Visualizing Survey Data with Tableau

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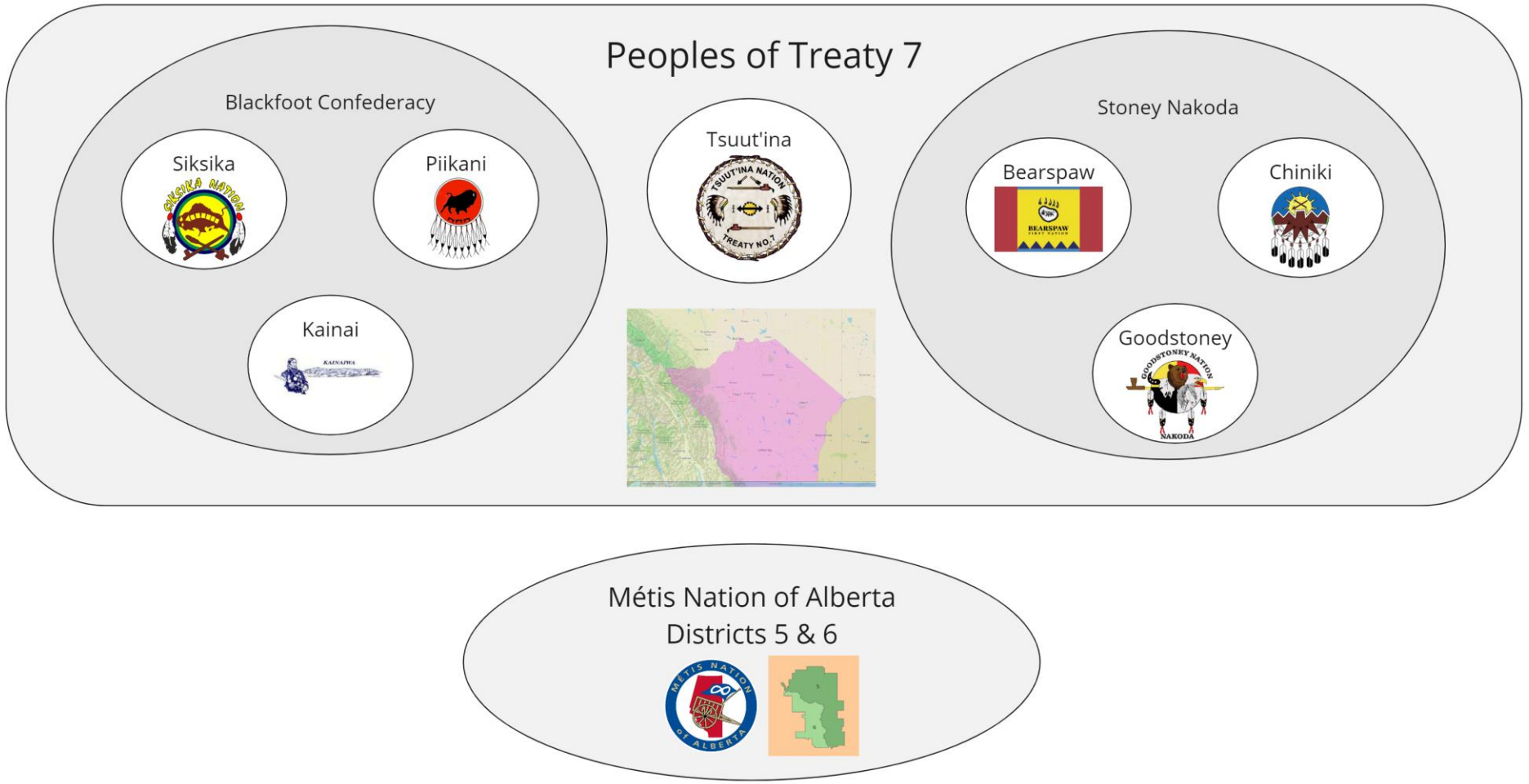
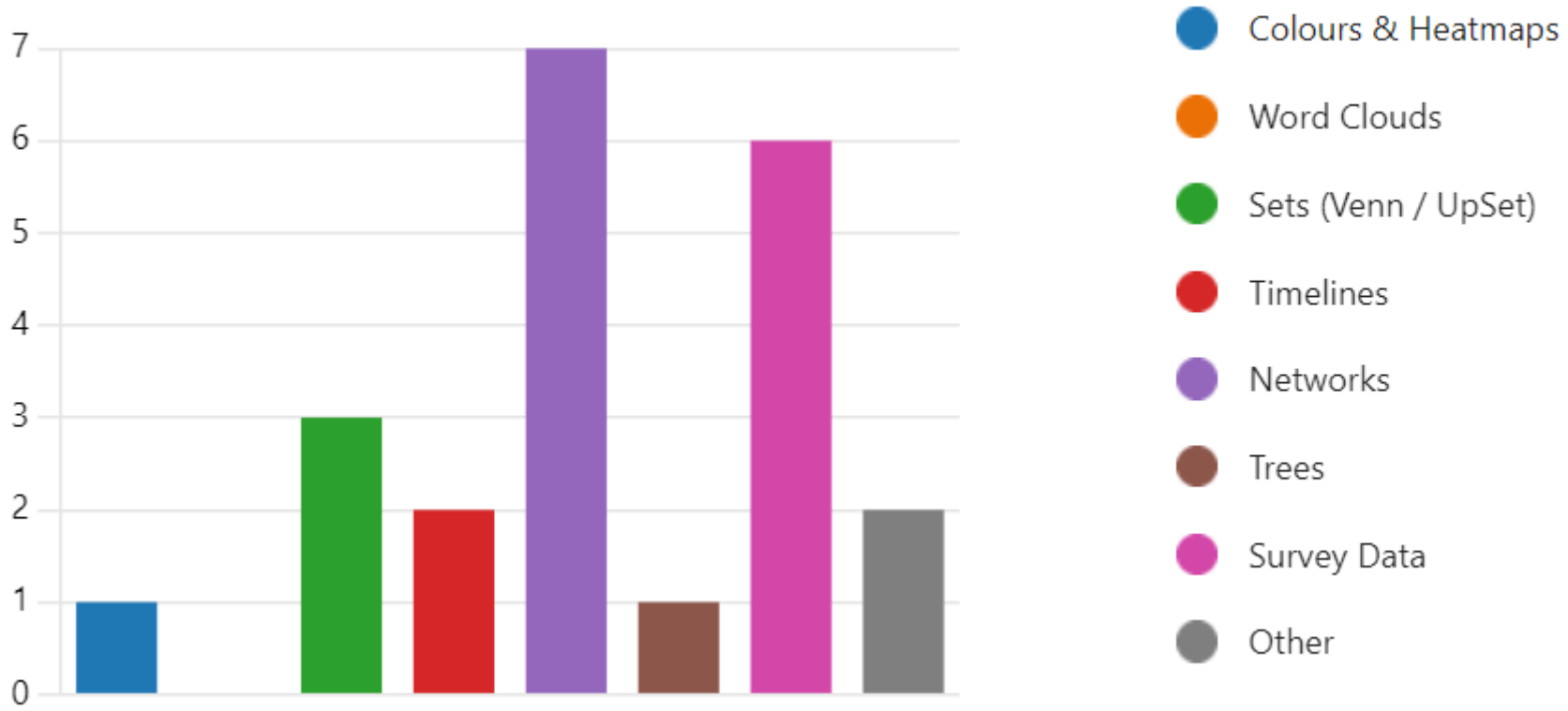
Data & Visualization Curator

February 13, 2024



The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which includes the Blackfoot Confederacy (comprised of the Siksika, the Piikani, and the Kainai First Nations), the Tsuut’ina First Nation, and the Stoney Nakoda (including the Chiniki, Bearspaw, and Goodstoney First Nations). The City of Calgary is also home to the Métis Nation of Alberta (Districts 5 and 6).

New Workshop



CUSTOMER SURVEY

Thank you for shopping with us! Please take a few minutes to rate us so we can serve you better.

	Very Bad	Bad	Neutral	Good	Excellent
Your question goes here. Lorem ipsum dolor sit amet, consectetur adipiscing elit.					
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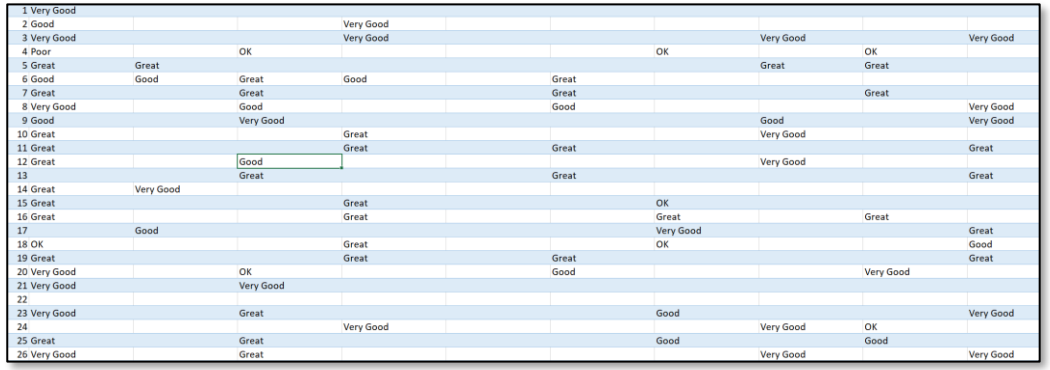
How else can we improve?

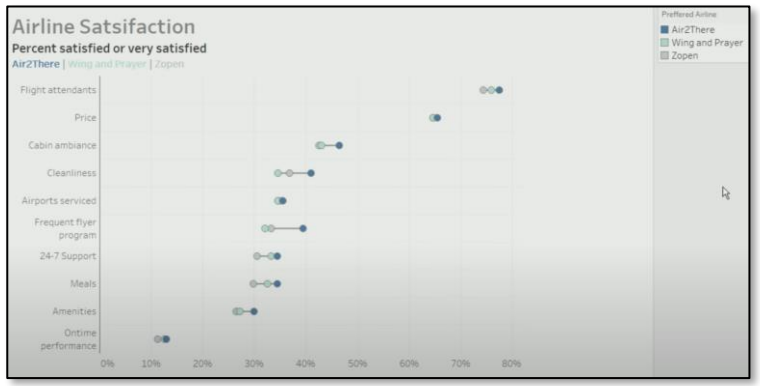
Your Name: Date:

1 Survey

2 Data



1	Very Good							
2	Good			Very Good				
3	Very Good			Very Good			Very Good	Very Good
4	Poor		OK			OK		
5	Great	Great				Great	Great	
6	Good	Good	Great	Good	Great			
7	Great		Great		Great		Great	
8	Very Good		Good		Good			Very Good
9	Good		Very Good			Good		Very Good
10	Great			Great		Very Good		
11	Great			Great	Great			Great
12	Great		Good			Very Good		
13			Great		Great			Great
14	Great	Very Good						
15	Great			Great		OK		
16	Great			Great		Great	Great	
17		Good				Very Good		Great
18	OK			Great		OK		Good
19	Great			Great	Great			Great
20	Very Good		OK		Good		Very Good	
21	Very Good		Very Good					
22								
23	Very Good		Great			Good		Very Good
24				Very Good			Very Good	OK
25	Great		Great			Good		Good
26	Very Good		Great				Very Good	Very Good



3 Visualization (Chart)

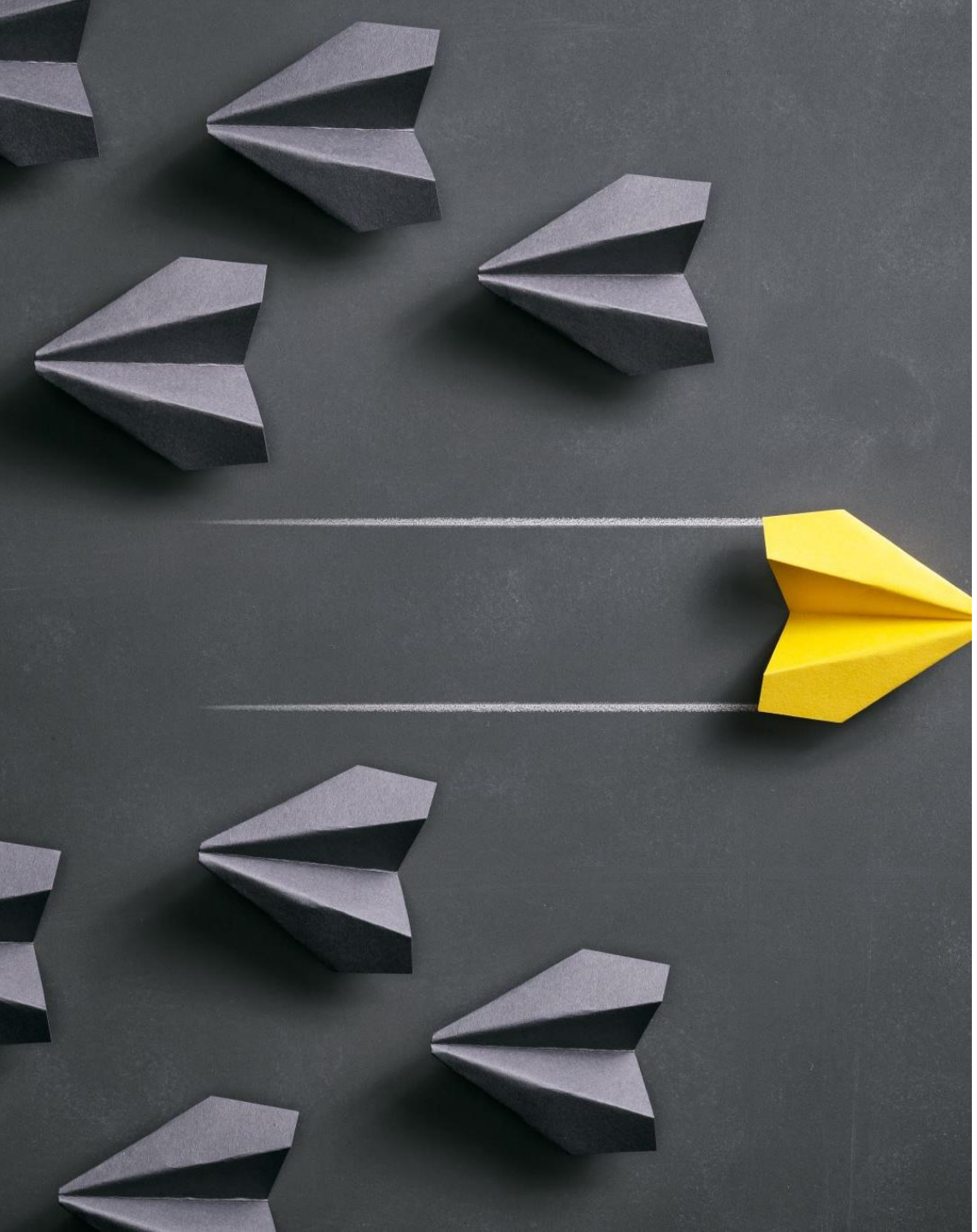
80-90% of a visualization project is working with the data

