImportId":	{"Impo
0.901	1.459	2.119	2	Democratic Party	CNN			4	0.501
0.736	1.79	2.183	2	Democratic Party	Fox News		3332863	3	0.28
2.475	7.001	9.923	4	Republican Party			2634971		
0.953	0.953	2.449	1	Democratic Party	Fox News		8098917	1	0.680

	Α	В	С	D	E	F	G
1	StartDate	EndDate	Status	IPAddress	Progress	Duration (in	Finished
2	Start Date	End Date	Response Type	IP Address	Progress	Duration (in	Finished
3	{"ImportId":"startDate","timeZone":"America/Denver"}	{"ImportId":"endDate	{"ImportId":"status"}	{"ImportId":	{"ImportId":	{"ImportId":	{"ImportId":
4	11/11/19 16:46	11/11/19 16:47	Survey Preview		100	6	TRUE
5	11/11/19 16:48	11/11/19 17:02	Survey Preview		100	805	TRUE
6	11/11/19 17:52	11/11/19 17:52	Survey Preview		100	10	TRUE
7	11/11/19 17:52	11/11/19 17:53	Survey Preview		100	17	TRUE

Qualtrics – Getting Your Data

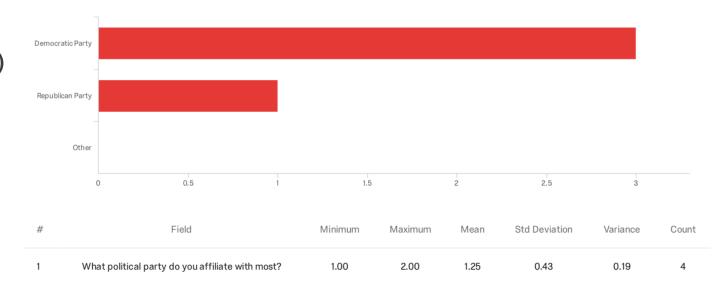
Can also use Qualtrics' "Reports" Feature



Qualtrics – Getting Your Data

- Reports can be nice visually
 - Can see the survey questions
 - Default graphs (can change/add more)
- Not too efficient for large projects with a lot of data
- Less freedom than downloading raw data into CSV

Q3 - What political party do you affiliate with most?



Qualtrics – Getting Your Data Demo

Qualtrics — Design

- Paid accounts have decent flexibility in terms of aesthetics
- Can remove logos
 - Maybe you think having "Columbia" on every page will bias participants
- Can choose from a few themes
- Add a progress bar
- Custom CSS

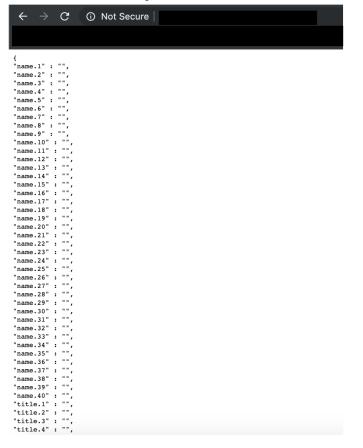
Qualtrics – Design

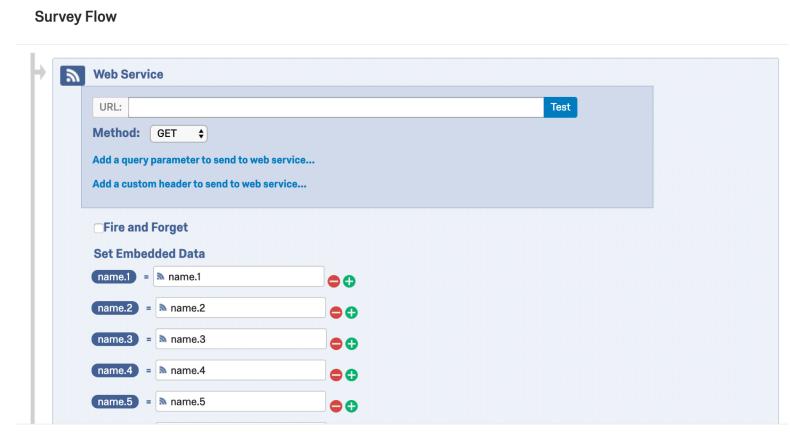
Look and Feel My Survey Dynamic Themes 1 Columbia Business School **Presets** AT THE VERY CENTER OF BUSINESS™ Theme **Columbia Business** School - 508 Compliant What political party do you affiliate with most? Layout **Democratic Party** General Style Desktop Republican Party Motion Other Logo Background **Glacier Mountains** ← Back to Old Editor ✓ Save Cancel

Qualtrics – Look and Feel Demo

Qualtrics – Web Elements

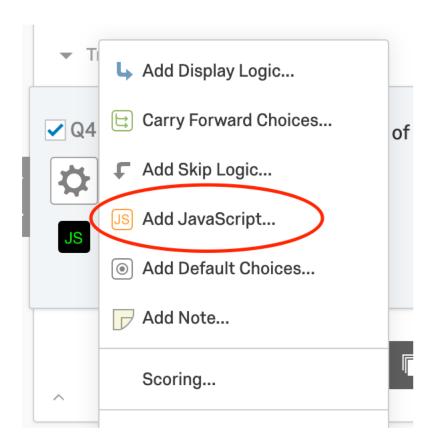
Can import data and automatically set to Embedded Data from websites.





Qualtrics — JavaScript

JavaScript can help when datasets get larger or the experiment gets more complicated



```
Edit Question JavaScript
 Qualtrics.SurveyEngine.addOnload(function()
   /*Place your JavaScript here to run when the page loads*/
var name = Qualtrics.SurveyEngine.getEmbeddedData( "name")
   if( Math.random() < .5){
     message = "Thank you, " + name + " for your time."
     message = "Hi, " + name + "! You've been selected for a chance to win!"
   Qualtrics.SurveyEngine.setEmbeddedData( "message", message )
 Qualtrics.SurveyEngine.addOnReady(function()
   /*Place your JavaScript here to run when the page is fully displayed*/
 Qualtrics.SurveyEngine.addOnUnload(function()
  /*Place your JavaScript here to run when the page is unloaded*/
 Sull Screen
```

Qualtrics — JavaScript

- JavaScript can help when datasets get larger or the experiment gets more complicated
- Pro Tip: Need to run JavaScript the block before if setting embedded data that will be used immediately

Item Index

Methods

addEmbeddedData addOnClick addOnload addOnReady addOnPageSubmit addOnUnload clickNextButton clickPreviousButton disableNextButton disablePreviousButton displayErrorMessage

enableNextButton
enablePreviousButton
getAnswers
getChoiceAnswerValue
getChoiceContainer
getChoiceDisplayed
getChoiceRecodeValue
getChoices
getChoicesFromRecodeValue
getChoicesFromVariableName
getChoiceValue

getChoiceVariableName
getPostTag
getQuestionContainer
getQuestionDisplayed
getQuestionInfo
getQuestionTextContainer
getSelectedAnswers
getSelectedAnswerValue
getSelectedChoices
getTextValue
hideChoices

hideNextButton
hidePreviousButton
setChoiceAnswerValue
setChoiceValue
setChoiceValueByRecodeValue
setChoiceValueByVariableName
setEmbeddedData
showNextButton
showPreviousButton

Properties

Qualtrics.SurveyEngine.QuestionInfo

questionclick

questionContainer

questionId

Thank You!

Come to CELSS consulting hours!

https://celss.iserp.columbia.edu/

Wednesdays 2:30-5pm

Thursdays 10:30am-1pm

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