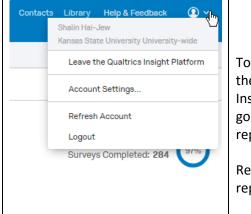
DOWNLOADING AND ANALYZING DATA FROM THE QUALTRICS INSIGHT (RESEARCH) PLATFORM

K-State Survey Powered by Qualtrics: http://survey.k-state.edu

Qualtrics is being transitioned to the Qualtrics Insight Platform, which has some new enablements:

- More sophisticated auto-generated data visualizations
- Some automated text analysis (topic modeling) features
- A UI more aligned with mobile devices and touch screens, and other features

It looks like older features that people may want are still reachable from the new UI but may be a little convoluted. (See below re: "Survey Statistics," for example.)



The Old UI or the New UI (User Interface)?

Toggling between the two user interfaces or "UIs" (available from the user account logo at the top right of the interface in the dropdown menu) is NOT ADVISABLE because reports created in the new UI (Qualtrics Insight Platform) are lost when a user goes back to the older version and will have to be re-created when going back to the new platform. This is not a problem if the user has the old parameters of data queries and reports...but if not, then he or she will have to recreate from memory.

Remember that Qualtrics is a cloud-based tool, so all the data collection, data processing, data visualizations, reports creations, and other work are happening on remote servers.

A Data Management Plan

If grant-funded research and academic research involve human subjects, these generally require the oversight of the Institutional Review Board (IRB) of the University Research Compliance Office (URCO) (<u>https://www.k-state.edu/comply/</u> and <u>comply@ksu.edu</u> and 2-3224). There are a number of standards that must be adhered to to enable the approval of research. While survey research is often exempted from their oversight, it is important to go through the review to ensure that all participants are protected correctly, that the researcher follows all relevant laws and policies, and that the university is compliant and in legal standing. Having IRB oversight means that a researcher gets the benefit of experts from various backgrounds who evaluate their research design (plan) and ensure that each step is compliant. (If a research design changes mid-

stream, the IRB will have to be brought back to re-evaluate before changes may be taken.) Besides the informed consent, those who would use a survey tool will also have to have a data management plan that protects the identities of participants and that protect the data against leakage and misuse; the data also have to be maintained for a number of years. To this end, researchers should be aware of how they're handling the data, who has access to it, how to anonymize datasets (and how to protect confidential identities against re-identification).



A Note about Data The data you can generally get out of a Qualtrics survey depends on how you structure and ask the question...who you ask it to...and how you deliver it to the potential respondents. That said, how you pre-process your resulting data and the statistical and analytical methods you apply to the data may result in insights that you would not access otherwise.

AUTO-GENERATED DATA IN QUALTRICS

Survey Statistics: In the older version of the Qualtrics user interface (UI), it was possible to access auto-collected information about the Survey Statistics (Reporting Tab -> Survey Statistics). This date included survey times (in a bar chart histogram), survey duration, survey date ranges, survey completion rates, questions with lower response rates, last questions answered before survey dropout, and others.

K-Staters had this feature before and are not just starting out on the new UI, so they will still currently have this feature.

My Projects > 2014 Info	rmation Technology Satisfa	Survey Statistics	
⊘ Survey Image: Survey of Distributions Image: Data & Analysis Image: Results Image: Printed Reports Image: Analysis Image: Printed Reports		 To get to the same "Survey Statistics" data through the new UI, Go to My Projects (on the Qualtrics Insight Platform). Select a survey. Go to Paports tab in this survey in the top many bar (at the far right) 	
Survey: 2014 Information T Image: Survey Start Times Image: Survey Durations Image: Survey Start Dates Image: Survey Completion Percent Image: Survey Co	Add a Filter Apply The Filter Drop Outs Last answered question counts Respondent Information What is your primary affiliation with K-State? Choose the response that best describes your affiliation within the past 12 months. What is your	 Go to Reports tab in this survey in the top menu bar (at the far right). Click "Printed Reports" (at the secondary top menu bar). Click "Create a New Report." Finalize that report. At the top right, a green and white "Survey Statistics" button will appear. All the former "Survey Statistics" information will be available. However, this data will not be exportable as a .PDF format report. For a video of this process, please go to the following link: <u>http://www.screencast.com/t/veAf9ZhK</u> (per Marc C. at Qualtrics Helpdesk). 	

HUMAN-MACHINE CODED DATA IN QUALTRICS

Text Analysis on Qualtrics: One of the new features of Qualtrics involves auto-generated text analysis (topic modeling). This may only be done for questions for which an open-ended text option is available. (This is not for closed answer questions.)