Agenda

- Why Tableau?
- Reorganizing the data
- Creating visualizations
- Likert questions

Not Covering:

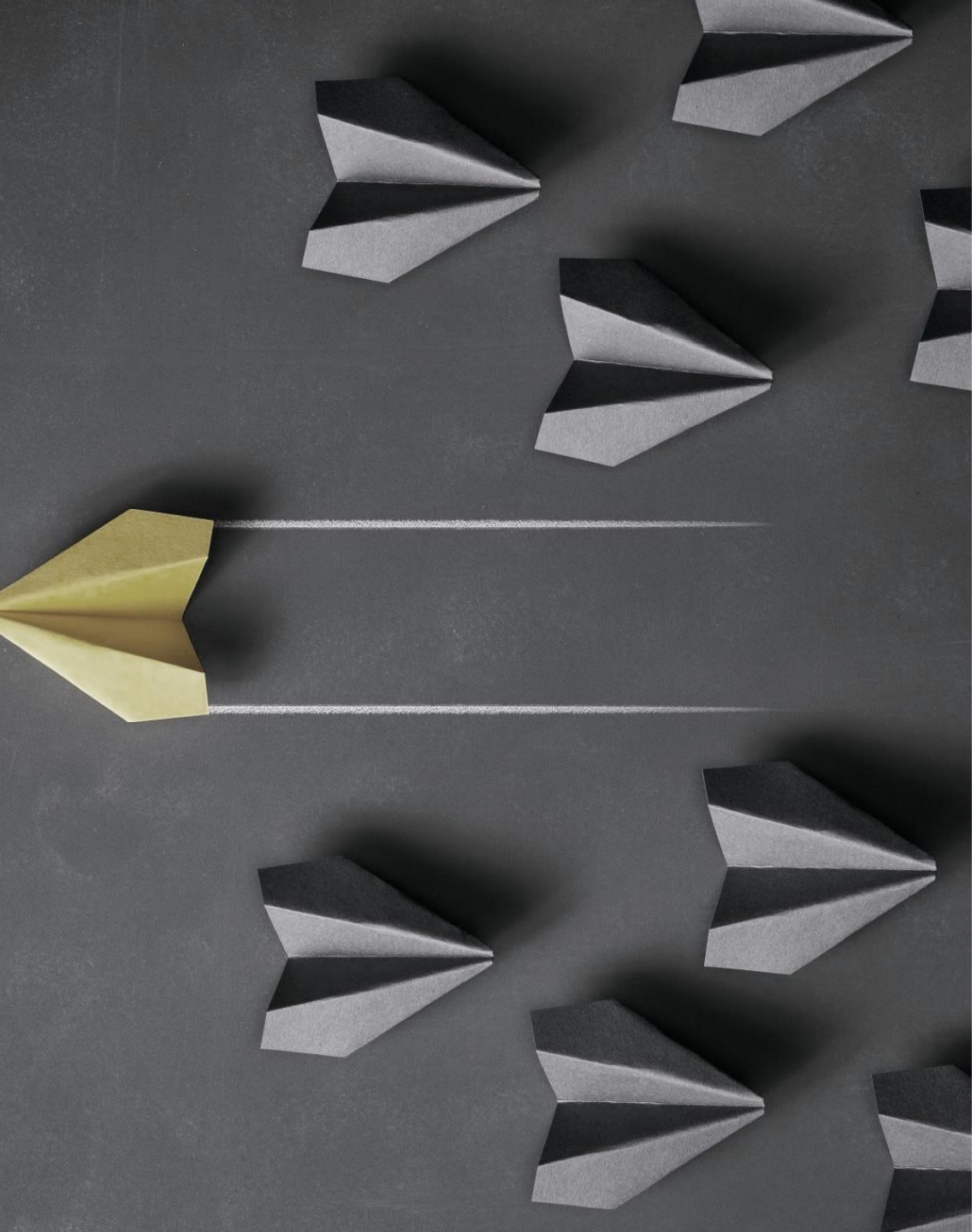
- Survey design
- Statistical analysis of results
- Text analysis



Why Tableau?

- Free for students and non-commercial research
  - https://www.tableau.com/community/academic
- Easy to use, drag & drop
- Powerful, many options
- Tableau Prep: Great tool to reorganize survey data.

* How many have used Tableau before?



Why NOT Tableau?

- Expensive
- Does not support advanced statistics
- One more thing to learn

Alternatives:

Visualization: PowerBI, Qlik, Google Data Studio, Flourish, DataWrapper

Other: Excel, SPSS, STATA, R

Tableau Versions

Creating Visualizations

- Tableau desktop
- Tableau cloud
- Tableau public *

Viewing Visualizations

- Tableau reader *

AI Products

- Tableau pulse
- Tableau AI

Data Wrangling

- Tableau prep

Server

- Tableau server

* Free

Data

- 80-90% of a visualization project is working with the data
- Tableau Desktop is designed to work with data tables/spreadsheets
- Each column needs to be its own field
- Each row needs to be its own record

Crosstab Data (you don't want it shaped like this):

Net Income (millions of dollars)			
Company	2010	2009	2008
Citi Group	10602	-1606	-27684
General Electric	11644	11025	17410
Siemens AG	5554	3650	8504
Koninklijke Philips Electronic	1948	608	-262

While crosstabs make sense to people, it makes our software's head hurt because each row contains three pieces of data -- in this case the company's net income in 2010, 2009 and 2008. Tableau feels much more comfortable when data is in a normalized format, where each row contains only one net income figure.

Normalized Data (you want your data shaped this way):

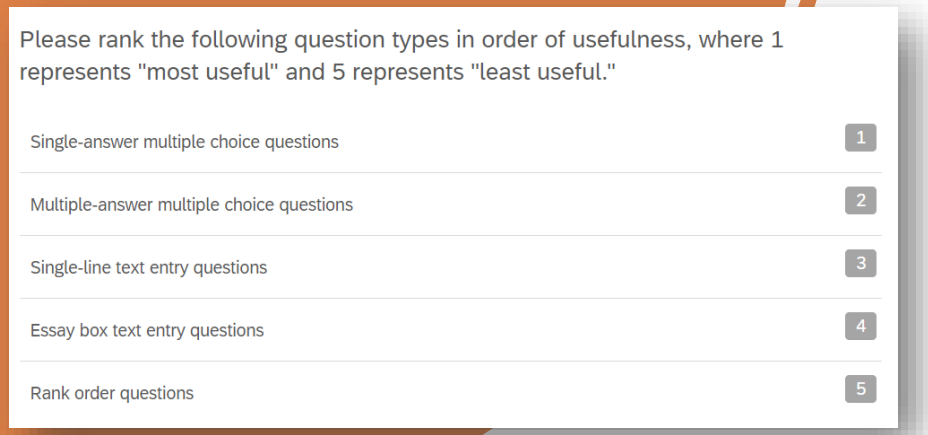
Company	Year	Net Income ($millions)
Citi Group	2010	10602
Citi Group	2009	-1606
Citi Group	2008	-27684
General Electric	2010	11644
General Electric	2009	11025
General Electric	2008	17410
Siemens AG	2010	5554
Siemens AG	2009	3650
Siemens AG	2008	8504
Koninklijke Philips Electronic	2010	1948
Koninklijke Philips Electronic	2009	608
Koninklijke Philips Electronic	2008	-262

Example

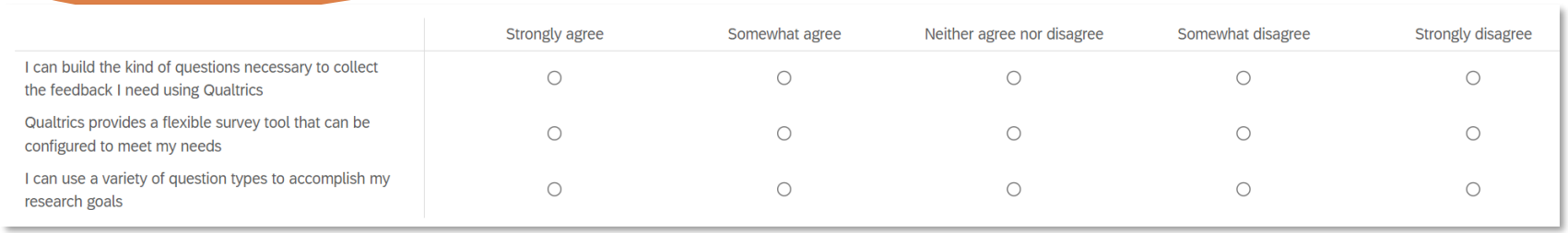
- Output from Qualtrics survey
- Wrangled version ready for tableau

RecordedDate	Q1 Single choice	Q2 Multiple choice	Q3 Dropdown list	Q4 Certified	Q5 Random choice	Q6 Text entry	Q7 Multi line text	Q8 Form field_1	Q8 Form field_2	Q8 Form field_3	Q8 Form field_4	Q9 Rank order_1	Q9 Rank order_2	Q9 Rank order_3	Q9 Rank order_4	Q9 Rank order_5	Q10 Matrix table_1	Q10 Matrix table_2	Q10 Matrix table_3	Q11 Slider_1	Q11 Slider_2	Q11 Slider_3	Q12 Side by Side#1_1	Q12 Side by Side#1_2	Q12 Side by Side#1_3	Q12 Side by Side#1_4	Q12 Side by Side#1_5	Q12 Side by Side#1_6	Q12 Side by Side#1_7	Q12 Side by Side#1_8	Q12 Side by Side#2_1	Q12 Side by Side#2_2	Q12 Side by Side#2_3	Q12 Side by Side#2_4	Q12 Side by Side#2_5	Q12 Side by Side#2_6	Q12 Side by Side#2_7	Q12 Side by Side#2_8	Q13 End of survey
2024-02-09 18:44	Not useful	To see best practices in survey construction and design,To practice building and editing a survey without starting from scratch	Somewhat agree	18-24 years old	Single-answer multiple choice questions	2B or ~2B	Boy howdy!	Imma	Fakir	imma.fakir@ucalgary.ca	4032208895	5	4	1	2	3	Strongly disagree	Somewhat disagree	Neither agree nor disagree	3	1	5	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Yes	No	Not sure	Need more information	Yes	No	Not sure	Need more information	Yes
2024-02-09 18:58	Not useful	To practice building and editing a survey without starting from scratch		65+ years old	Multiple-answer multiple choice questions	Already completed poll	Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor	Chris P.	Chicken	chris.chicken@ucalgary.ca	403-419-0210	5	2	1	4	3	Strongly agree	Strongly agree	Somewhat agree	1	1	5	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult									Yes
2024-02-09 19:05	Neither useful nor not useful		Somewhat agree	25-34 years old	Dropdown list multiple choice questions	ChatGPT	Another type of text entry question is a Multi line question.	Bill	Loni	bill.loni@ucalgary.ca	5879116309						Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	5	5	5	Very easy	Very difficult	Very easy	Very difficult	Very easy	Very difficult	Very easy	Very difficult		Not sure	Yes			No		Yes	Yes
2024-02-11 2:00	Useful	To explore the different features and functionality of the survey editor tool,To see if Qualtrics provides the features I need to build the survey I have planned	Somewhat agree	Under 18	Dropdown list multiple choice questions	Luke, I am your father	Lorem Ipsum	Homer	Simpson	homer.simpson@ucalgary.ca	4037119111	2	1	4	5	3	Somewhat agree	Neither agree nor disagree	Somewhat agree	1	4	3	Somewhat difficult	Neither easy nor difficult	Somewhat difficult	Very difficult	Somewhat difficult	Neither easy nor difficult	Somewhat difficult	Very difficult	No		Not sure			Yes	Yes	Need more information	Yes
2024-02-11 2:03	Neither useful nor not useful	To learn about different question types and how to use them,To see best practices in survey construction and design,To explore the different features and functionality of the survey editor tool,To practice building and editing a survey without starting from scratch,To see if Qualtrics provides the features I need to build the survey I have planned	Strongly agree	55-64 years old	Dropdown list multiple choice questions	quick poll	Feedback	Benny	Bear	benny.the.bear@ucalgary.ca	5872203579	5	2	1	3	4	Somewhat agree	Strongly agree	Somewhat agree	3	3	4	Very easy	Somewhat easy	Neither easy nor difficult	Somewhat difficult	Very difficult	Somewhat difficult	Neither easy nor difficult	Somewhat easy									No

Example



Q9 Rank order_1	Q9 Rank order_2	Q9 Rank order_3	Q9 Rank order_4	Q9 Rank order_5
5	4	1	2	3
5	2	1	4	3
2	1	4	5	3
5	2	1	3	4



