

When did we become data geeks?

Jessie Blekfeld-Sztraky

Session overview:

→ About me + NC State

- → Challenges of a donor relations professional
- → Five spreadsheet tools
- → Real world applications (Bonus: ChatGPT!)

→ Resources



About me



- → 7+ years in higher education advancement
- → De facto data person on my team
- → No formal data training; learned everything on the job or after hours

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she/her

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NC STATE UNIVERSITY

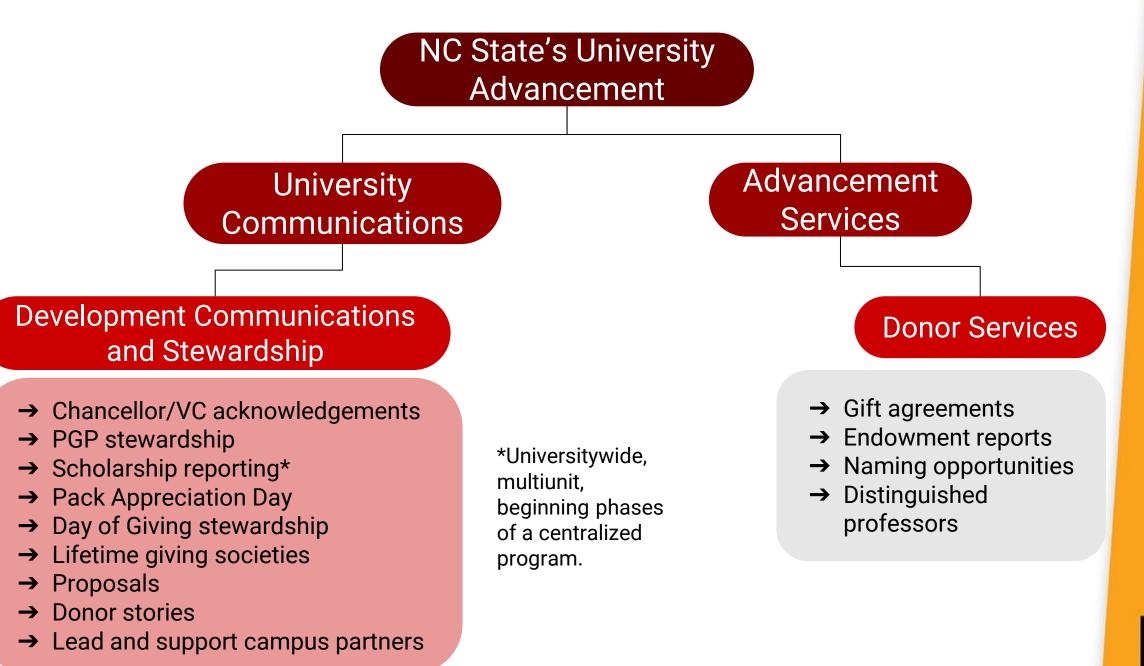
Facts

- → Largest land-grant public institution in North Carolina
- → 37,500+ students
- → 12 colleges & 68 departments
- → 250,000+ living alumni
- → Motto- "Think and Do"

The Think and Do the Extraordinary Campaign

- → Raised \$2.1 billion, ended December 31, 2021
- → Created 2,100 new funds and 636 new scholarships and fellowships.
- → 104 endowed faculty positions were created.





∧D RP Challenges of a donor relations professional







Challenges

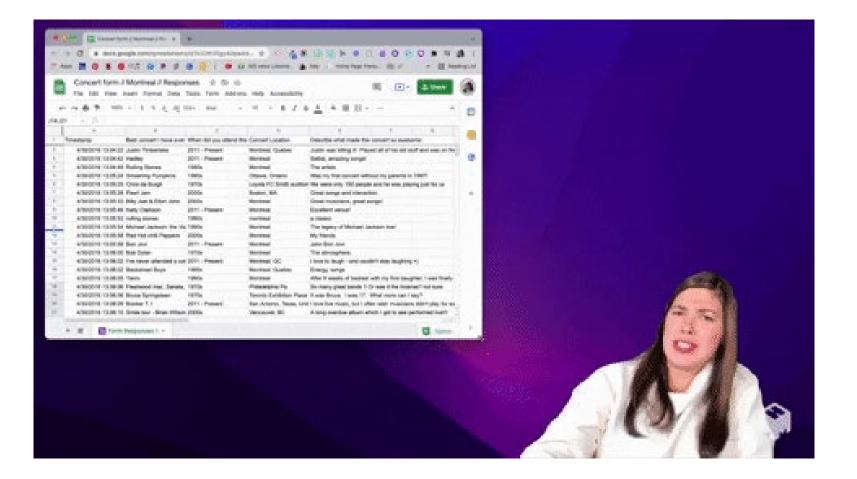
- → Shifting donor strategy
- → Limited data access
- → Unreliable data
- → Partner delays
- → Tight timelines
- \rightarrow Spread thin





How to we do it?

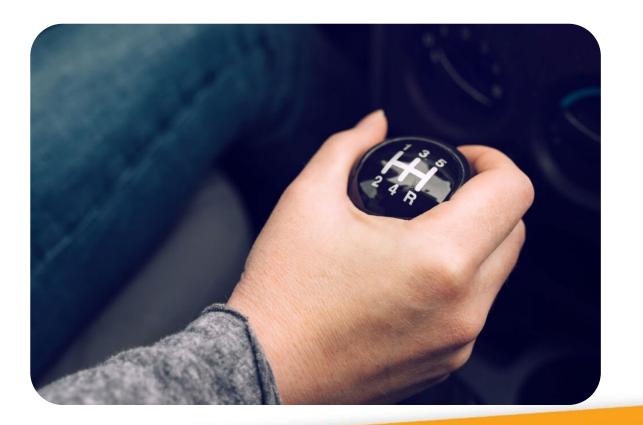






Why not harness full potential?