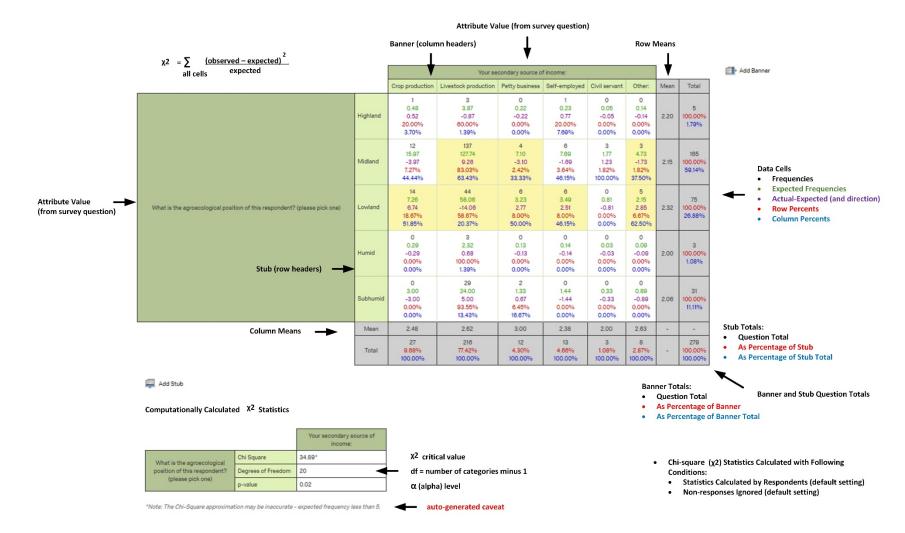
- 1. To access this feature, click into the target survey.
- 2. Go to "Data & Analysis" tab.
- 3. Select "Text." A message will be shown that reads "Analyzing text responses, this could take a few minutes..."
- 4. When the analysis is done, another message will show: "to start creating topics, start a search in the box below or click on the + (plus) next to any response". The text queries may use some
- 5. There is a dropdown next to the question which enables a focus on particular questions at a time. If a question is selected, then there is some processing online before that textual data is available for further exploration.
- 6. A general text search may be done based on a seeding term to start the search. Words may be connected with "and," and exclusions may be set up with "not," and () parentheses may be used to help define order of operations for logic statements that include multiple exemplars, and filters may also be applied. Text counts may be shown in bar charts in descending order (from most-frequent to least-frequent mentions). After search terms of interest are found, click "Create Topic," and it will be added to the count at the top. This is a kind of supervised machine learning which is human-led and machine-supported.
- 7. The plus sign enables annotation to a particular topic for value-added insights by the researcher. Only alphanumeric characters and spaces may be used, and no special characters (#, @, +, etc.) may be used.

My Projects > 2014 Information Technolog	Projects Contacts	Library Help & Feedback	® ~	
🖉 Survey 🛷 Distributions 📮 Data & Analysis 🕼 Report	ts			
📮 Data 🛛 💭 Text 🔛 Cross Tabs	Q Search			
Question: Q15: Web Conferencing and Lecture Cap ~	Q3_4_TEXT: Respondent Information What is your primary affiliation with K-State? Choose the response that best describes your affiliation	•		
Q15: Web Conferencing and Lecture Capture in Classrooms Identify the room or rooms where you would like Information Technology Services to consider installing web conferencing and / or lecture-capturing capabilities	within the past 12 months Other - Text Q11_10_TEXT: Going Mobile Which of the following mobile devices do you use for work or study? Select all that apply Other - Text Q12: What date or applications would you like to			
Add	Q12: What data or applications would you like to be more mobile-friendly at K-State? Q26_10_TEXT: IT Information Sources on Campus What are the main ways that you acquire information about IT on campus? Please check all that apply Other - Text		onse	
View All Responses	Q13_4_TEXT: Computer Platforms What computer platform do you primarily use? Select all that apply Other - Text			
Showing all 51 responses	Q20_7_TEXT: Data Management Where are you currently backing up your data? Select all that apply Other - Text			
	Q18: Is there a particular place on campus or in the residence halls where you would like to see wireless access added or enhanced? (Please be as specific as possible.)	>		
Web Conferencing and Lecture Capture in Classrooms Identify the lecture-capturing capabilities	Q30: Professional Development Opportunities Suggest types of professional development opportunities you would like offered to advance your use of technologies in your role(s) at K-	Services to consider installing web conferencing and / or	Q16 - Topics	
I am not a student or faculty.	State. Q23_10_TEXT: Where do you store university data? Select all that apply Other - Text		Ħ	
n/a	Q33: What other information technology needs do you have based on your campus designation listed above?		Ð	
Some of the rooms in Kedzie Hall	Q34: Identify other classroom technology hardware you would like to see installed and in		=	
Fairchild Hall	which building and room (specifically). Include information about how you would like to use the technologies.		±	
Waters 328	Q35_10_TEXT: What are your preferred ways for receiving campus-based IT information? Please check all that apply Other - Text	-	H	

