

Creating and Analyzing Qualtrics Surveys

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ENGW 1410: Intro to Writing Studies Research
Dr. Neal Lerner
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Workshop Agenda

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

Slides, handouts, and sample survey available at:

<https://bit.ly/sp24-lerner-engw1410-surveydesign>



Sample: Campus Commute

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

<https://bit.ly/ENGW1410-Survey>



What did you notice?



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during the presentation!*

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.

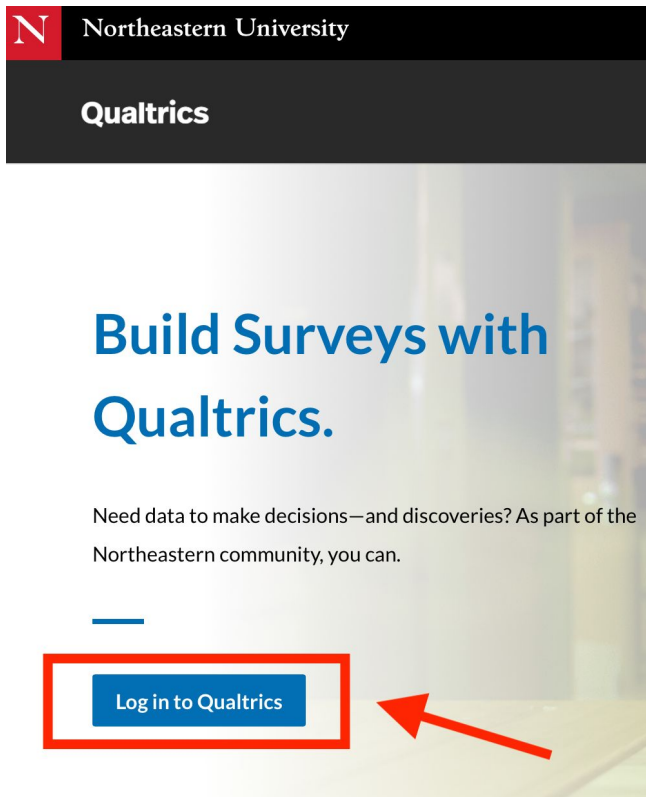


- You can login with your Northeastern credentials:
qualtrics.northeastern.edu



Once in Qualtrics

Step 1. Log in
with your
Northeastern
credentials .



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Step 2. Begin the project

The screenshot shows the XM dashboard. At the top left is the XM logo and a 'Home' link. Below the logo is a 'Welcome to XM' message with a user profile icon (Y) and a settings gear. A search bar is labeled 'Search by name, type, owner...'. On the left sidebar, under 'Recently visited', there is a list of surveys: 'Communing Habits of Northe...', 'Flex pilot survey for FACEB...', 'My Sample Survey', and 'Facebook Warehouse Biling...'. At the bottom of this list is a blue button labeled 'Create a new project'. On the right, the 'Active surveys' section shows three cards: 'Warehouse pilot survey' (104 total responses), 'Introduction & Team Formation Form - Fa...' (43 total responses), and 'Facebook Warehouse E' (1.4K total responses). Below this is a 'Your workflows summary' section with a button 'Create a workflow'. Red arrows point from text boxes to the 'Create a new project' button and the 'Active surveys' section.

XM Home

Welcome to XM

Search by name, type, owner...

Recently visited [See all projects](#)

Survey
Communing Habits of Northe... New

Survey
Flex pilot survey for FACEB...
23 Responses Active

Survey
My Sample Survey New

Survey
Facebook Warehouse Biling...
1354 Responses Active

Create a new project

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
0 new re:
1.4K total 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.