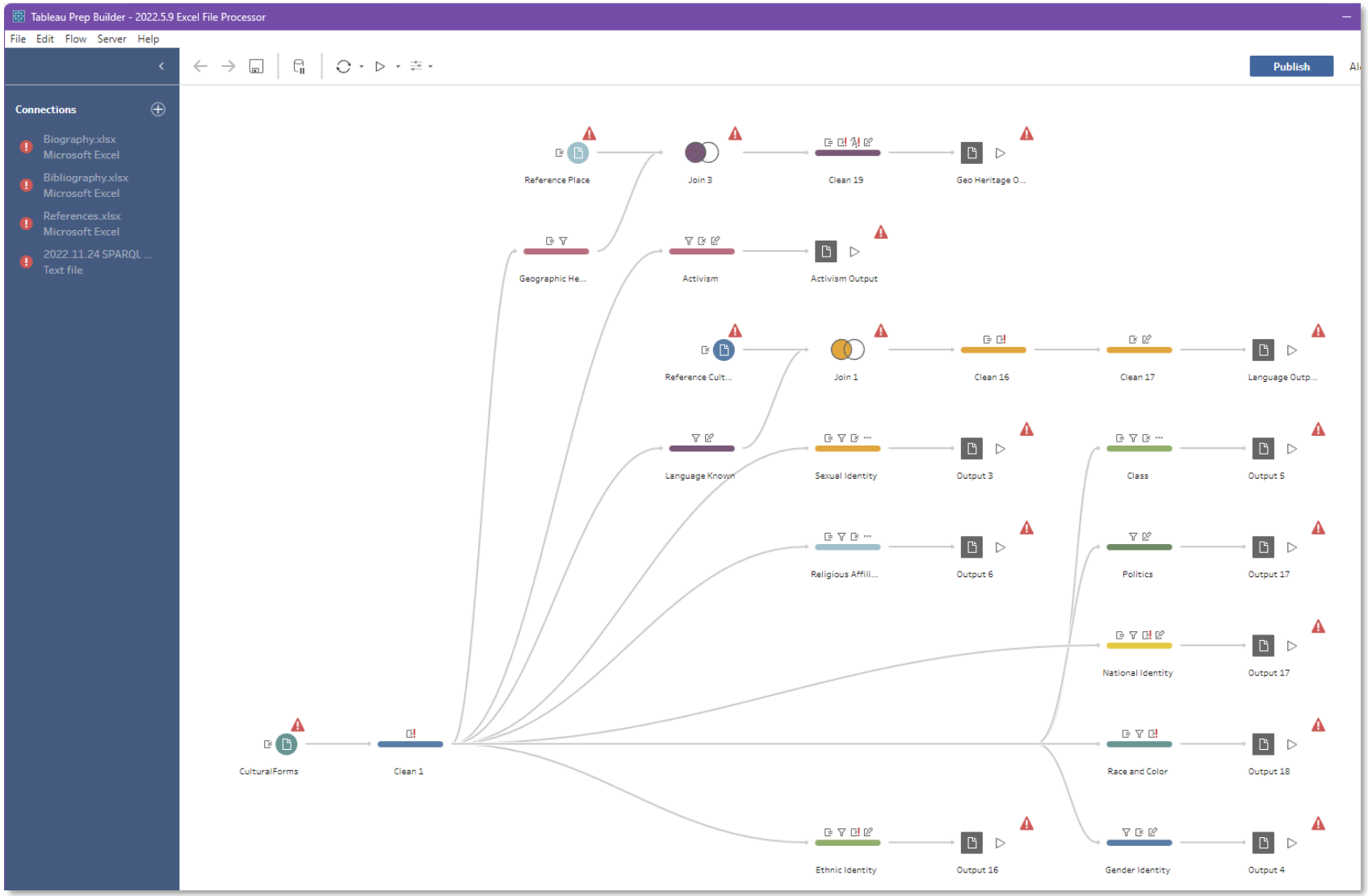
	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I can build the kind of questions necessary to collect the feedback I need using Qualtrics	○	○	○	○	○
Qualtrics provides a flexible survey tool that can be configured to meet my needs	○	○	○	○	○
I can use a variety of question types to accomplish my research goals	○	○	○	○	○

Q10 Matrix table_1	Q10 Matrix table_2	Q10 Matrix table_3
Strongly disagree	Somewhat disagree	Neither agree nor disagree
Strongly agree	Strongly agree	Somewhat agree
Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree
Somewhat agree	Neither agree nor disagree	Somewhat agree
Somewhat agree	Strongly agree	Somewhat agree

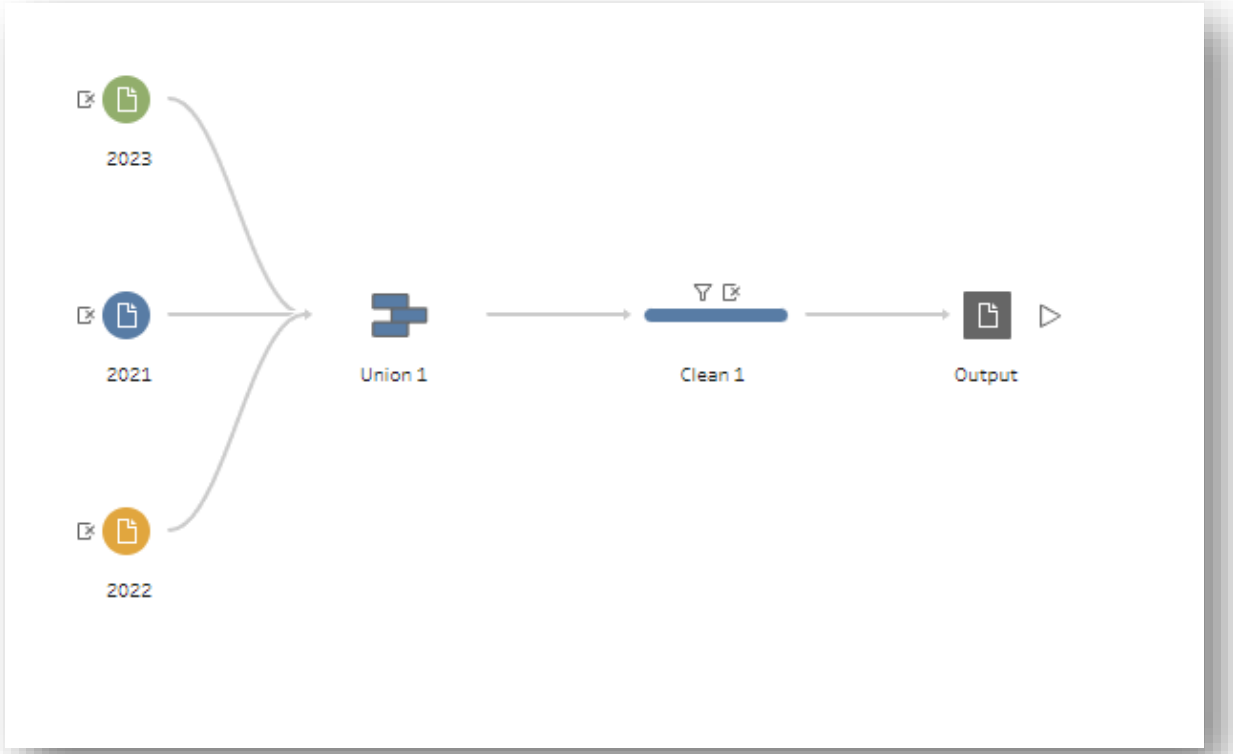
Tableau Prep

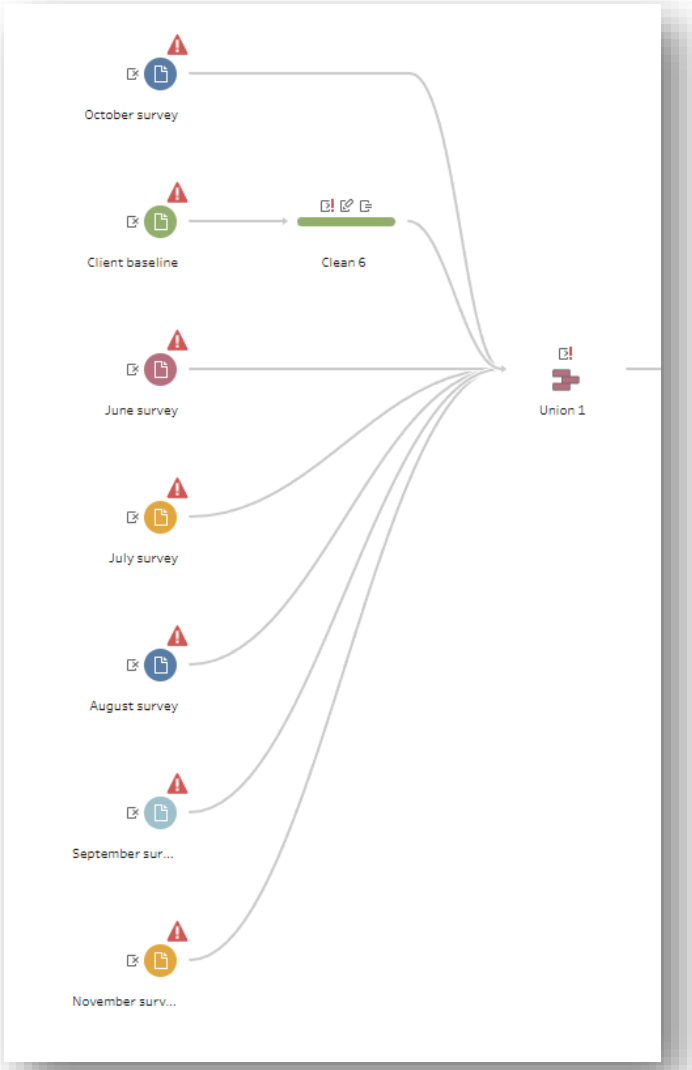
Reorganizes data through a series of operations	• Union, Aggregation, Pivot/Unpivot, Filter, Change Values • Flow chart
See your data	• Highlights missing/exceptional values • Shows extent of all values
Records all operations	• Useful for showing provenance • Can be repeated with on new/updated data
Join / Split data tables	• Merging datasets

Tableau Prep



Union


2023
2021
2022
Union 1
Clean 1
Output

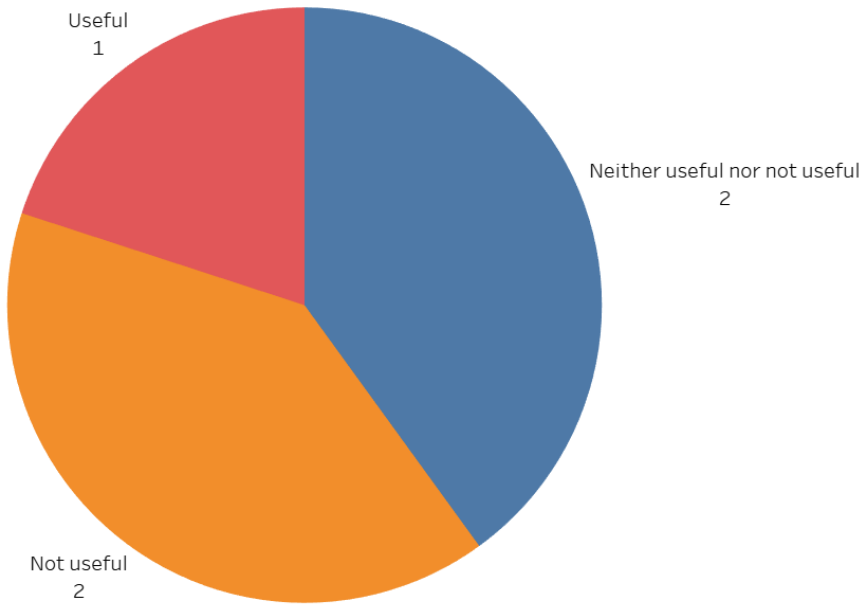

October survey
Client baseline
Clean 6
June survey
Union 1
July survey
August survey
September sur...
November surv...

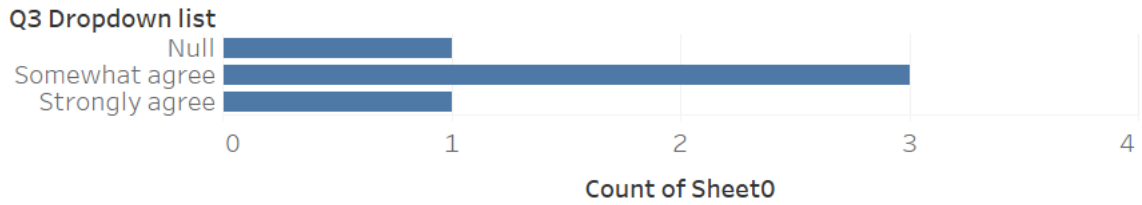
Single Choice Example

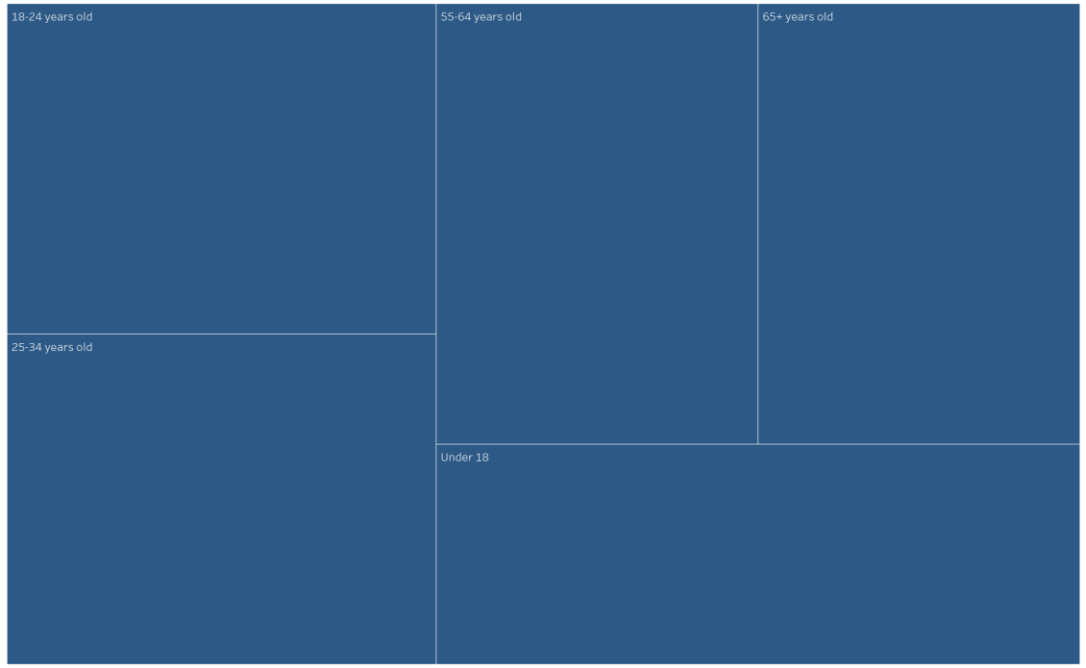
RecordedDate	Q1 Single choice	Q3 Dropdown list	Q4 Certified	Q5 Random choice	Q6 Text entry	Q7 Multi line text	Q8 Form field_1	Q8 Form field_2	Q8 Form field_3	Q8 Form field_4	Q9 Rank order_1	Q9 Rank order_2	Q9 Rank order_3	Q9 Rank order_4	Q9 Rank order_5	Q10 Matrix table_1	Q10 Matrix table_2	Q10 Matrix table_3	Q11 Slider_1	Q11 Slider_2	Q11 Slider_3	Q12 Side by side#1_1	Q12 Side by side#1_2	Q12 Side by side#1_3	Q12 Side by side#1_4	Q12 Side by side#1_5	Q12 Side by side#1_6	Q12 Side by side#1_7	Q12 Side by side#1_8	Q12 Side by side#2_1	Q12 Side by side#2_2	Q12 Side by side#2_3	Q12 Side by side#2_4	Q12 Side by side#2_5	Q12 Side by side#2_6	Q12 Side by side#2_7	Q12 Side by side#2_8	Q13 End of survey
2024-02-09 18:44	Not useful	Somewhat agree	18-24 years old	Single-answer multiple choice questions	2B or ~2B	Boy howdy!	Imma	Fakir	imma.fakir@ucalgary.ca	4032208895	5	4	1	2	3	Strongly disagree	Somewhat disagree	Neither agree nor disagree	3	1	5	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Neither easy nor difficult	Yes	No	Not sure	Need more information	Yes	No	Not sure	Need more information	Yes
2024-02-09 18:58	Not useful		65+ years old	Multiple-answer multiple choice questions	Already completed poll	Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor	Chris P.	Chicken	chris.chicken@ucalgary.ca	403-419-0210	5	2	1	4	3	Strongly agree	Strongly agree	Somewhat agree	1	1	5	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult	Very difficult									Yes
2024-02-09 19:05	Neither useful nor not useful	Somewhat agree	25-34 years old	Dropdown list multiple choice questions	ChatGPT	Another type of text entry question is a Multi line question.	Bill	Loni	bill.loni@ucalgary.ca	5879116309						Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	5	5	5	Very easy	Very difficult	Very easy	Very difficult	Very easy	Very difficult	Very easy	Very difficult		Not sure	Yes			No		Yes	Yes
2024-02-11 2:00	Useful	Somewhat agree	Under 18	Dropdown list multiple choice questions	Luke, I am your father	Lorem Ipsum	Homer	Simpson	homer.simpson@ucalgary.ca	4037119111	2	1	4	5	3	Somewhat agree	Neither agree nor disagree	Somewhat agree	1	4	3	Somewhat difficult	Neither easy nor difficult	Somewhat difficult	Very difficult	Somewhat difficult	Neither easy nor difficult	Somewhat difficult	Very difficult	No		Not sure			Yes	Yes	Need more information	Yes
2024-02-11 2:03	Neither useful nor not useful	Strongly agree	55-64 years old	Dropdown list multiple choice questions	quick poll	Feedback	Benny	Bear	benny.the.bear@ucalgary.ca	5872203579	5	2	1	3	4	Somewhat agree	Strongly agree	Somewhat agree	3	3	4	Very easy	Somewhat easy	Neither easy nor difficult	Somewhat difficult	Very difficult	Somewhat difficult	Neither easy nor difficult	Somewhat easy									No

