

Creating and Analyzing Qualtrics Surveys

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For
Intro to Writing
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Northeastern University
NULab for Texts, Maps, and Networks

*Feel free to ask questions at any point
during the presentation!*

Sample: Campus Commute

Take a few minutes to fill out this survey. We will use this to point to examples:

https://bit.ly/diti_qualtrics_survey



Workshop Agenda

- Introduction to Qualtrics Forms for Survey Creation
- Survey Questions Tips
- Programming Different Types of Survey Questions
- Exporting and Analyzing Surveys from Qualtrics

Slides, handouts, and sample survey available at:

<https://bit.ly/diti-sp22-lerner-survey>



Research Ethics

While doing official research involving human subjects, always:

1. Get IRB (Institutional Review Board) approval
2. Find the right, secure survey tool to use; Northeastern uses Qualtrics, which is secure for keeping your results private
3. Understand that your specific questions will gather specific answers. Try not to steer your participants in a particular direction, and always be wary of the vulnerabilities of the demographic(s) you're studying.



Qualtrics

- Qualtrics is a great survey option for more formal surveys.
- You can use it in many industries: political campaigns, marketing, academia and many others.
- It has many pre-programmed, built-in questions which can save you a lot of time.

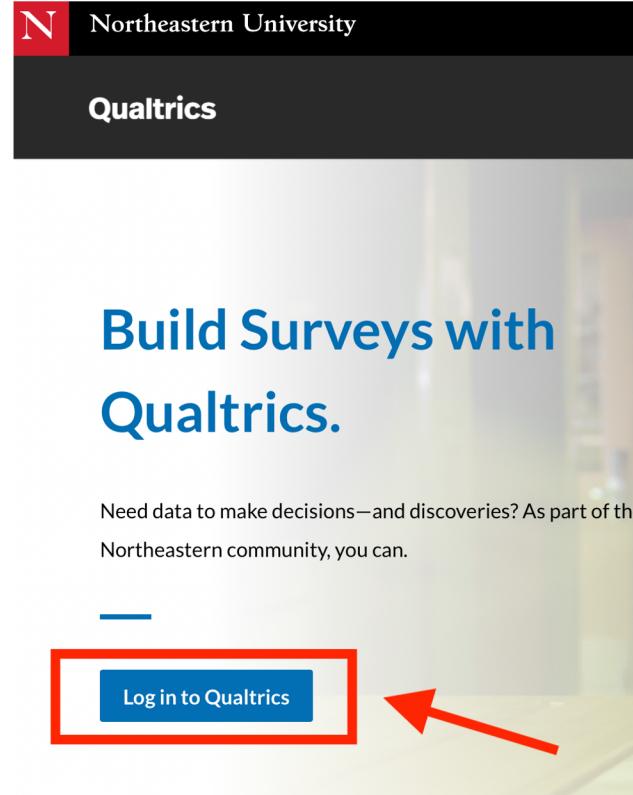


- You can login with your Northeastern credentials:
qualtrics.northeastern.edu



Once in Qualtrics

Step 1. Log in
with your
Northeastern
credentials .



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Step 2. Begin the project

Welcome to XM

Active surveys

- Warehouse pilot survey (0 new responses, 104 total responses)
- Introduction & Team Formation Form - Fa... (0 new responses, 43 total responses)
- Facebook Warehouse E...

Recently visited

- Survey: Commuting Habits of Northe...
- Survey: Flex pilot survey for FACEB... (Active, 23 Responses)
- Survey: My Sample Survey (New)
- Survey: Facebook Warehouse Biling... (Active, 1354 Responses)

Your workflows summary

Set up your first workflow to automate important actions and drive efficiency

Create a workflow Learn more about workflows

You will see your active and recently visited surveys.

Create a new project

Start by clicking “Create a new project”

Step 3. Open a blank project

XM ≡

Search the catalog

Type

What you're measuring

Customers

Employees

Markets

Students

Website and app visitors

Department

Customer experience

Education

Human resources

Create a project

From scratch



Survey

Guided projects

Start building using a pre-built solution with step-by-step guidance



Concept Testing (Basic)

Assess the strengths and weaknesses of potential new products or services

Once you begin, you will have the option to either start from scratch or import the pre-built survey options.