Start by clicking "Create a new project"



Step 3. Open a blank project



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



Pricing Study (Van Westendorp)

Identify optimal product pricing with 4 simple questions



Product Naming

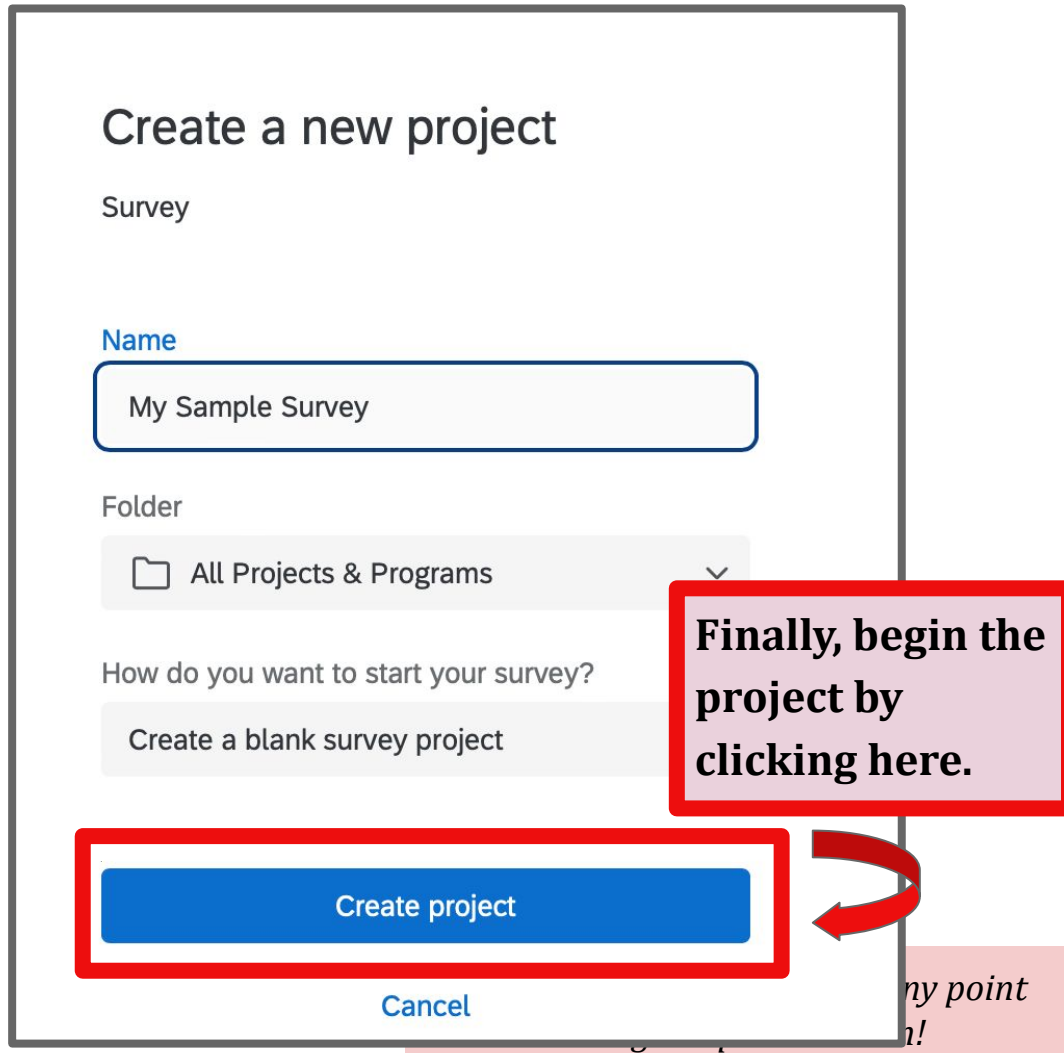
Find the best name product

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



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.