For more: Please visit the "Searching Text Responses" (Qualtrics)

https://www.qualtrics.com/support/survey-platform/data-and-analysis-module/text/searching-text-responses/

Cross Tabulation Analysis in Qualtrics: Another approach involves the creation of cross tabulation analysis. A downloadable article about this feature is available on SlideShare.



http://www.slideshare.net/ShalinHaiJew/conducting-a-cross-tabulation-analysis-in-the-qualtrics-research-suite

Online Reports (or Dashboard) in Qualtrics: Another feature in Qualtrics enables the creation of online reports (or dashboards) with summary data. These reports are hosted on Qualtrics servers, and the links to them may be hosted behind an eID and password-protected space. Reports update automatically as new data is collected.

To create such reports...

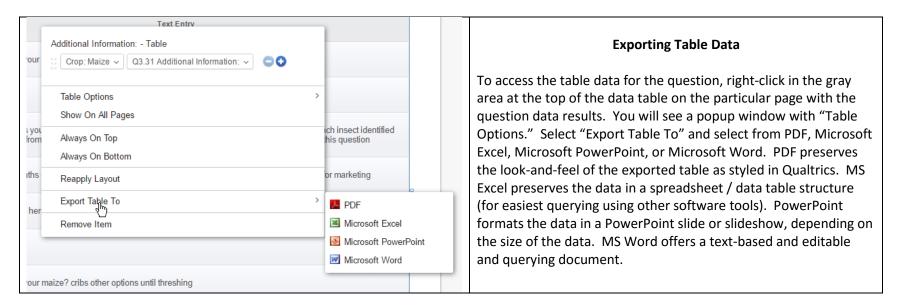
- 1. Click into the target survey.
- 2. Click on the "Reports" tab.
- 3. Custom Pages may be added to the report with different information from the survey (usually by question). The data is reported out usually as bar charts and also as tables with count data. Options for visualizations include data tables, bar charts, line charts, pie charts, "breakdown bars," statistics tables, and gauge charts.
- 4. Data elements may be dragged within a page from one location to the other with the dots at the right of each part of the data page.
- 5. When reports are complete, they may be exported as PDF, Word, PowerPoint, and .csv files.
- 6. Reports may also be offered publicly through a URL on the Web (an access code may be set to protect the data further). (To set Report Options, go to the dropdown by the gear button at the top right.) The online reports are not interactive to reach the underlying data per se, but it is possible to paginate through any multi-page reports.

DATA EXPORT FROM QUALTRICS

Exporting Data from Qualtrics for Analysis in Other Analytic Tools

A mass data export. When a researcher wants to download data, he or she generates a report (Reports -> New Report). Then, he or she may export the report data by clicking on Report Options at the right and selecting from the dropdown to "Export Report" (to PDF, Word, PowerPoint slides, or .csv). Of the forms of data, .csv is most functional in terms of using the exported data for more analysis (whether quantitative or qualitative).

A mass summary export of data may not be sufficiently coherent, though, particularly if complex question structures were used (like matrix questions), file upload questions, and large-scale open-source text captures. For matrix questions, particularly with a high number of respondents, it is more helpful to download the data question by question and then parse out the data for various types of queries.



In terms of multimedia captures, it is harder to code "high dimensional" data like text, imagery, audio, and video files. Those will have to generally be downloaded for analysis.

And then, text questions may need to be analyzed using various types of linguistic analysis tools...for efficient analysis.

Adding custom fields: There is a limited ability to add custom fields to enable comparisons across columnar data...

Downloading Data into the NVivo Qualitative Data Analytics Program: There is a new integration between Qualtrics and NVivo 11 Plus (on Windows).

(Please see the related handout.)

Online Data Archival in Qualtrics; Offline Archival Options: Data related to particular surveys cannot be placed in the online Library (although the survey itself may be stored there). Surveys may be downloaded offline in the proprietary .qsf (Qualtrics Survey Format), and related data may be downloaded as .csv, and both may be reconstituted online in Qualtrics.

- 1. To access this functionality, click into a target survey.
- 2. Click in the "Survey" tab.
- 3. Select the "Tools" dropdown menu.
- 4. Click "Export Survey."
- 5. A .qsf survey will be exported based on the formal front-facing name of the survey.