https://brosz.ca/slides/survey/ Demo_Survey.csv

Questions 1, 3, 4

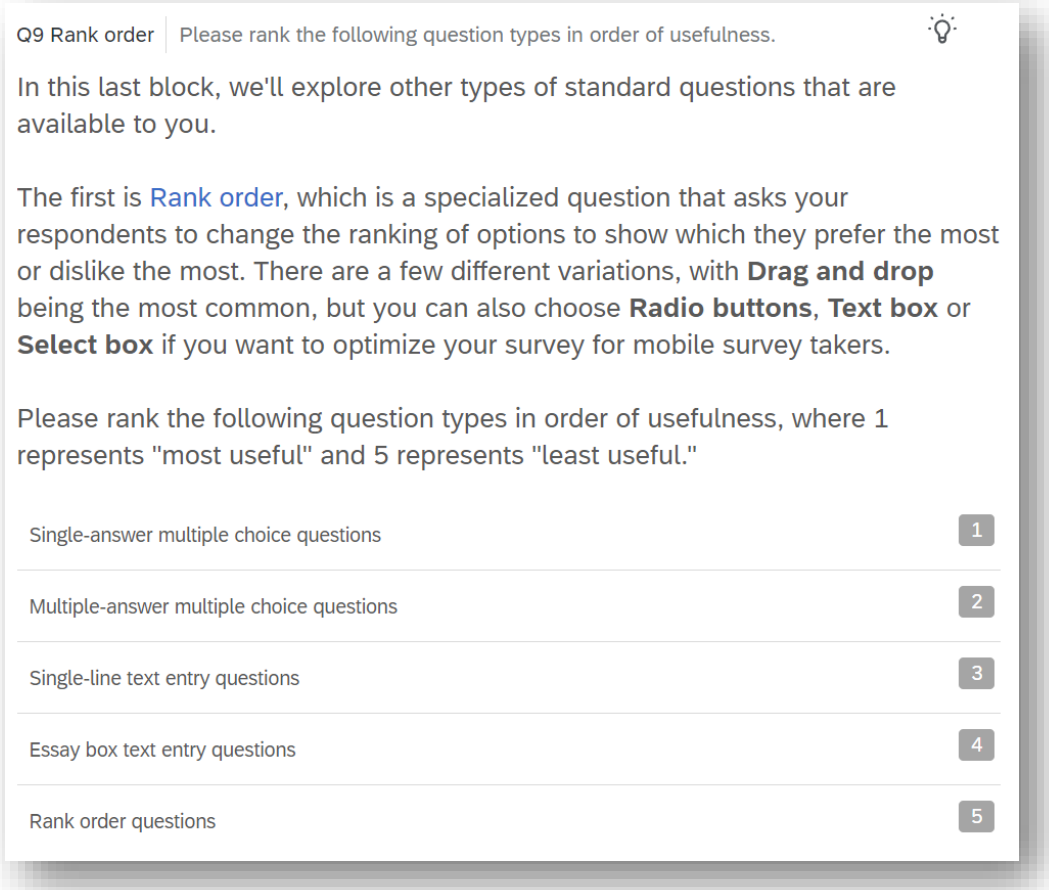

Useful
1
Neither useful nor not useful
2
Not useful
2


Q3 Dropdown list
Null
Somewhat agree
Strongly agree
0
1
2
3
4
Count of Sheet0


18-24 years old
55-64 years old
65+ years old
25-34 years old
Under 18

Unpivot Example

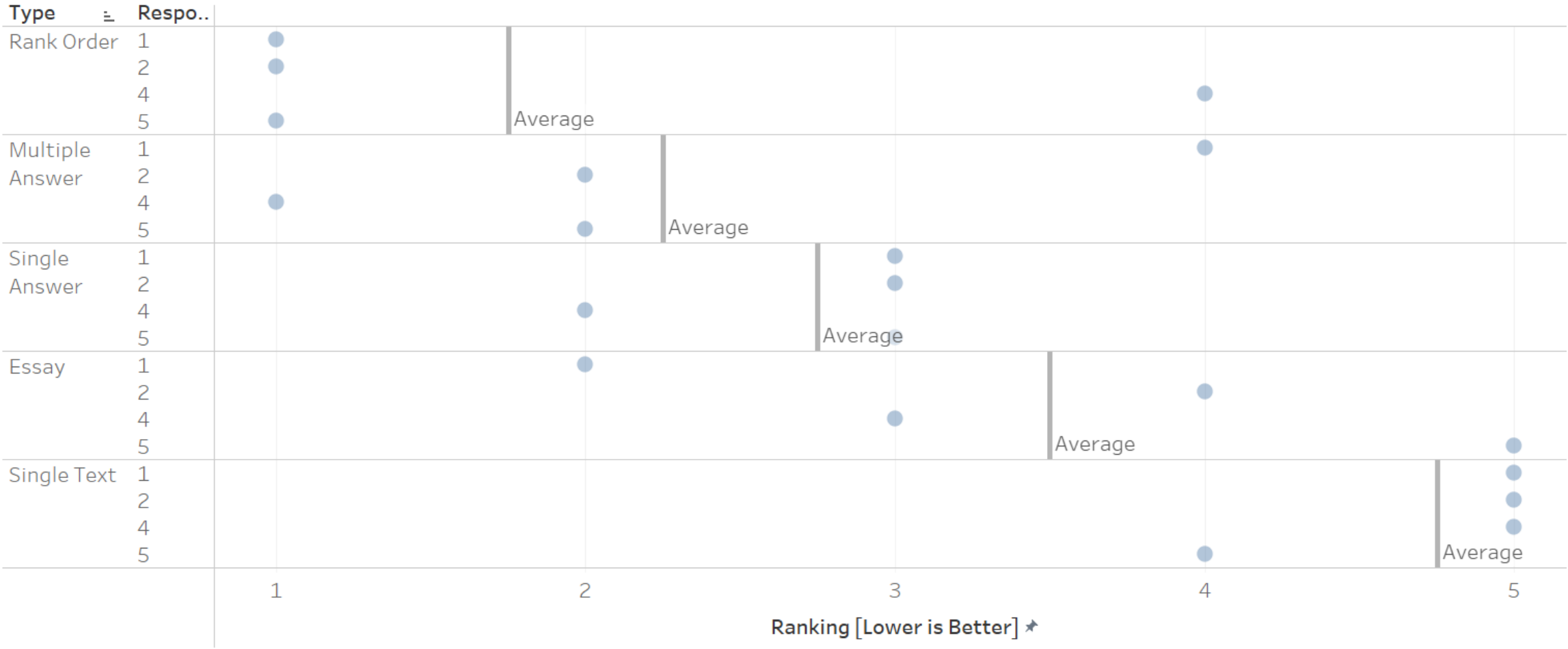
- Ranking Order



Q9 Rank order_1	Q9 Rank order_2	Q9 Rank order_3	Q9 Rank order_4	Q9 Rank order_5
5	4	1	2	3
5	2	1	4	3
2	1	4	5	3
5	2	1	3	4

https://brosz.ca/slides/survey/

2 Transformed Ranking Output.csv


Type
Respo..
Rank Order
1
2
4
5
Average
Multiple Answer
1
2
4
5
Average
Single Answer
1
2
4
5
Average
Essay
1
2
4
5
Average
Single Text
1
2
4
5
Average
1
2
3
4
5
Ranking [Lower is Better]

Multiple Choice

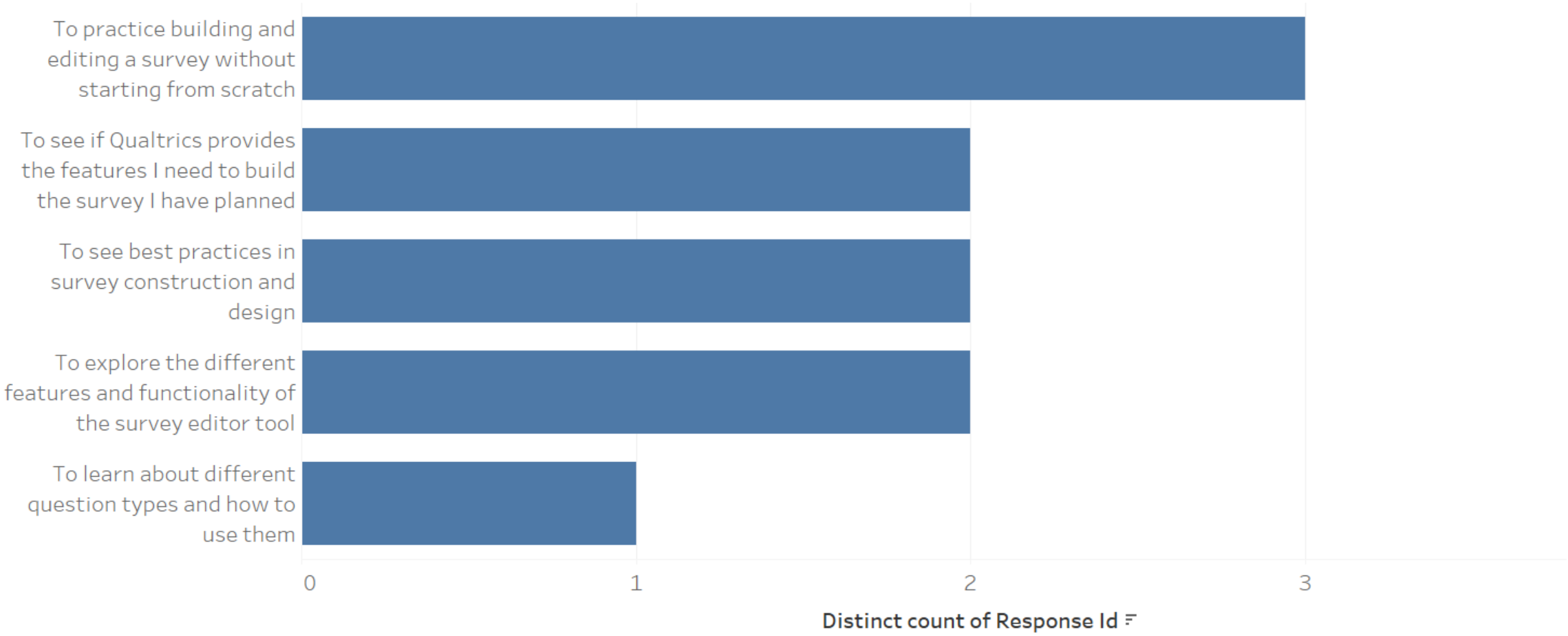
Why did you choose to take the question tour? Please select all that apply.

To learn about different question types and how to use them	To practice building and editing a survey without starting from scratch
To see best practices in survey construction and design	To see if Qualtrics provides the features I need to build the survey I have planned
To explore the different features and functionality of the survey editor tool	None of the above (this answer is "exclusive" which means you can't choose it with any other option - it can be set using the response menu that becomes available when you click into the answer to make edits)

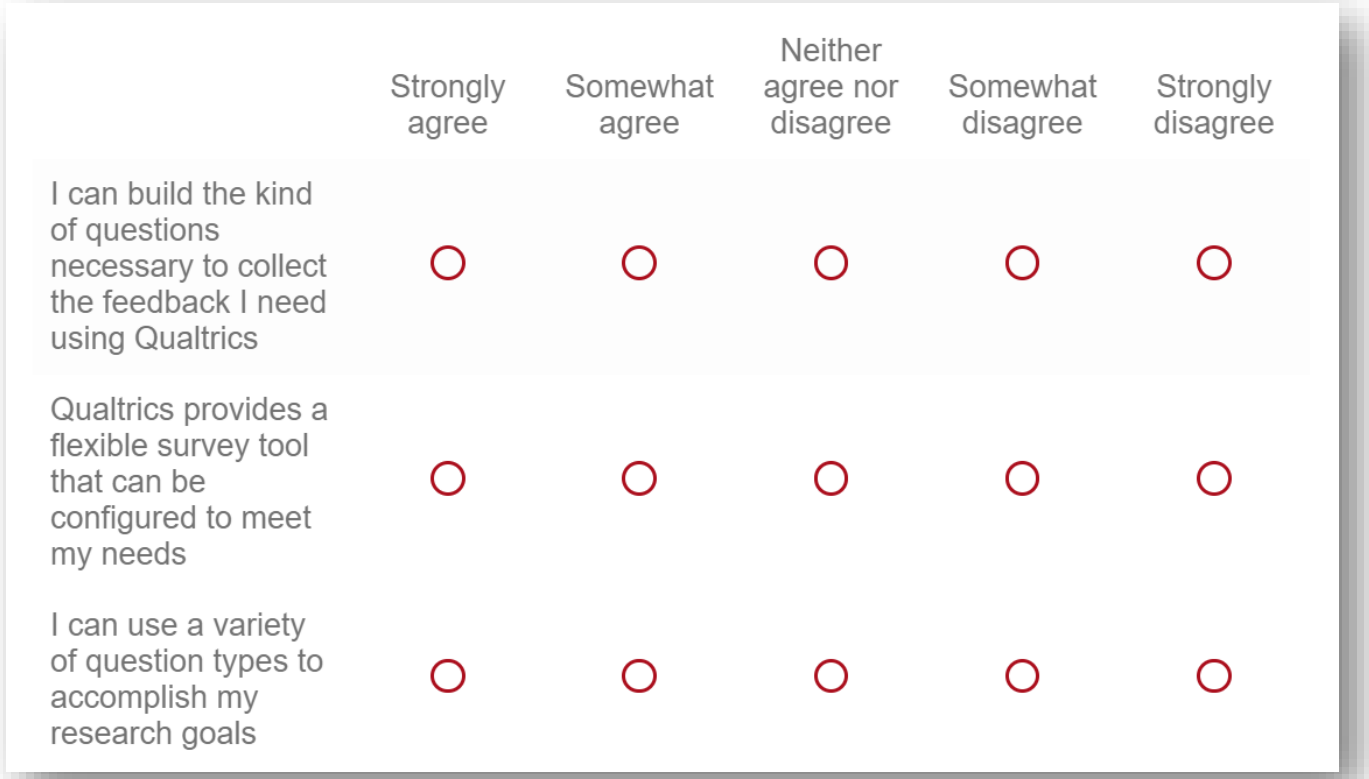
Q2 Multiple choice
To see best practices in survey construction and design,To practice building and editing a survey without starting from scratch
To practice building and editing a survey without starting from scratch
To explore the different features and functionality of the survey editor tool,To see if Qualtrics provides the features I need to build the survey I have planned
To learn about different question types and how to use them,To see best practices in survey construction and design,To explore the different features and functionality of the survey editor tool,To practice building and editing a survey without starting from scratch,To see if Qualtrics provides the features I need to build the survey I have planned

https://brosz.ca/slides/survey/

3 Transformed Multiple Choice Output.csv


To practice building and editing a survey without starting from scratch
To see if Qualtrics provides the features I need to build the survey I have planned
To see best practices in survey construction and design
To explore the different features and functionality of the survey editor tool
To learn about different question types and how to use them
0
1
2
3
Distinct count of Response Id