The screenshot shows a 'Create a new project' dialog box. It has a title bar 'Create a new project' and a subtitle 'Survey'. Below the subtitle, there are three sections: 'Name' with a text input field containing 'My Sample Survey'; 'Folder' with a dropdown menu showing 'All Projects & Programs'; and 'How do you want to start your survey?' with a button labeled 'Create a blank survey project'. At the bottom, there is a large blue button labeled 'Create project' and a smaller blue button labeled 'Cancel'. A red box highlights the 'Create project' button, and a red arrow points from a text box to it. The text box contains the text 'Finally, begin the project by clicking here.'

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 screenshot displays the Qualtrics web application interface. At the top, there is a navigation bar with the Qualtrics logo (XM) and a menu icon. Below this, a horizontal tab bar contains several tabs: 'Survey', 'Workflows', 'Distributions', 'Data & Analysis', 'Results', and 'Reports'. The 'Survey' tab is currently selected and highlighted with a red underline. A red oval encircles the 'Survey' tab and the vertical tabs on the left side of the interface. A red arrow points from the 'Reports' tab to a text box on the right. Another red arrow points from the 'Survey' tab to a text box at the bottom left. The main content area shows the 'Edit question' screen for an 'Untitled project'. It includes a 'Question type' dropdown set to 'Multiple choice', an 'Answer type' section with radio buttons for 'Allow one answer' (selected) and 'Allow multiple answers', and a 'Choices' section with a 'Number of choices' input set to 3. Below these are buttons for 'Import from library' and 'Add new question'. At the bottom, there is a section for 'End of Survey' with a message: 'We thank you for your time spent taking this survey. Your response has been recorded.'

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

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.

Blocks and Questions

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

edit question

question type

Multiple choice

Answer type

Allow one answer

Allow multiple answers

Choices

Number of choices

3

edit multiple

Use suggested choices

Tools

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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

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”.



What do you think?

- “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 that are currently reviewed by the university administration, like the expansion of bike lanes on campus, would be environmentally friendly and affordable?”
 - Vaguely worded and double-barreled.



What do you think?

- “Do you think the inept 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



What do you think?

- Do you always take the MBTA when you commute to campus?
Choices: Sometimes, Rarely, Never
- “Always” is confusing. The feedback from this question will not be very useful.
- Does not the MBTA provide adequate resources for commuters? Choices: Yes/No
- 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!



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 Survey Builder interface. The 'Survey' tab is active, and the 'Builder' sub-tab is selected. The 'Question type' dropdown menu is open, showing various question types. The 'Matrix table' option is highlighted. A red arrow points from the 'Builder' sub-tab to the 'Question type' dropdown. Another red arrow points from the 'Matrix table' option to a preview window on the right. The preview window shows a matrix table question with three rows and four columns. The first column contains blue bars, and the other three columns contain radio buttons. The text 'Matrix table' is displayed below the preview, along with a description: 'Matrix table questions combine multiple questions with the same answer choices into a single table.'

XM Untitled project

Survey Workflows Distributions Data & Analysis Results Reports

Builder Survey flow Look and feel Survey options

Edit question

Question type

Multiple choice

Multiple choice

Text entry

Text / Graphic

Matrix table

Slider

Form field

Rank order

Side by side

NPS Net promoter score

End of Survey

Untitled project

Tools Saved Jan 19, 2022 at 6:07 PM Draft

Matrix table

Matrix table questions combine multiple questions with the same answer choices into a single table.

Add Block



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

Q5.

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

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

End of Survey

[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”





Multiple choice



▼ 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

Tools

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- ☐ 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 reach

- ☐ 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.

ask questions at any point during the presentation!

Collaborating in Qualtrics

The screenshot shows the Qualtrics web interface. At the top, there's a navigation bar with the XM logo, a hamburger menu, and 'Untitled project'. Below this are tabs for Survey, Workflows, Distributions, Data & Analysis, Results, and Reports. On the left, the 'Edit question' sidebar is visible, showing 'Question type' as 'Multiple choice' and 'Answer type' as 'Allow one answer'. The main area shows a question block with a text input field and three choice options. A red box highlights the 'Tools' icon in the top left of the question block, with a red arrow pointing to the 'Collaborate' option in the dropdown menu. A text box with a red border and arrow points to the 'Collaborate' option, stating: 'Step 1. Click on the “Tools” icon. Then select Collaborate.'