Pricing Study (Van Westendorp)

Identify optimal product pricing with 4 simple questions



Product Naming

Find the best name for your product



Step 4. You can:

- Name your survey right away or do it later.
- Place it in a folder (especially, if you have several survey projects)
- Start a blank survey or export the pre-built survey questions. A blank survey option is the most common.

Create a new project

Survey

Name

My Sample Survey

Folder



All Projects & Programs

How do you want to start your survey?

Create a blank survey project

Create project

Cancel

Finally, begin the project by clicking here.



Basic Anatomy of Qualtrics

The image shows the Qualtrics survey builder interface. On the left, a vertical sidebar contains icons for Survey, Workflows, Distributions, Data & Analysis, Results, and Reports. The 'Survey' icon is highlighted with a red circle and an arrow pointing to a callout box. The main workspace shows a question editor for a 'Multiple choice' question with fields for Question text, Choices (Choice 1, Choice 2, Choice 3), and Answer type (Allow one answer selected). Below the editor is a 'Default Question Block' section. At the bottom, there's an 'End of Survey' message and a thank you note. The top navigation bar includes 'Tools', 'Saved at 6:07 PM', 'Draft', 'Preview', 'Publish', and user notifications.

All major survey design options (question type, the # of answer choices, etc.) will be located here, in the “Survey” tab and all of the vertical tabs.

Once the survey is ready, you will distribute it and analyze the subsequent results in these section (all horizontal tabs)

Blocks and Questions

dit question

question type

Multiple choice

Answer type

Allow one answer

Allow multiple answers

Choices

umber of choices

- 3 +

dit multiple

se suggested choices

Tools Saved at 6:33 PM Draft

Commuting Habits of Northeastern Students

Block Title

Question

Text of the question

Click to write Choice 1

Click to write Choice 2

Click to write Choice 3

Import from library

Add Block

You will see spaces for a survey title, block title, questions and answer choices.

Survey and block titles are visible to you only!



Different Types of Questions

Multiple choice: questions that only have specific answers and the user can only click one. For example, “What is your favorite physical exercise?”

Likert-scale: a type of response scale in which respondents can specify their level of agreement, importance or satisfaction typically in 5 points, (1) strongly agree to (5) strongly disagree.

Checkboxes: questions that only have specific answers and the user can click multiple. For example, “select all the physical exercises you did last week”.

Linear Scale: questions that invite users to choose from a lower to higher number that match their experience. Typically, on a scale from 1 to 10; allows a more granular measure of affect and participants are able to express their degrees of response.

Paragraph/Short Answer: open-ended questions that usually invite longer prose. For example, “Describe your favorite gym exercise and how it makes you feel”.



Answer Choices in Qualtrics

- You can find the common question types we just discussed and many many more in Survey Builder. Here is the example of a Likert scale question.

In “Survey” tab, click “Builder”. Then select the question type.

The screenshot shows the Qualtrics interface with the "Survey" tab selected. In the left sidebar, the "Builder" option is highlighted. A red box and arrows point to the "Builder" button and the "Question type" dropdown menu. The "Multiple choice" option is selected. A modal window titled "Matrix table" is open, showing a 3x4 grid of answer choices represented by blue and white squares. Below the grid, the text "Matrix table" and its description are visible. At the bottom right of the modal, there is a "Add Block" button.



Answer Choices in Qualtrics. Likert Scale

Choices

Number of choices

- 5 +

Edit multiple

Use suggested choices



Dissatisfied - Satisfied



Reverse order

Choice display

Show all

Show first and last

Format

List



Alignment

Horizontal



How satisfied are you with your transportation options for reaching the University?

Extremely satisfied Somewhat satisfied Neither satisfied nor dissatisfied Somewhat dissatisfied Extremely dissatisfied

Import from library

+ Add

You can select the number of answer choices, the alignment of these choices and other features of the question. Note that many options are pre-programmed already which will save you a lot of time! Explore "Use suggested choices"



Ineffective or Misleading Questions

- “On a scale from 1 to 10 please rate the discounted semester pass program.”
 - Scientific or technical jargon. Your respondents may or may not be aware of the program or, perhaps, it’s the first time they heard this title.
- “Do you think that many programs like the expansion of bike lanes on campus would be environmentally friendly and affordable?”
 - Vaguely worded and double-barreled.



