

## Executive Summary

Qualtrics Panel Services connects Qualtrics users with partner panel providers to collect sample for their surveys. The projects are managed in-house by Qualtrics project managers. At the close of each project the project managers download a csv file with the panel id numbers for all the successful survey completions. The panel id numbers are unique to each panel provider and the column variable used to reference them in the spreadsheet is also different between providers. The downloaded file includes all the research data collected for that particular survey. The project manager needs to send back a file with the successful panel id numbers without compromising the privacy of the data collected. To do this the project manager will usually copy and paste the panel id column into a new worksheet and email that worksheet to the respective panel companies.

Since each panel id variable is different my solution prompts the user to specify the name of the panel id variable in an input box. It then copies all the variables into an array, creates a new workbook, and inserts the values of the array into the first column of sheet 1. A user form will prompt the user to select who the recipient of the email will be and sends an email with a form message to let the panel company know to close the project and attaches the created document of panel id numbers to the message.

## Implementation

1. Identify the panel id variable being used
  - a. String variable called "id" set through an input box that prompts the user to define the panel id
2. Search for the column that includes the panel id variable
  - a. Do until loop that loops until the active cell value is equal to the id variable
  - b. Counter to count how many times it loops to get the column number of the id variable
3. Create an array variable with 10,000 "slots"
  - a. 10,000 slots should be more than enough to accommodate the largest possible panel project
4. Input all the panel ids into the array
  - a. Set the active cell to be row 2 of the id column
  - b. Do until active cell is blank
  - c. Using a counter set at 0, save the value of the active cell into the array in the "counter" position
5. Create a new workbook
  - a. Save the new workbook with the same name as the original with an appendage "\_id name" (i.e. Panel project1\_vid.xlsx)
  - b. Do until array at current counter position is blank
  - c. Set the active cell value equal to the array value of the current array position
  - d. Advance active cell using the offset method offsetting 1 row down, 0 columns across
6. Close new workbook
7. Call user form
  - a. Initiate drop down box to insert email address for established panel providers

- b. Prepopulate a subject as the name of the workbook, or allow the user to enter their own subject
  - c. Get gmail account info
8. Send mail with attachment

## Learning

I learned the value of VBA throughout the process. I found myself making small macros to speed up my efficiency. Being able to close a project by running a macro has saved at least five minutes off of each project. When we average 10-15 projects a week, that's an extra hour of time saved. This is an area in Qualtrics that we're looking to expand and these extra minutes will mean a lot more as we take on more projects. The difficulties I encountered creating this macro were figuring out how to copy and paste a selection from one workbook to another. I also found it hard to switch between workbooks and keeping everything straight in the code. When I would make the selection and then try to create a new workbook to put it into I would get a "Paste Method of worksheet class failed" error. After hours of frustration I came up with the idea to put everything into a really large array. This got rid of the necessity to try and figure out exactly how copy and paste worked in VBA. The other area of difficulty was prepopulating the subject of the email into the user form from the name of the original workbook. The reason I wanted to use the name of the workbook is when we download the data from Qualtrics we would name the file with the subject of the email string that was used to track the project. The email string subject was the name of the project along with a project number. By using the same subject it would look like the new email was a part of the original string, or would at least make it easier to track and reduce the risk of it getting "lost" in an overcrowded inbox. The difficulty was in not knowing how to pass a variable to the userform\_initiate procedure of the user form. I went online and queried pass variable to user form and found a solution that creates a sub procedure in the user form code. Loading the user form and then calling that sub procedure, passing through the variable, and having that subprocedure populate the variables before showing the user form worked great.

This course has given me confidence to attempt to automate every repetitive procedure through VBA.