Likert Scale Questions



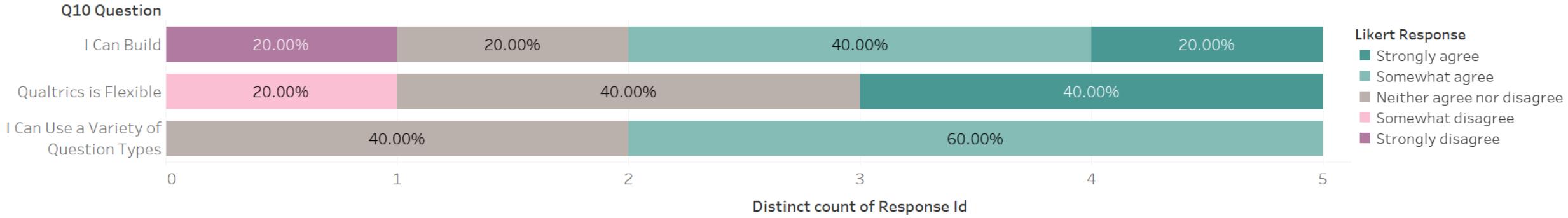
	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I can build the kind of questions necessary to collect the feedback I need using Qualtrics	○	○	○	○	○
Qualtrics provides a flexible survey tool that can be configured to meet my needs	○	○	○	○	○
I can use a variety of question types to accomplish my research goals	○	○	○	○	○

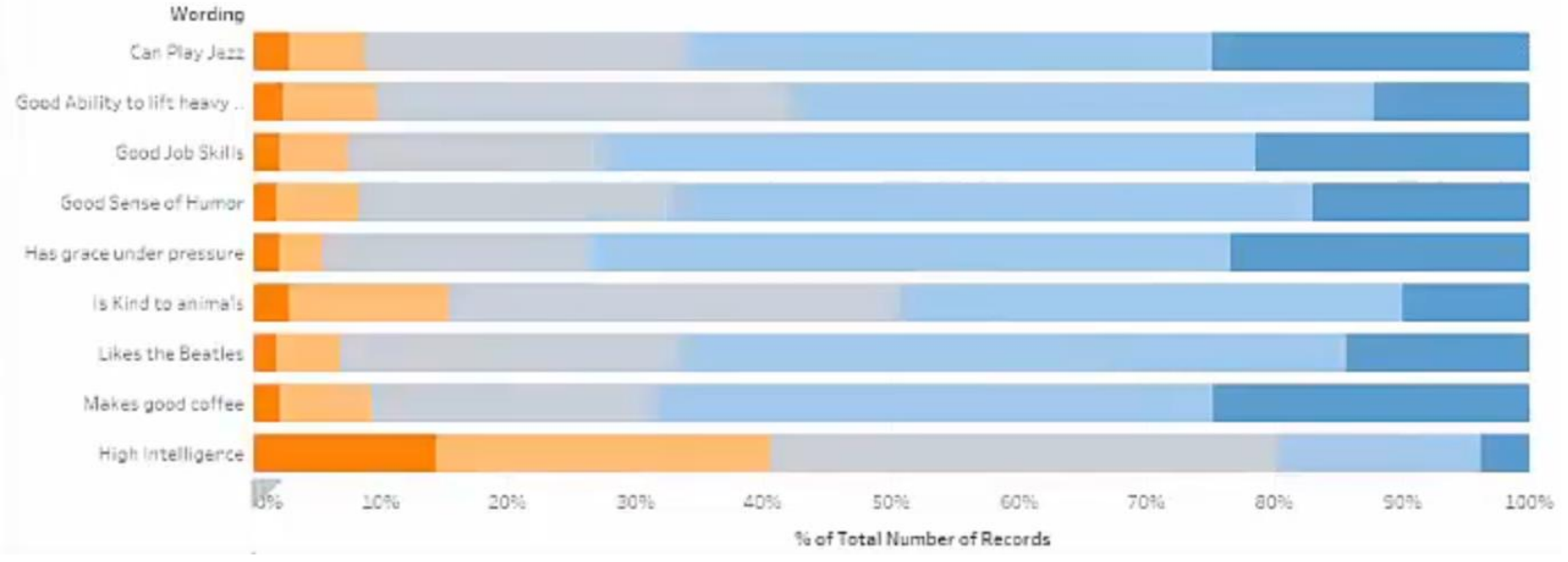
Q10 Matrix table_1	Q10 Matrix table_2	Q10 Matrix table_3
Strongly disagree	Somewhat disagree	Neither agree nor disagree
Strongly agree	Strongly agree	Somewhat agree
Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree
Somewhat agree	Neither agree nor disagree	Somewhat agree
Somewhat agree	Strongly agree	Somewhat agree

https://brosz.ca/slides/survey/

4 Transformed Likert Output.csv

Stacked Bar Chart

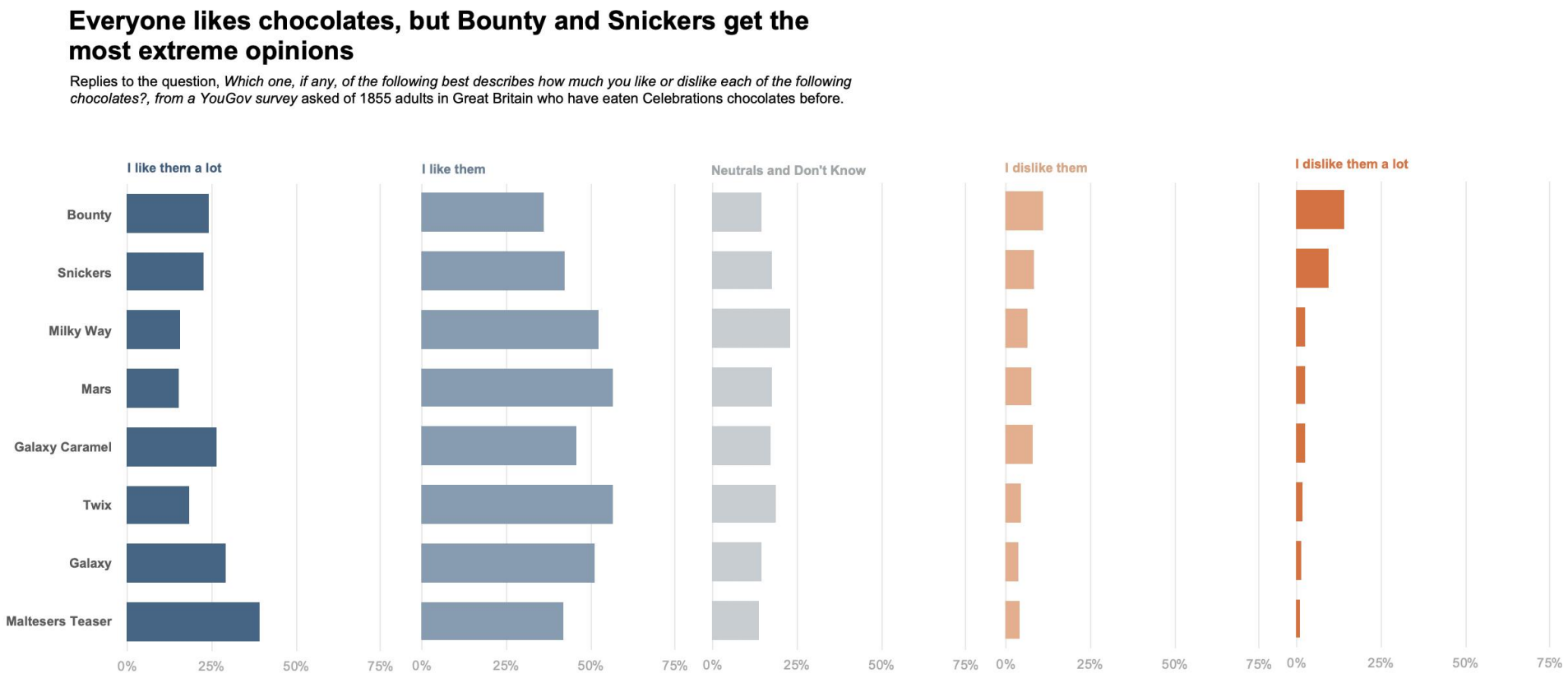




Downsides

- No common baselines for comparison
- Can be hard to determine whether there is more support for or against

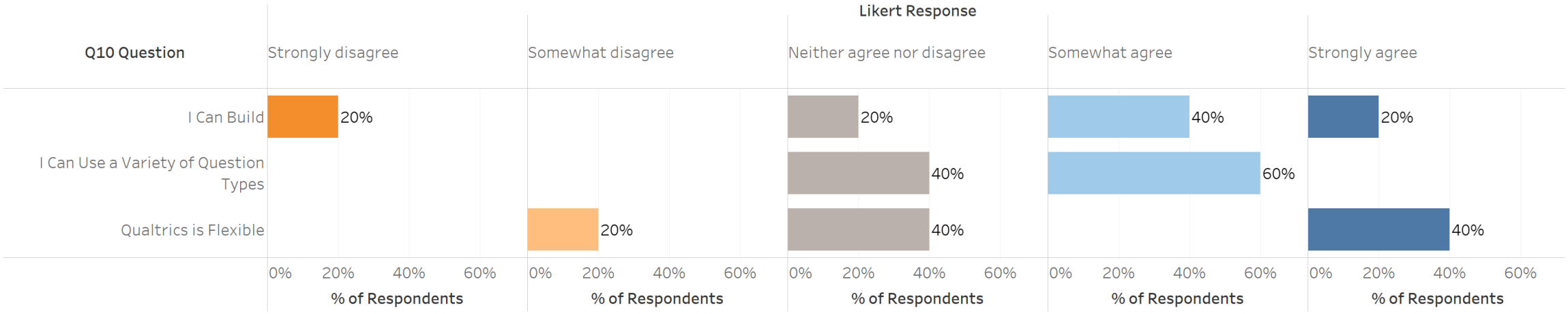
Small Multiple Bar Charts



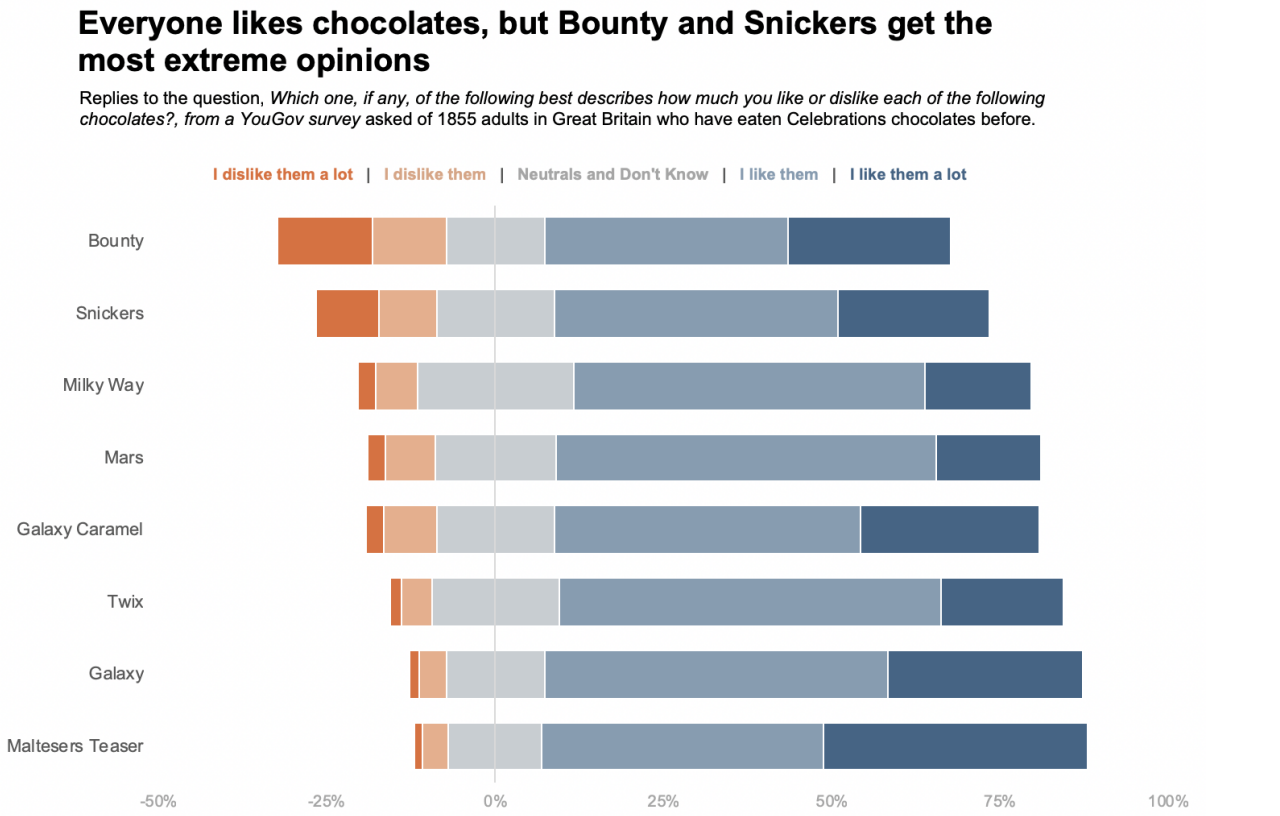
From https://daydreamingnumbers.com/blog/4-ways-to-visualize-likert-scales/