Ineffective or Misleading Questions Cont'd

- “Do you think the university administration should for once finally do something about improving our campus commuting experience?”
 - Try to avoid biased judgmental language and anything that your respondents might find off-putting!
- How long does it take you to commute to campus on a typical day?
 - Less than 10 minutes
 - 11-20 minutes
 - 15-35 minutes
 - 25-40 minutes
 - 41-50 minutes
 - 51-60 minutes
 - More than one hour

Overlapping Answers are a Common
Mistake



Absolute Questions and Double Negatives

- Do you always take the MBTA when you commute to campus?
 - “Always” is confusing. The feedback from this question will not be very useful.
- Does not the MBTA provide adequate resources for commuters?
 - Double-negatives are incredibly confusing for survey takers
- Mismatched answer choices, random questions that do not fit thematically and many other problems that can be fixed by reading the questions out loud or to peers!





Multiple choice

Tools

Saved at 5:25 PM

Draft

Answer type

 Allow one answer Allow multiple answers

Choices

Number of choices

- 5 +

Edit multiple

Use suggested choices



Dissatisfied - Satisfied



Disagree - Agree



Dissatisfied - Satisfied



Inappropriate - Appropriate



Male - Female - Non-binary

True - False

Yes - No

- 11-20 minutes
- 21-30 minutes
- 31-40 minutes
- 41-50 minutes
- 51-60 minutes
- More than one hour

 transit_optns_satis

How satisfied are you with your transportation options for reaching

- Extremely dissatisfied
- Somewhat dissatisfied
- Neither satisfied nor dissatisfied
- Somewhat satisfied
- Extremely satisfied

Note how by selecting “Use suggested choices” you can automatically populate your answer choices

Programming in Qualtrics

By labelling your questions (shorter titles preferred), you will save a lot of time in the analysis stage. Instead of question 1, question 2, etc. you will have meaningful labels that you can then add to your codebook.

Add Block

ask questions at any point during the presentation!



If-Then: Go to Section Based on Answer

If you want to ask your respondents' consent to participate, conduct follow up interviews, or if you only want participants who put specific answers to see specific content, there are two options available for that.

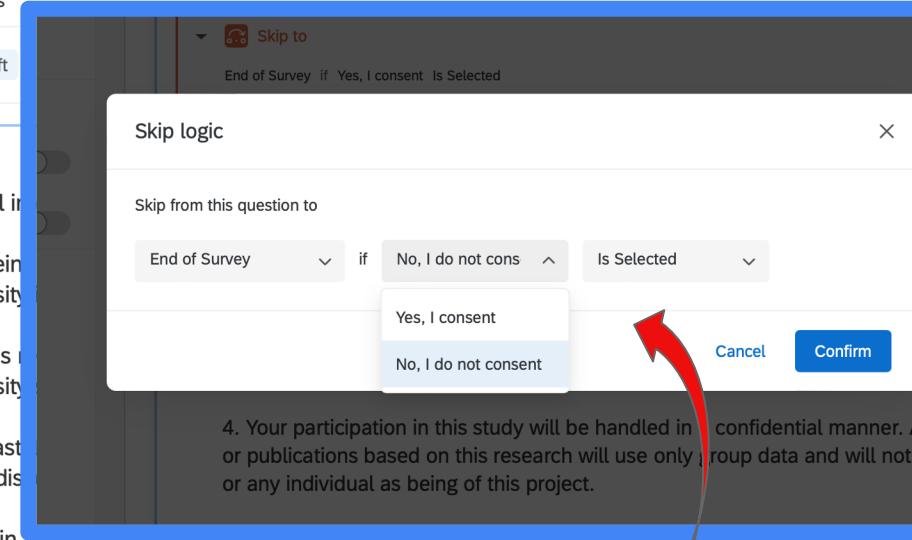
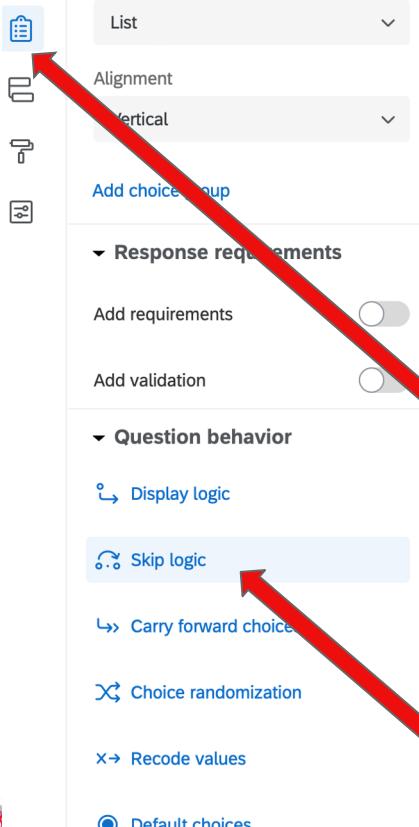
- Skip logic
- Display logic

Let's explore them in Qualtrics.