XM Untitled project ? Y

Survey Workflows Distributions Data & Analysis Results Reports

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

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

the question text

Choice 1 Choice 2 Choice 3

Import from library Add new question

Add Block



Collaborating in Qualtrics

The screenshot shows the 'Collaborate on Project' interface in Qualtrics. At the top, there are tabs for 'Distributions', 'Data & Analysis', 'Results', and 'Reports'. Below these, the title 'Collaborate on Project:' is followed by a redacted black box. A search bar with the placeholder 'Type Username or Email...' is on the left. To its right is an 'Add' button with a person icon, and a link 'User and Group Address Book'. A red arrow points from the 'Add' button to the left. Below this is a table with columns: 'User', 'Edit', 'View Reports', 'Activate/Deactivate', 'Copy', and 'Distribute'. The first row has a redacted 'User' name, and the other columns have checkboxes, all of which are checked. A red arrow points from the 'Details' checkbox of the first row to the right. At the bottom right, there are 'Cancel' and 'Save' buttons. A red box with text is overlaid on the table area.

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"/> |

Cancel Save

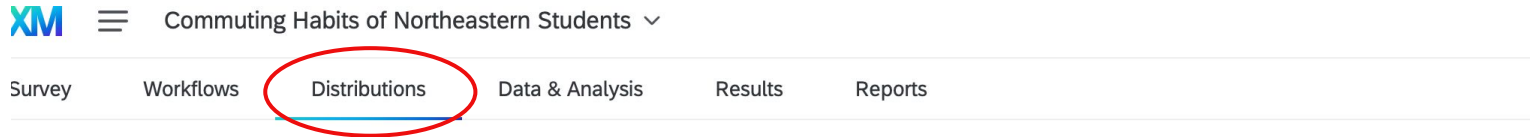
Step 2. Type the names of your project collaborators and click "Add".

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

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?