Downsides:

- Loss of part-to-whole relationship
- Hard to group together “agrees” in comparison to both “disagree” columns
- Takes up more space


Likert Response
Q10 Question
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree
I Can Build
I Can Use a Variety of Question Types
Qualtrics is Flexible
20%
20%
40%
20%
20%
40%
60%
40%
40%
0%
20%
40%
60%
% of Respondents

Diverging Bar Chart



From https://daydreamingnumbers.com/blog/4-ways-to-visualize-likert-scales/

Downsides:

- Can be hard to read if neutral values vary greatly from topic to topic
- Does it make sense to split neutral values between likes and dislikes?
- Harder to create in Tableau

Starting Point

Columns

Rows: Q10 Question | Likert Response

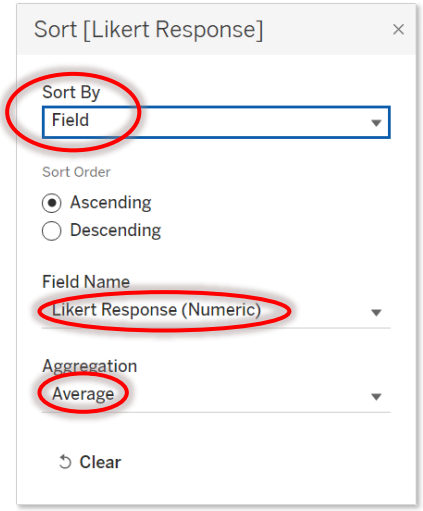
Diverging

Q10 Question	Likert Response	
I Can Build	Neither agree nor disagree	Abc
	Somewhat agree	Abc
	Strongly agree	Abc
	Strongly disagree	Abc
I Can Use a Variety of Question Types	Neither agree nor disagree	Abc
	Somewhat agree	Abc
Qualtrics is Flexible	Neither agree nor disagree	Abc
	Somewhat disagree	Abc
	Strongly agree	Abc

Based on https://willmasse.com/tableau-diverging-stacked-bar-chart

New Field: Likert Response (Numeric)

```
CASE [Likert Response]
WHEN "Strongly agree" THEN 5
WHEN "Somewhat agree" THEN 4
WHEN "Neither agree nor disagree" THEN 3
WHEN "Somewhat disagree" THEN 2
WHEN "Strongly disagree" THEN 1
END
```



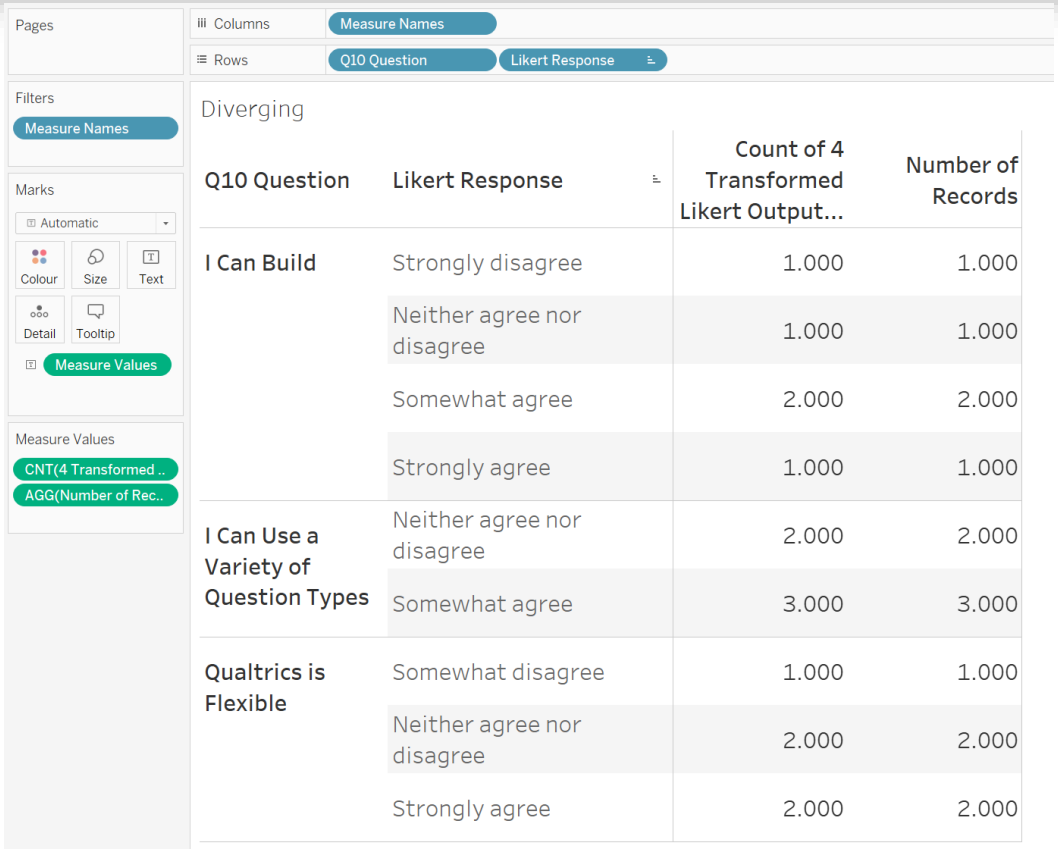
Rows | Q10 Question | Likert Response

Diverging

Q10 Question	Likert Response	
I Can Build	Strongly disagree	Abc
	Neither agree nor disagree	Abc
	Somewhat agree	Abc
	Strongly agree	Abc
I Can Use a Variety of Question Types	Neither agree nor disagree	Abc
	Somewhat agree	Abc
Qualtrics is Flexible	Somewhat disagree	Abc
	Neither agree nor disagree	Abc
	Strongly agree	Abc

New Field: Number of Records

```
COUNT([Likert Response (Numeric)])
```



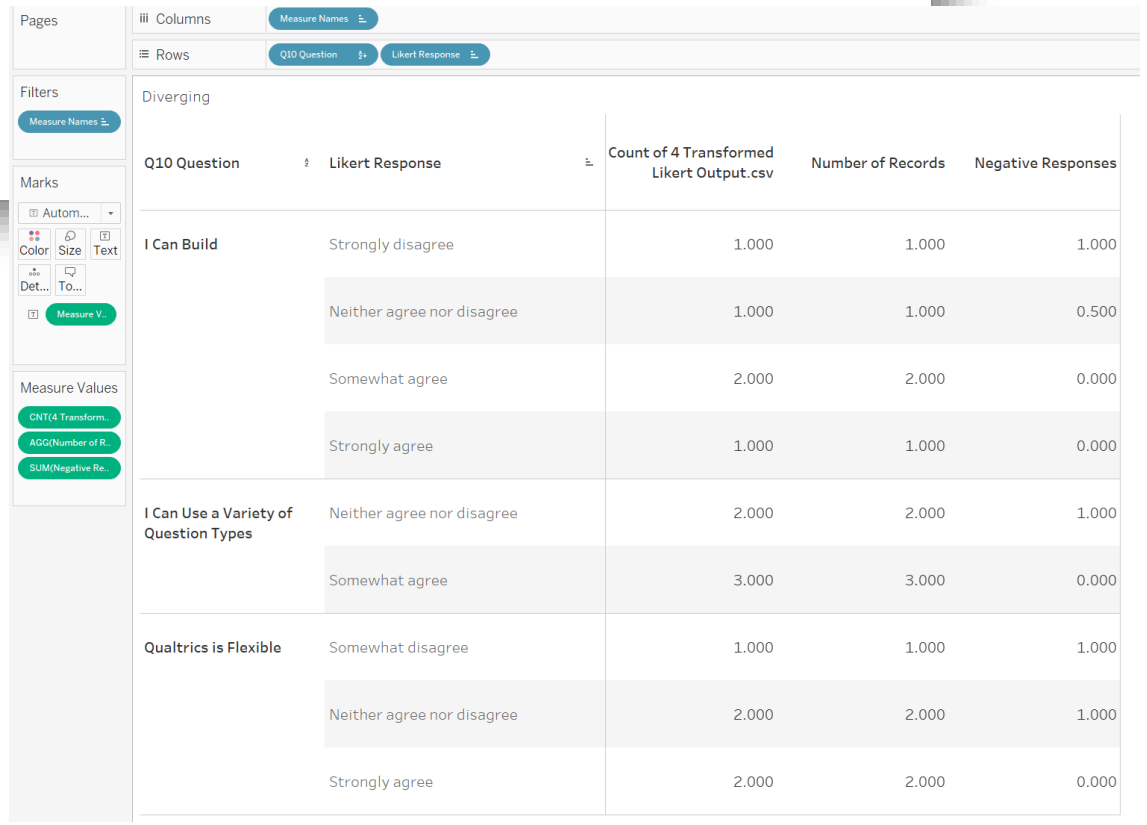
Diverging

Q10 Question	Likert Response	Count of 4 Transformed Likert Output...	Number of Records
I Can Build	Strongly disagree	1.000	1.000
	Neither agree nor disagree	1.000	1.000
	Somewhat agree	2.000	2.000
	Strongly agree	1.000	1.000
I Can Use a Variety of Question Types	Neither agree nor disagree	2.000	2.000
	Somewhat agree	3.000	3.000
Qualtrics is Flexible	Somewhat disagree	1.000	1.000
	Neither agree nor disagree	2.000	2.000
	Strongly agree	2.000	2.000

New Field: Negative Responses

(This will help us determine how far to the left of the central axis we need to position the bar)

```
IF [Likert Response (Numeric)] < 3 THEN 1
ELSEIF [Likert Response (Numeric)] = 3 THEN 0.5
ELSE 0
END
```



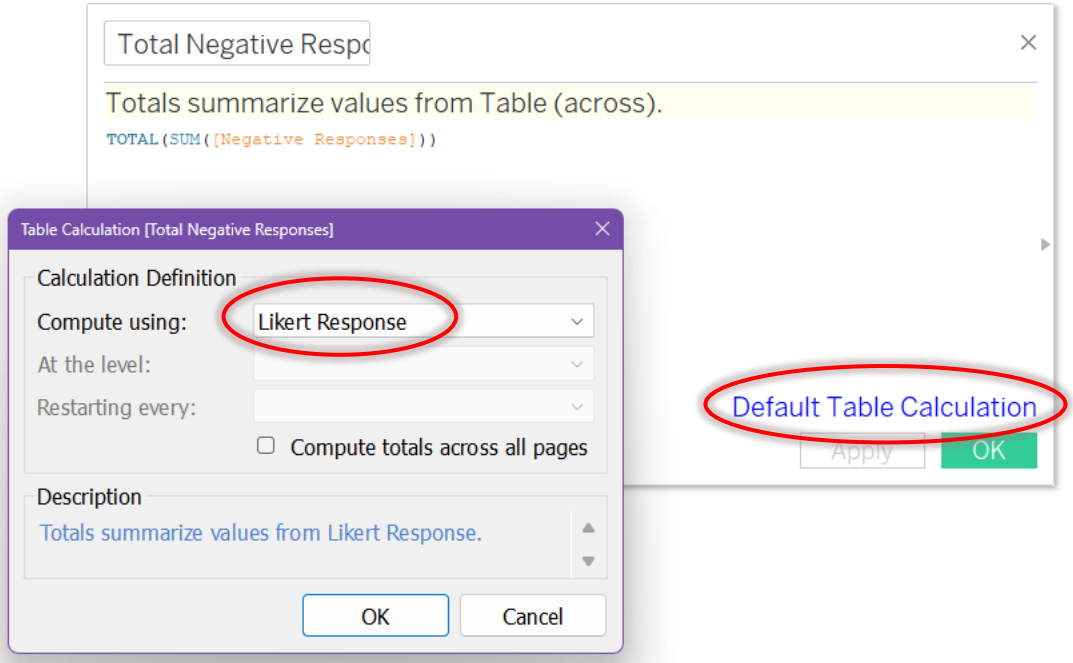
Diverging

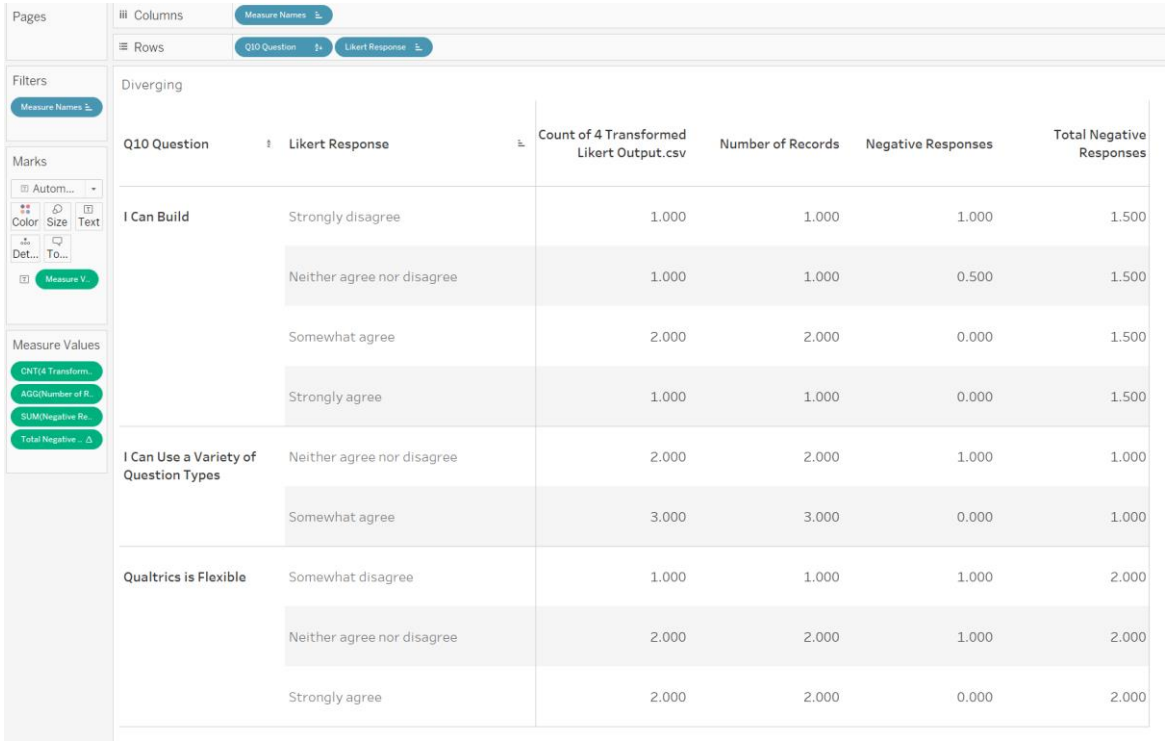
Q10 Question	Likert Response	Count of 4 Transformed Likert Output.csv	Number of Records	Negative Responses
I Can Build	Strongly disagree	1.000	1.000	1.000
	Neither agree nor disagree	1.000	1.000	0.500
	Somewhat agree	2.000	2.000	0.000
	Strongly agree	1.000	1.000	0.000
I Can Use a Variety of Question Types	Neither agree nor disagree	2.000	2.000	1.000
	Somewhat agree	3.000	3.000	0.000
Qualtrics is Flexible	Somewhat disagree	1.000	1.000	1.000
	Neither agree nor disagree	2.000	2.000	1.000
	Strongly agree	2.000	2.000	0.000