Skip Logic

Survey Workflows Distributions Data & Analysis Results Reports



Click on your question first. Then scroll down to "Question behavior" in "Survey builder". Click on "Skip logic" and program how you want the survey to behave. Here, we tell Qualtrics to send the respondent to the end of the survey if the respondent does not consent to taking it.

See to ask questions at any point during the presentation!



n

Tools ▾ Saved at 5:51 PM Draft

Preview Publish

+

choice

pe

answer

iple answers

ices

+

consent_form

Skip to

End of Survey if No, I do not consent Is Selected

Here is some general information on the study:

1. This research is being conducted by independent academic researchers at Massachusetts.

o learn more about the commuting habits of

You will now have this label that tells you that “Skip logic” has been programmed into the question.

3. You must be at least 18 years old to be in this research pro

Edit conditions

Advanced options...

Remove

...

You can always change the conditions by clicking the three dots on the right.

A screenshot of a survey editor interface. At the top, there are tabs for 'Tools', 'Saved at 5:51 PM', and 'Draft'. On the left, there's a sidebar with sections like 'choice', 'pe', 'answer', 'iple answers', 'ices', and a plus sign. The main area shows a question labeled 'consent_form' with a 'Skip to' condition set to 'End of Survey' if 'No, I do not consent' is selected. Below this, there's a text block about study information and a numbered list starting with '1. This research is being conducted by independent academic researchers at Massachusetts.' A red box highlights the text 'You will now have this label that tells you that “Skip logic” has been programmed into the question.' To the right, a context menu is open with options 'Edit conditions', 'Advanced options...', and 'Remove', with a red circle around the '...' button. Another red box highlights the text 'You can always change the conditions by clicking the three dots on the right.' A large red arrow points from the 'Edit conditions' option in the menu to the '...' button.



Display Logic

The screenshot shows the Survey Builder interface with the following elements:

- Add choice group** button.
- Response requirements** section with "Add requirements" and "Add validation" toggle switches.
- Question behavior** section:
 - Display logic** (highlighted with a red arrow pointing from the text box below).
 - Skip logic**
 - Carry forward choices**
 - Choice randomization**
 - Recode values**
 - Default choices**
- Light Rail/Streetcar**, **Commuter Rail**, **Ferry**, **Bike**, and **Car** options in a list, with **Car** circled in red.
- parking_time** question with the following content:
 - parking_time
 - You selected "Car". How long, on average, does it take you to find a parking space?
 - 0-2 minutes
 - 3-5 minutes

Click on the question that you want to display only to a specific group of respondents (in our case those who indicated that they commute by car). Then go to Survey Builder and scroll down (the way we did with Skip Logic)



Display Logic

What type of transportation do you primarily use each day to commute to and from campus? (select the mode used for the longest distance of your commute, only choose one option).

- Walk
- Bus
- Subway
- Light Rail/Streetcar
- Commuter Rail
- Ferry
- Bike
- Car

2. Once the logic is specified, the question will have a little icon that tells you the display logic

parking_time

 Display this question

If What type of transportation do you primarily use each day to commute to and from campus? (select... Car Is Selected

You selected "Car". How long, on average, does it take you to find a parking space?

- 0-2 minutes
- 3-5 minutes
- 3-5 minutes

Display Logic (You selected "Car". How long, on average, does it take you to fi

Display this Question only if the following condition is met:

Question ▾

transport_type Wh...ampus? (select... ▾

Car ▾

Is Selected ▾

Select Question...



consent_form He...by independent...

on_off_campus Do ...us or off-campus?

✓ transport_type Wh...ampus? (select...

parking_time You ... a parking space?

1. Specify the logic of the display. Here you are telling Qualtrics that this question should be displayed only to those who answered "Car" to transport_type question. Note: that you can select ANY question from the list.