Email



Web



Social



Mobile



Online panel

Send with Qualtrics

 Compose Email

Use your own email system

 Get a single reusable link

 Generate a trackable link for each contact

Nor

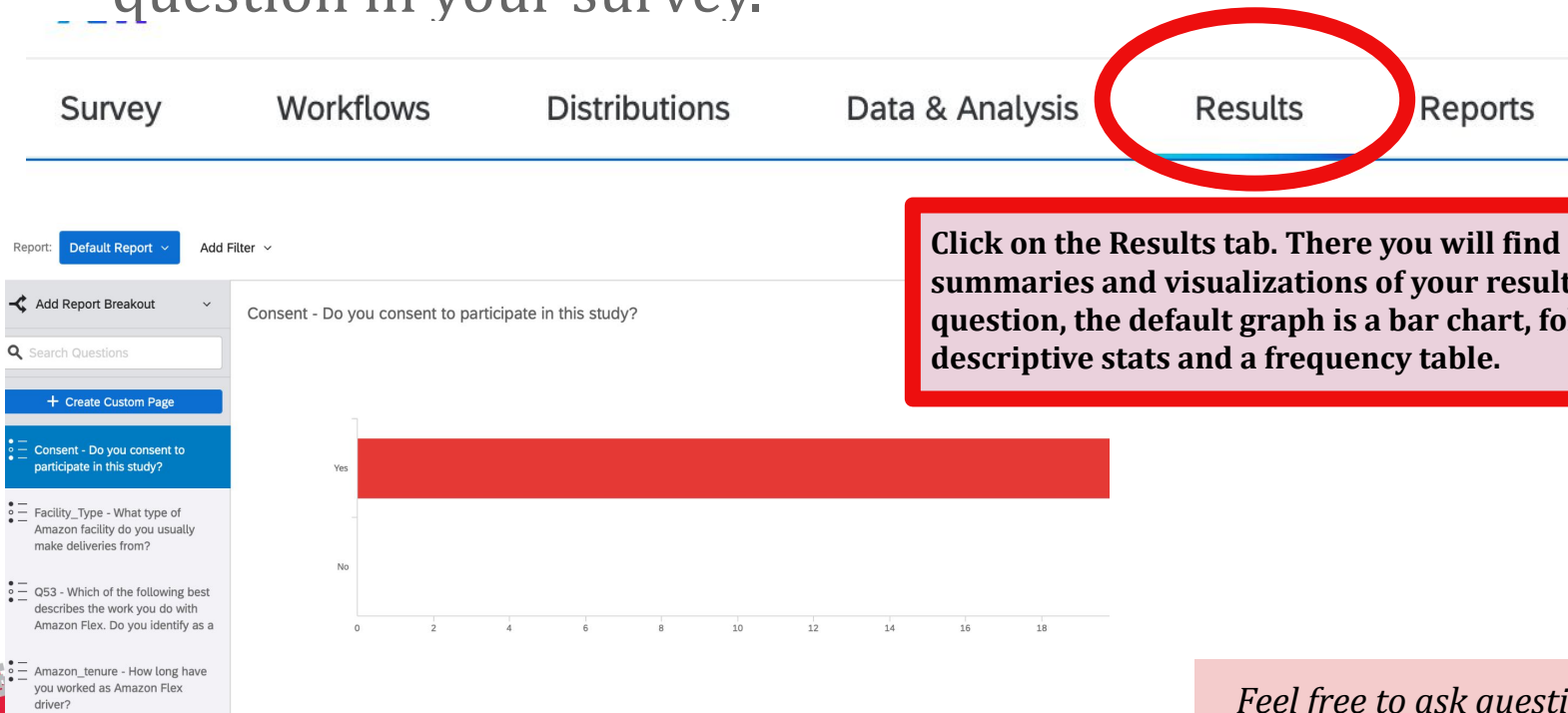
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during the presentation!

print

Analyzing the Results

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



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.

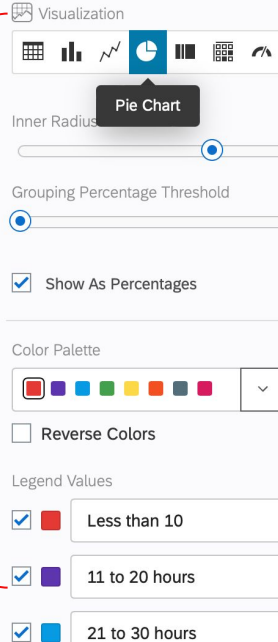
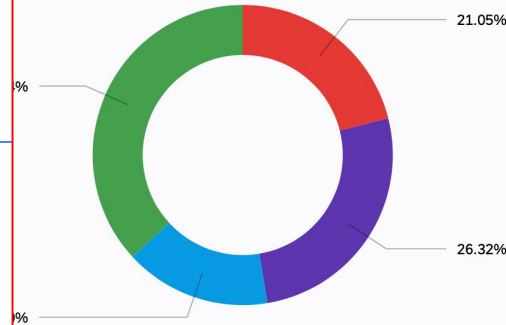
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Analyzing the Results

Click “Add Visualization”