New Field: Total Negative Responses

(We need to know how many negative responses we have, this will help making the axis)

```
TOTAL(SUM([Negative Responses]))
```



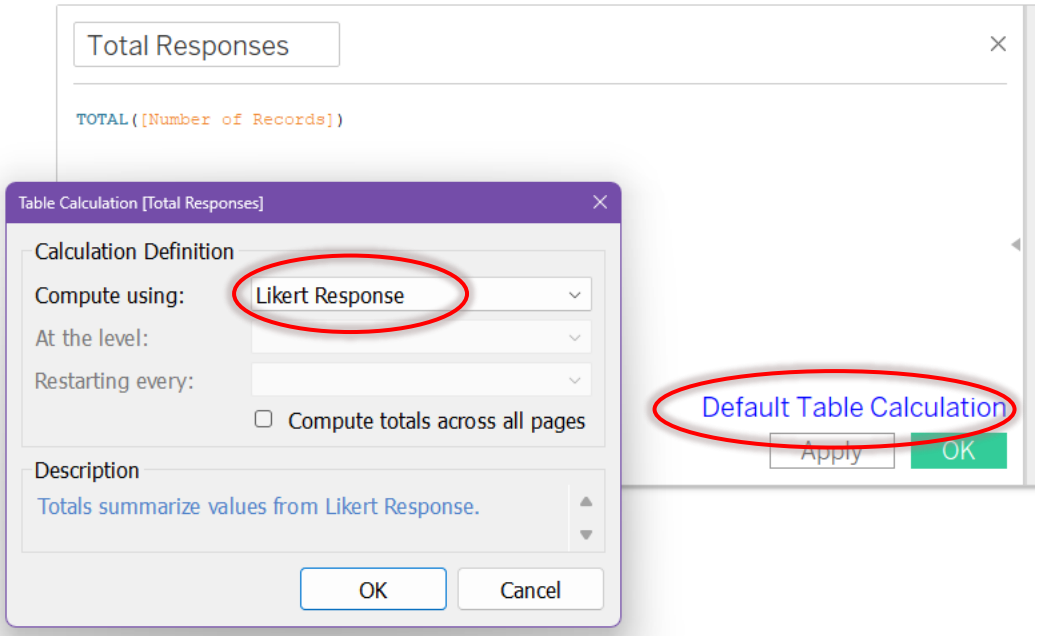


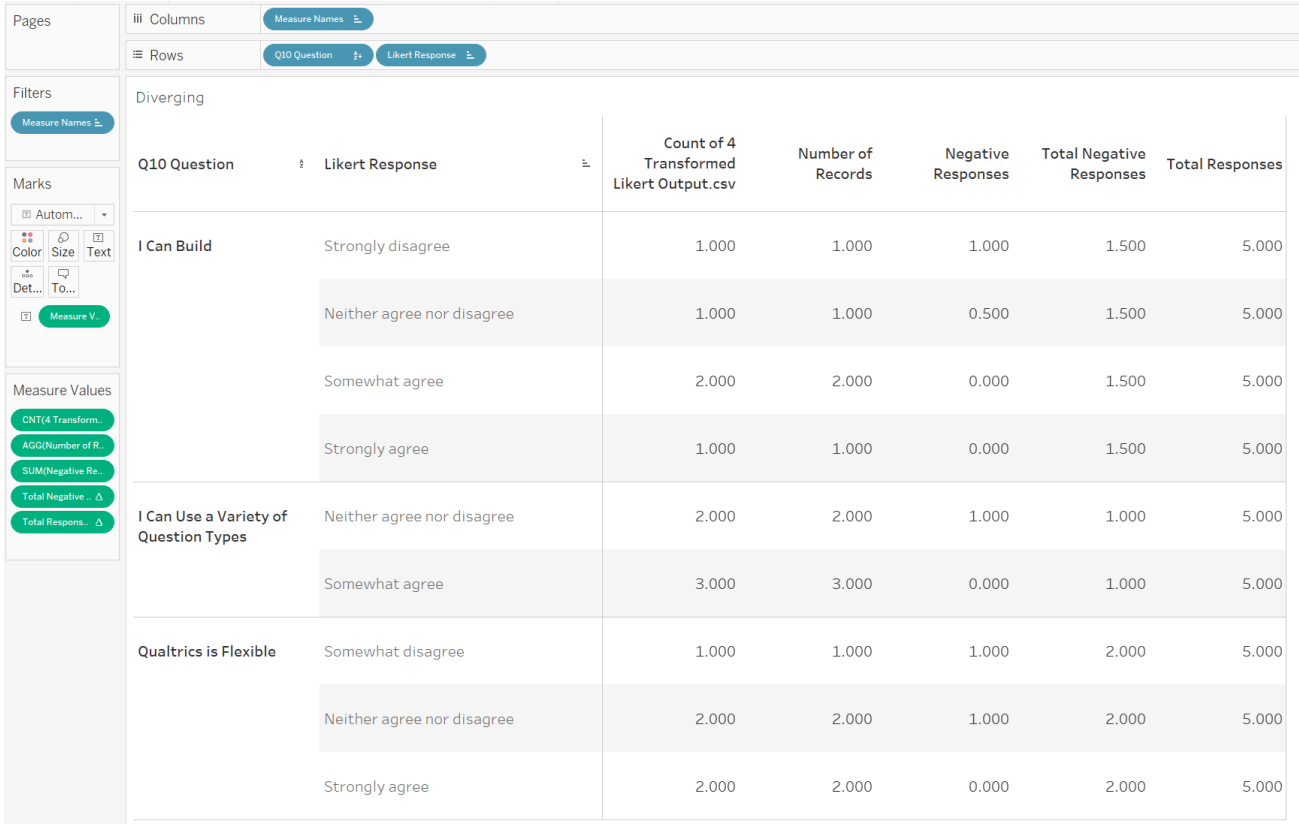
Q10 Question	Likert Response	Count of 4 Transformed Likert Output.csv	Number of Records	Negative Responses	Total Negative Responses
I Can Build	Strongly disagree	1.000	1.000	1.000	1.500
	Neither agree nor disagree	1.000	1.000	0.500	1.500
	Somewhat agree	2.000	2.000	0.000	1.500
	Strongly agree	1.000	1.000	0.000	1.500
I Can Use a Variety of Question Types	Neither agree nor disagree	2.000	2.000	1.000	1.000
	Somewhat agree	3.000	3.000	0.000	1.000
Qualtrics is Flexible	Somewhat disagree	1.000	1.000	1.000	2.000
	Neither agree nor disagree	2.000	2.000	1.000	2.000
	Strongly agree	2.000	2.000	0.000	2.000

New Field: Total Responses

(This will tell us how long our bar should be)

```
TOTAL([Number of Records])
```



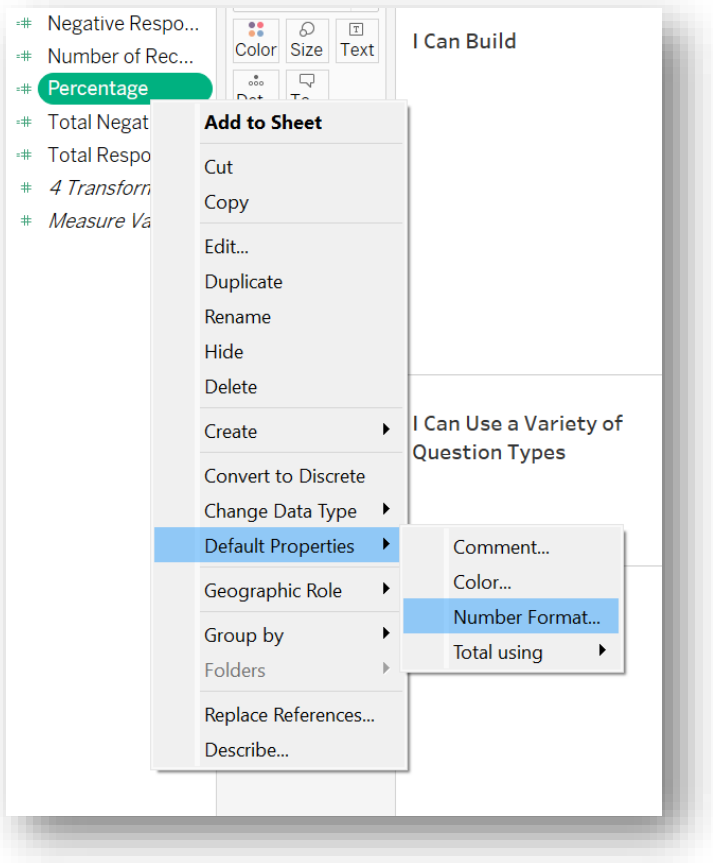


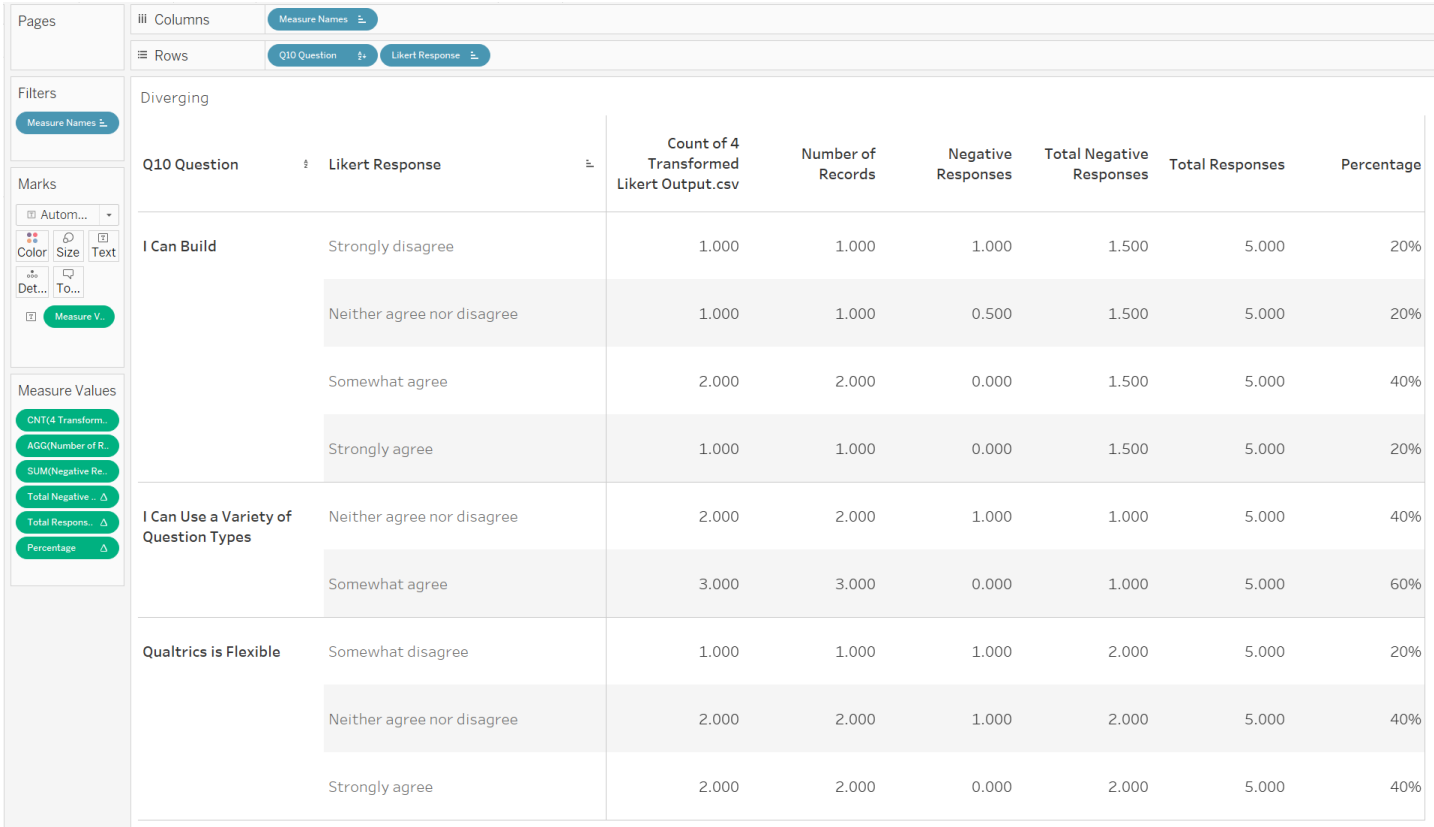
Q10 Question	Likert Response	Count of 4 Transformed Likert Output.csv	Number of Records	Negative Responses	Total Negative Responses	Total Responses
I Can Build	Strongly disagree	1.000	1.000	1.000	1.500	5.000
	Neither agree nor disagree	1.000	1.000	0.500	1.500	5.000
	Somewhat agree	2.000	2.000	0.000	1.500	5.000
	Strongly agree	1.000	1.000	0.000	1.500	5.000
I Can Use a Variety of Question Types	Neither agree nor disagree	2.000	2.000	1.000	1.000	5.000
	Somewhat agree	3.000	3.000	0.000	1.000	5.000
Qualtrics is Flexible	Somewhat disagree	1.000	1.000	1.000	2.000	5.000
	Neither agree nor disagree	2.000	2.000	1.000	2.000	5.000
	Strongly agree	2.000	2.000	0.000	2.000	5.000