Feel free to ask questions at any point during the presentation!

Display Logic

Display Logic (You selected "Car". How long, on average, does it take you to fi

Display this Question only if the following condition is met:

Question ▾ transport_type Wh...ampus? (select... ▾ Car ▾ Is Selected ▾)

Select Question...

In Page



consent_form He...by independent...

on_off_campus Do ...us or off-campus?

transport_type Wh...ampus? (select...

parking_time You ... a parking space?

commute_time How ...n a typical day?

transit_optns_sat... the U

0-2 minu

1. Specify the logic of the display. Here you are telling Qualtrics that this question should be displayed only to those who answered "Car" to transport_type question. Note: that you can select ANY question from the list.

What type of transportation do you primarily use each day to commute to and from campus? (select the mode used for the longest distance of your commute, only choose one option).

- Walk
- Bus
- Subway
- Light Rail/Streetcar
- Commuter Rail
- Ferry
- Bike
- Car

parking_time

Display this question

If What type of transportation do you primarily use each day to commute to and from campus? (select... Car Is Selected

You selected "Car". How long, on average, does it take you to find a parking space?

- 0-2 minutes
- 3-5 minutes
- 3-5 minutes

2. Once the logic is specified, the question will have a little icon that tells you the display logic

Feel free to ask questions at any point during the presentation!



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Survey Options

- You are ready to run a survey!
- If you want to include advanced features, such as preventing multiple submissions ('ballot staffing'), you can find them in Survey Options. Note: the default options that are already pre-programmed in Qualtrics are sufficient for most surveys.

XM Commuting Habits of Northeastern Students

Survey Workflows Distributions Data & Analysis Results Reports

Builder Options Saved at 6:02 PM Draft

Survey flow

LOOK and FEEL

Survey options

General Language, title, survey description

Responses Survey expiration, incomplete responses, back button and more

Security Passwords, file uploads, bot detection and more

Post-Survey Thank you emails, completed survey messages, and triggers

Advanced

Scoring Attach point values to specific answers

Quotas Set conditions you want responses to meet

Translations Translate this survey into other languages

Survey language Select the language you're writing your survey in. This will be used for automa Qualtrics.

Survey language English (US)

Display name Enter a survey name to show in search results, social media posts, and on bro

Display name Qualtrics Survey | Qualtrics Experience Management

Survey description Enter a survey description to show in search results and on social media posts

Survey description The most powerful, simple and trusted way to gather experience data. Start your journey to experience management and try a free account today.



Recode Your Answers

The screenshot shows the Survey Builder interface with a red callout box highlighting the 'Survey' tab and the 'Recode values' option in the sidebar.

Survey Builder Sidebar:

- Survey (highlighted with a red circle)
- Workflows
- Distribu...
- List
- Alignment
- Vertical
- Add choice group
- Response requirements (dropdown menu open)
 - Add requirements
 - Add validation
- Question behavior (dropdown menu open)
 - Display logic
 - Skip logic
 - Carry forward choices
- Choice randomization
- X → Recode values (highlighted with a red circle)

Recode Values Dialog Box:

Recode Values

Recode Values Variable Naming

1	Less than 10 minutes
2	11-20 minutes
3	21-30 minutes
4	31-40 minutes
5	41-50 minutes
6	51-60 minutes
7	More than one hour

Survey Question Preview:

How satisfied are you with your transportation options for reaching the University?

Extremely dissatisfied

Bottom Right Text:

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Collaborating in Qualtrics

XM Untitled project

Survey Workflows Distributions Data & Analysis Results Reports

Tools ^ Saved Jan 19, 2023 at 6:07 PM

Step 1. Click on the “Tools” icon. Then select Collaborate.

Auto-number questions
Reset recode values
Manage reusable choices
Generate test responses
Review
Collaborate
Versions
Import/Export

Import from library Add new question

Multiple choice

Allow one answer Allow multiple answers

Number of choices 3

Edit multiple Use suggested choices

Add Block

The screenshot shows the Qualtrics interface with a red callout bubble highlighting the 'Tools' menu. A red arrow points from the text 'Step 1. Click on the “Tools” icon. Then select Collaborate.' to the 'Tools' button. Another red arrow points from the text 'the question text' to the 'Collaborate' option in the dropdown menu. The 'Collaborate' option is highlighted with a blue border.