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

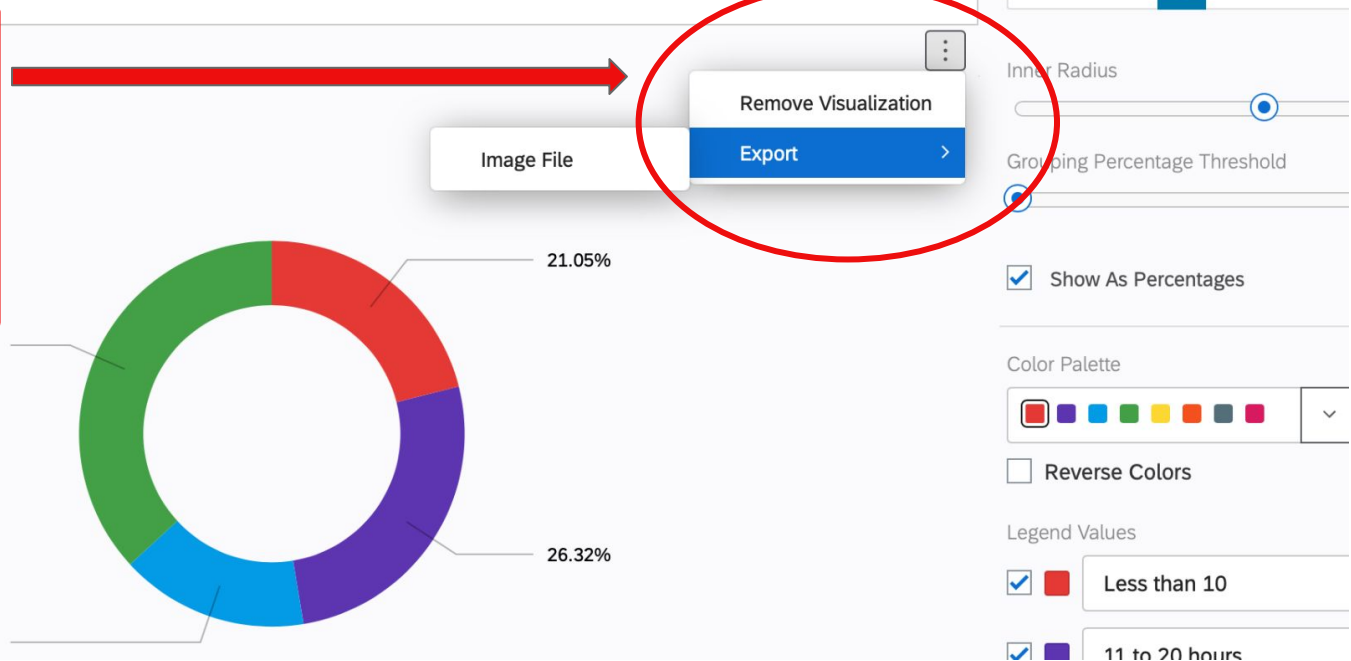
+ Add Note + Add Visualization



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

Showing rows 1 - 7 of 7



Export Your Results

Workflows

Distributions

Data & Analysis

Results

Reports

Crosstabs Weighting

Last Record Collected: Never Inactive

Download a data table

CSV TSV Excel XML SPSS Google Drive User-submitted files



Excel

Export your data as an XLSX file - an Excel-compatible format. If you have a very large number of responses, use TSV instead.

[Learn more](#)

- ☒ Download all fields
- ☒ Use numeric values
- ☐ Use choice text

[More options](#)

Close

Download

Export & Import

Export Data...

Import Data...

Response Export Automation...

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 .

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Your Turn!



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Activity: Create Surveys

Start creating your surveys! Work individually, in pairs, or in a group. Think about what your overall goal is, what types of experiences you're interested in measuring and tracing, and how your questions can get at those experiences.

1. (if working in a pair or group): **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



Discussion Questions

- What did you find difficult about designing a survey?
- What did you find worked well?
- What do you think is important to keep in mind when you're designing a survey?



Thank you!

—**Developed by** Yana Mommadova, Vaishali Kushwaha, Emily Sullivan, & Hunter Moskowitz

If you have any questions, contact us at nulab.info@gmail.com

Have questions? Schedule an appointment with us! <https://calendly.com/diti-nu>

Link to online materials: <https://bit.ly/sp24-lerner-engw1410-surveydesign>



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