New Field: Percentage

(Percentage labels)

```
[Number of Records]/[Total Responses]
```



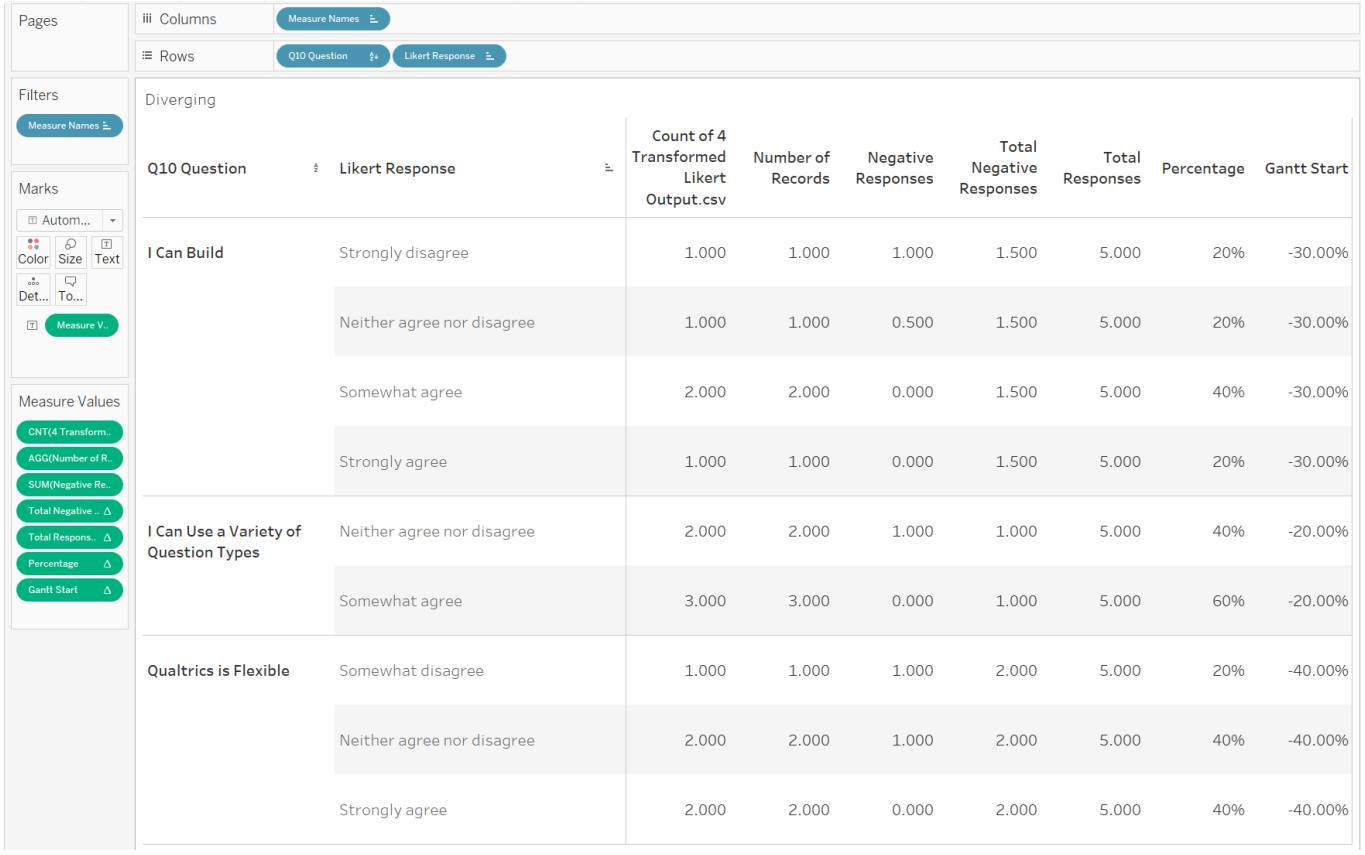


Q10 Question	Likert Response	Count of 4 Transformed Likert Output.csv	Number of Records	Negative Responses	Total Negative Responses	Total Responses	Percentage
I Can Build	Strongly disagree	1.000	1.000	1.000	1.500	5.000	20%
	Neither agree nor disagree	1.000	1.000	0.500	1.500	5.000	20%
	Somewhat agree	2.000	2.000	0.000	1.500	5.000	40%
	Strongly agree	1.000	1.000	0.000	1.500	5.000	20%
I Can Use a Variety of Question Types	Neither agree nor disagree	2.000	2.000	1.000	1.000	5.000	40%
	Somewhat agree	3.000	3.000	0.000	1.000	5.000	60%
Qualtrics is Flexible	Somewhat disagree	1.000	1.000	1.000	2.000	5.000	20%
	Neither agree nor disagree	2.000	2.000	1.000	2.000	5.000	40%
	Strongly agree	2.000	2.000	0.000	2.000	5.000	40%

New Field: Gantt Start

(Calculate the horizontal position our bar will start at)

```
-[Total Negative Responses]/[Total Responses]
```



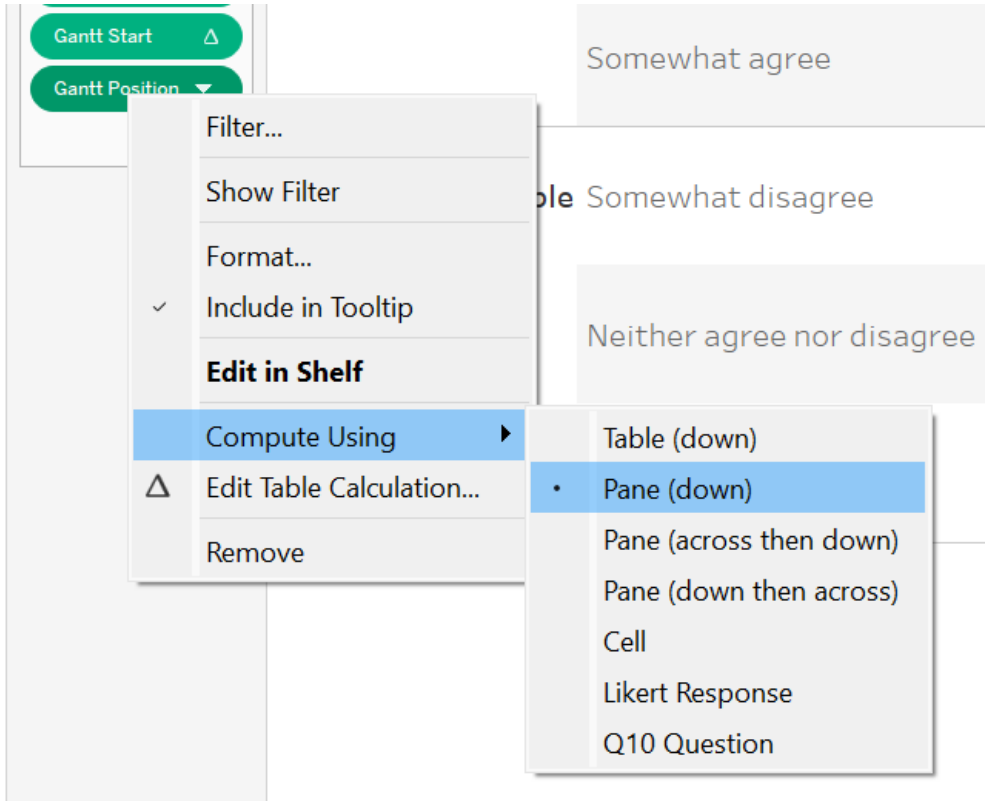
Diverging

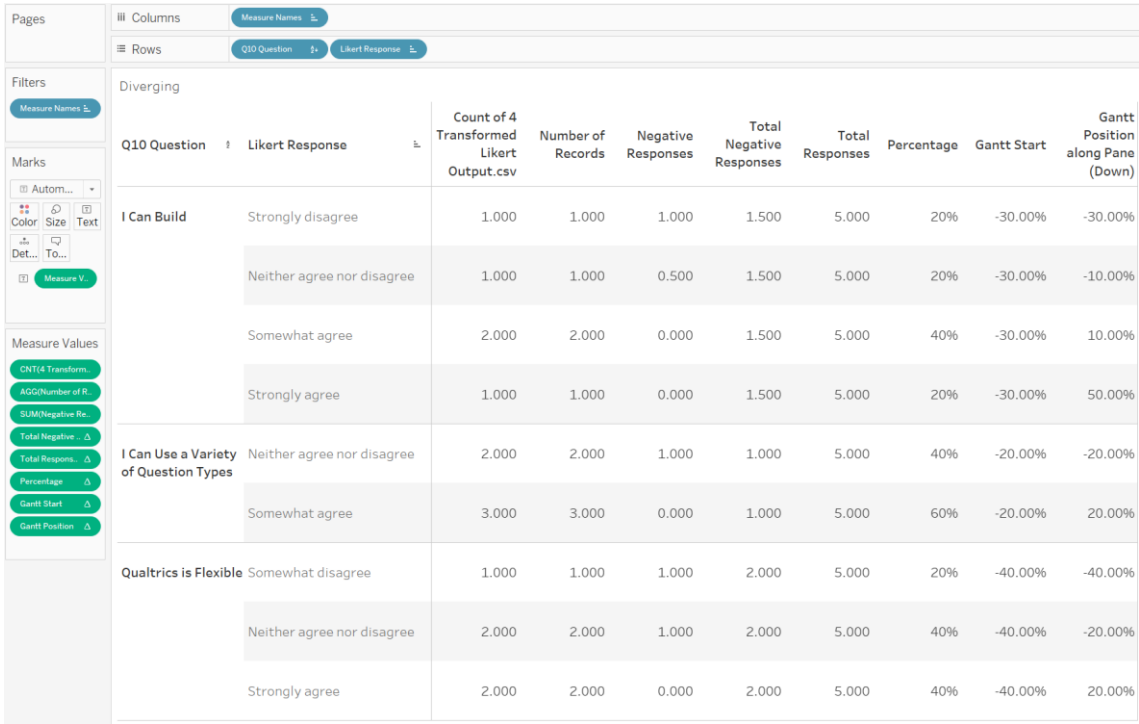
Q10 Question	Likert Response	Count of 4 Transformed Likert Output.csv	Number of Records	Negative Responses	Total Negative Responses	Total Responses	Percentage	Gantt Start
I Can Build	Strongly disagree	1.000	1.000	1.000	1.500	5.000	20%	-30.00%
	Neither agree nor disagree	1.000	1.000	0.500	1.500	5.000	20%	-30.00%
	Somewhat agree	2.000	2.000	0.000	1.500	5.000	40%	-30.00%
	Strongly agree	1.000	1.000	0.000	1.500	5.000	20%	-30.00%
I Can Use a Variety of Question Types	Neither agree nor disagree	2.000	2.000	1.000	1.000	5.000	40%	-20.00%
	Somewhat agree	3.000	3.000	0.000	1.000	5.000	60%	-20.00%
Qualtrics is Flexible	Somewhat disagree	1.000	1.000	1.000	2.000	5.000	20%	-40.00%
	Neither agree nor disagree	2.000	2.000	1.000	2.000	5.000	40%	-40.00%
	Strongly agree	2.000	2.000	0.000	2.000	5.000	40%	-40.00%

New Field: Gantt Position

(Calculate the horizontal position each sub-bar will start at)

```
PREVIOUS_VALUE([Gantt Start])+ZN(lookup([Percentage],-1))
```

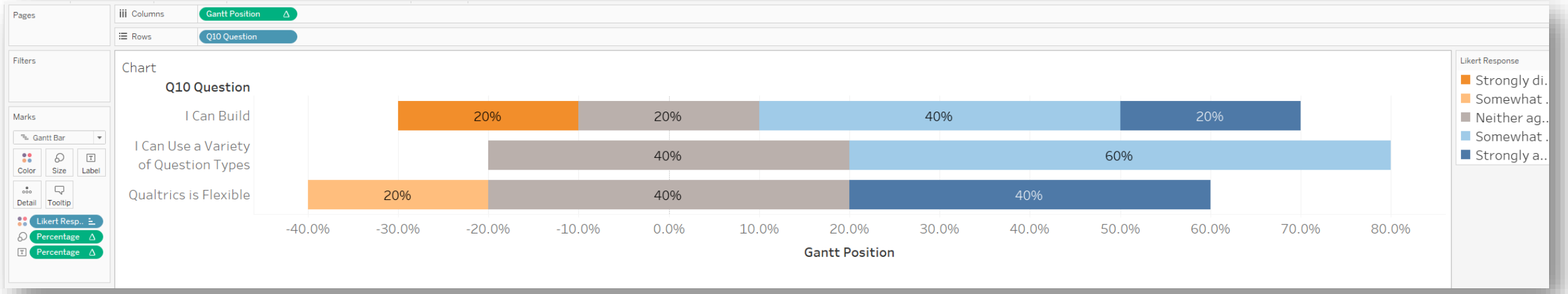




Q10 Question	Likert Response	Count of 4 Transformed Likert Output.csv	Number of Records	Negative Responses	Total Negative Responses	Total Responses	Percentage	Gantt Start	Gantt Position along Pane (Down)
I Can Build	Strongly disagree	1.000	1.000	1.000	1.500	5.000	20%	-30.00%	-30.00%
	Neither agree nor disagree	1.000	1.000	0.500	1.500	5.000	20%	-30.00%	-10.00%
	Somewhat agree	2.000	2.000	0.000	1.500	5.000	40%	-30.00%	10.00%
	Strongly agree	1.000	1.000	0.000	1.500	5.000	20%	-30.00%	50.00%
I Can Use a Variety of Question Types	Neither agree nor disagree	2.000	2.000	1.000	1.000	5.000	40%	-20.00%	-20.00%
	Somewhat agree	3.000	3.000	0.000	1.000	5.000	60%	-20.00%	20.00%
Qualtrics is Flexible	Somewhat disagree	1.000	1.000	1.000	2.000	5.000	20%	-40.00%	-40.00%
	Neither agree nor disagree	2.000	2.000	1.000	2.000	5.000	40%	-40.00%	-20.00%
	Strongly agree	2.000	2.000	0.000	2.000	5.000	40%	-40.00%	20.00%

Build the Chart

- Rows: Q10 Question
- Columns: Gantt Position
  - Compute Using: Likert Response
- Color: Likert Responses
  - Sort by Field, Response (Numeric), Average
- Size & Label: Percentage



Resources

BOOK

Data modeling with tableau : a practical guide to building data models using tableau prep and tableau desktop

Munroe, Kirk, author.
2022; 1st ed.

Online access

BOOK

Data storytelling and visualization with Tableau : a hands-on approach

Joshi, Prachi, author.
2023

Online access

https://www.tableau.com/learn/whitepapers/visualizing-survey-data

YouTube CA

Steve Wexler: Visualizing Survey Data 2.0 (2016) Tableau Conference.
https://www.youtube.com/watch?v=nmr_-1aL1T4

Steve Wexler: What's New in Survey Data (2018) Tableau Conference.
https://www.youtube.com/watch?v=ORyAZTmQ4nk

Visualizing Survey Data

Slides:
https://brosz.ca/slides/survey

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