Collaborating in Qualtrics

The screenshot shows a 'Collaborate on Project' dialog box. At the top, there's a search bar labeled 'Type Username or Email...' and a 'User and Group Address Book' button. Below that is a table with one row, showing a user with a blacked-out name. To the right of the user's name are five checkboxes, all of which are checked, followed by a minus sign. At the bottom right of the dialog are 'Cancel' and 'Save' buttons.

Collaborate on Project: [REDACTED]

Type Username or Email... Add User and Group Address Book

User	Edit	View Reports	Activate/Deactivate	Copy	Distribute
[REDACTED]	<input checked="" type="checkbox"/> Details	<input checked="" type="checkbox"/> Details	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

If you want them to have full access to the survey design (editing, copying, etc), make sure you check these boxes.

Cancel Save

Step 2. Type the names of your project collaborators and click "Add".

Please feel free to ask questions at any point during the presentation!

Survey Distribution

- Once the survey is ready, there are multiple ways in which you can distribute it, including web-links and QR codes.



Go to Distributions and select the method you prefer.

How do you want to distribute your survey?



Send with Qualtrics

Compose Email

Use your own email system

Get a single reusable link

Generate a trackable link for each contact

During the presentation!



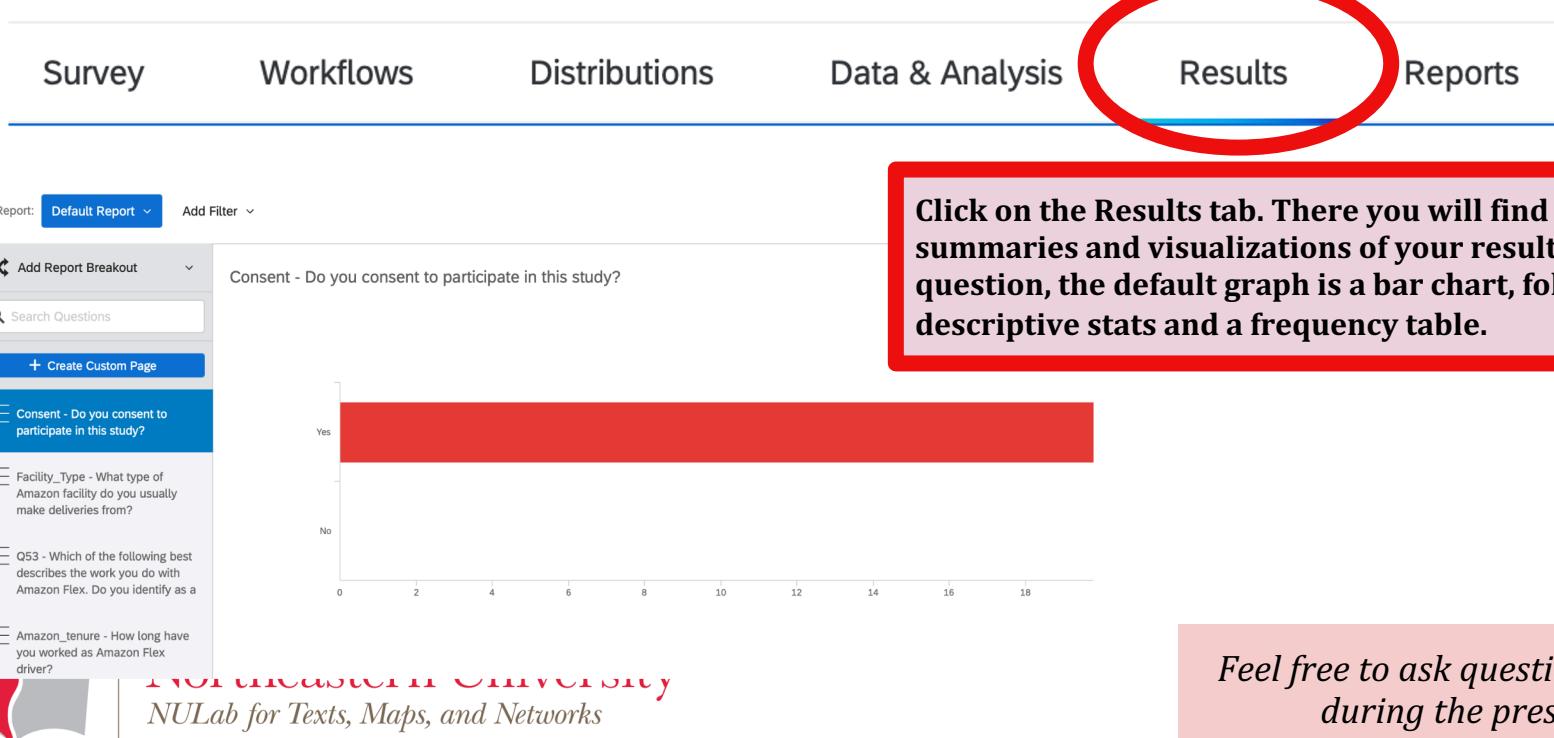
Nor

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point

Analyzing the Results

- The Results tab shows you the basic statistics for each question in your survey.



Survey Workflows Distributions Data & Analysis **Results** Reports

Report: Default Report Add Filter

Add Report Breakout

Search Questions

+ Create Custom Page

Consent - Do you consent to participate in this study?

Facility_Type - What type of Amazon facility do you usually make deliveries from?

Q53 - Which of the following best describes the work you do with Amazon Flex. Do you identify as a

Amazon_tenure - How long have you worked as Amazon Flex driver?

Yes

No

0 2 4 6 8 10 12 14 16 18

Click on the Results tab. There you will find quick summaries and visualizations of your results. For each question, the default graph is a bar chart, followed by descriptive stats and a frequency table.

Feel free to ask questions at any point during the presentation!

Analyzing the Results

Field

1	Less than 10
4	11 to 20 hours
5	21 to 30 hours
6	31 to 40 hours
7	41 to 50 hours
8	50 hours or more

Showing rows 1 - 7 of 7

+ Add Note + Add Visualization

Additional visualization options will appear on the left side. You can change the chart type, color codes, and many other features.

Pie Chart

Inner Radius: 19

Show As Percentages:

Color Palette:

- Less than 10 (Red)
- 11 to 20 hours (Purple)
- 21 to 30 hours (Blue)

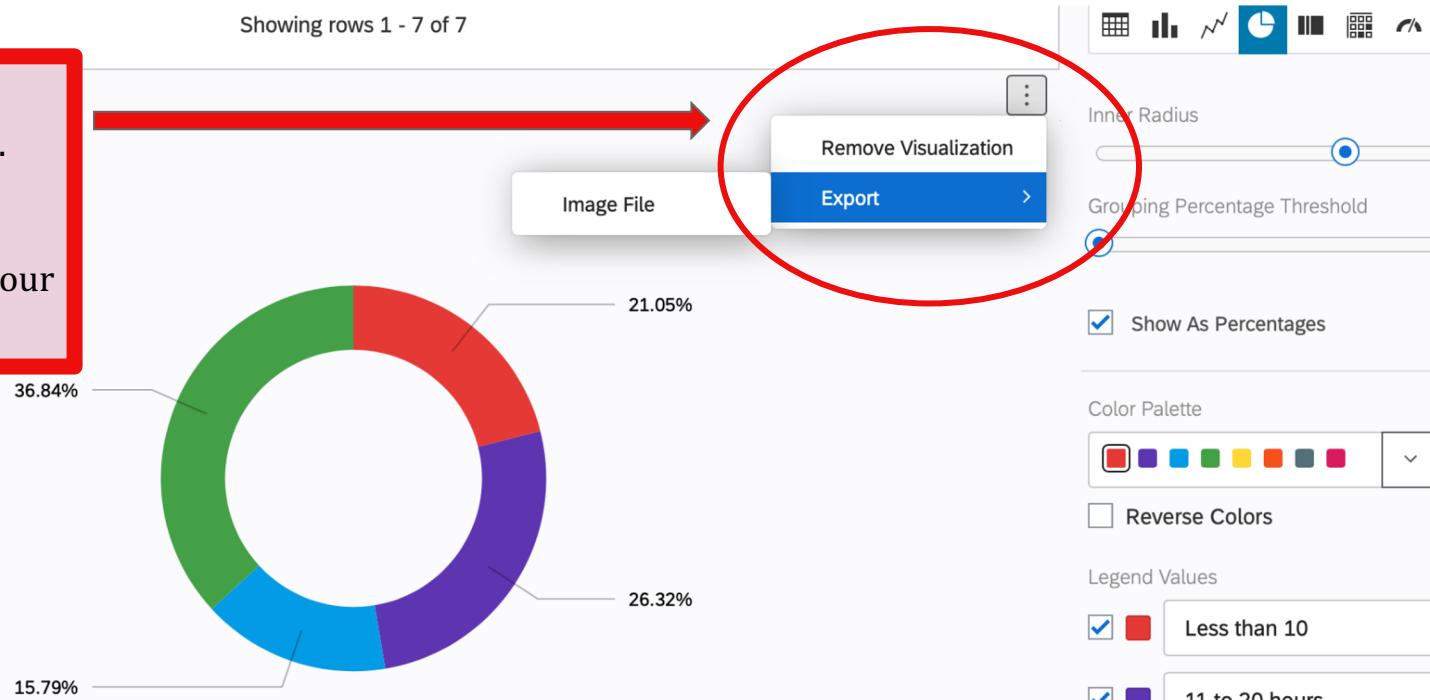
Reverse Colors:

Legend Values:

- Less than 10:
- 11 to 20 hours:
- 21 to 30 hours:

Analyzing and Exporting the Results

You can export your chart as an image file. Click on the three vertical dots in the upper left corner of your graph



Export Your Results

Workflows

Distributions

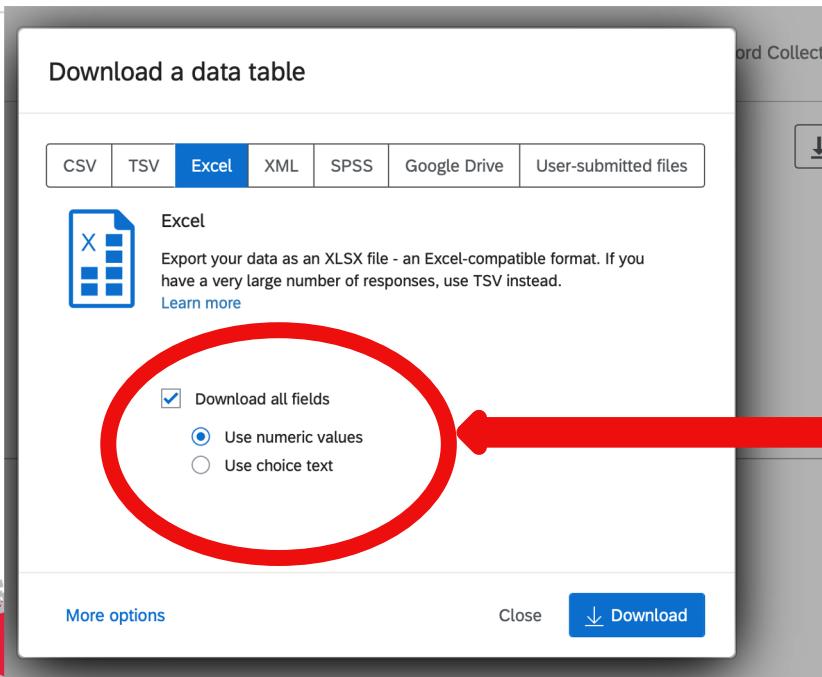
Data & Analysis

Results

Reports

Crosstabs Weighting

▼



Last Record Collected: Never Inactive

Export & Import ▾



In “Data & Analysis”, click “Export & Import”. In the window that will pop up, choose the file type you want to work with. If you recoded the answers to numbers and want to download the survey with only numeric values, mark the appropriate field .

Please free to ask questions at any point during the presentation!

Activity: Create Surveys

Break into your assigned groups and start creating your surveys! Think about what your groups' overall goal is, what types of experiences you're interested in measuring and tracing, and how your questions can get at those experiences.

1. One person create the Qualtrics survey and share it with everyone. Then, you can all collaborate on that form
2. Include at **least** 10 questions of all different types
3. Include another section to retrieve information for potential interviews

For access to these slides, visit <https://bit.ly/diti-sp22-lerner-survey>



Thank you!

If you have any questions, contact us at:

nulab.info@gmail.com

Slides, handouts, and data available at <https://bit.ly/diti-sp22-lerner-survey>

DTI Office Hours: <https://calendly.com/diti-nu/>