- → Wasted time
- → Mistakes/data errors
- → Limited staffing/resources
- → Personal, impactful and timely donor experience





Five spreadsheet tools



Concatenate

Technical definition

Join two or more text strings into one string.

(Adding/creating a new data point)

Real examples:

- → Letters, mailings- combining names, phrases, addresses into a single cell
- → Fund reporting- creating a new data point/unique identifier to compare old to new data reports



Concatenate

C3	✓ fx :	=CONCATENATE(A	B," ",B3)		
	A	В	С		
1	first_name	last_name			
2	Ki	Stronack	Ki Stronack		
3	Lillis	Fleckney	Lillis Fleckney		
4	Rochelle	Espley	Rochelle Espley		
5	Joanna	Scotsbrook	Joanna Scotsbrook		
6	Tamara	Compfort	Tamara Compfort		
7	Emlen	McColgan	Emlen McColgan		
8	Olivero	Kreber	Olivero Kreber		
9	Jeannine	Laundon	Jeannine Laundon		
10	Sharia	Cavilla	Sharia Cavilla		
11	Hercule	Skipper	Hercule Skipper		



If statements

Technical definition

Make logical comparisons between a value and what you expect.

(Adding/creating a new data point)

Real examples:

→ Honor rolls- correctly identifying the primary person for a listing

→ Giving societies-

categorizing based on amount



If statements

•	► E	F	G	
_ID	PREPARED_FOR_LINE	FY23 Total Giving	Giving Society	ALLO CODE
285391	Mrs. Faydra E. Windrass	1,050	Chancellor's Circle	92469
358007	Mr. Fredrick C. Venables	500		56067
158016	Ms. Amata M. Shrieves			62983
322215	Mrs. Rhea D. Gorman	4,000	Chancellor's Circle	43549
42211	Mr. Sampson M. Grenfell			46101
38660	Mr. Armin E. Huby	500		63577
25036	Mrs. Gunilla A. Tuffey			56908
151396	Mrs. Aretha K. Bunting	999		97858
271173	Ms. Lucky T. Downes			83317
352640	Ms. Ambur W. Giorgiutti	3,000	Chancellor's Circle	86201
187814	Mr. Sebastien R. Guttridge	100		04053
389000	Mrs. Sissy D. Fagg			30867



Count if statements

Technical definition

Count the number of cells that meet a criterion.

(Adding/creating a new data point)

Real examples:

→ Impact reporting-

- Count the number of donors to a particular fund
- Count the number of funds a donor is associated with
- Count the number of students who received a specific scholarship



Count if statements

	В	С	D	
nb	Fund Name	Student Name	Count the number of students	
	Rochelle Espley Clark Scholarship	Elizabeth Dickens		
	Rochelle Espley Clark Scholarship	Katherine Gray		
	Joanna Scotsbrook Scholarship Endowment	Penelope Alsop		
	Joanna Scotsbrook Scholarship Endowment	Amy Short		
	Joanna Scotsbrook Scholarship Endowment	Amy Baker		
	Tamara and David Compfort Endowed Scholarship	Warren Forsyth		
	Emlen McColgan Scholarship Endowment	Sue Gibson		
	Pepsi Scholarship Fund	Charles Mitchell		
	Joseph and Jeannine Laundon Endowment Fund	Oliver Clarkson		
	Sharia Cavilla Memorial Scholarship	Molly Peters		
	Sharia Cavilla Memorial Scholarship	Nicholas Vance		
	Hercule G. Skipper Scholarship	Isaac Metcalfe		
	Hercule G. Skipper Scholarship	Evan Mathis		
	Cleopatra Fullilove Scholarship Endowment	Simon Ball		
	Remy & Charles Addionizio Scholarship Award Endowment	Dan Paige		
	Remy & Charles Addionizio Scholarship Award Endowment	Simon Manning		
	Remy & Charles Addionizio Scholarship Award Endowment	Blake Piper		
	Remy & Charles Addionizio Scholarship Award Endowment	Joanne Lewis		
	Remy & Charles Addionizio Scholarship Award Endowment	Molly Mitchell		
	Remy & Charles Addionizio Scholarship Award Endowment	Steven Short		
	Remy & Charles Addionizio Scholarship Award Endowment	Una White		
	Remy & Charles Addionizio Scholarship Award Endowment	Joseph Davidson		



X-lookups/V-lookups

Technical definition

Join data from multiple sets in a table or range by row.

(Adding/creating a new data point)

Real examples:

- → Birthday mailings- add fresh mailing/email address information
- → Giving society calculationsjoin two data exports based on donor or gift id



X-lookups/V-lookups

Spreadsheet A

В	С
b Fund Name	Student Name
Ki and Susan Stronack Biological Sciences Endowment	Michael Manning
Lillis C. Fleckney Merit Scholarship	Robert Rampling
Rochelle Espley Clark Scholarship	Elizabeth Dickens
Rochelle Espley Clark Scholarship	Katherine Gray
Joanna Scotsbrook Scholarship Endowment	Penelope Alsop
Joanna Scotsbrook Scholarship Endowment	Amy Short
Joanna Scotsbrook Scholarship Endowment	Amy Baker
Tamara and David Compfort Endowed Scholarship	Warren Forsyth
Emlen McColgan Scholarship Endowment	Sue Gibson
Pepsi Scholarship Fund	Charles Mitchell
Joseph and Jeannine Laundon Endowment Fund	Oliver Clarkson
Sharia Cavilla Memorial Scholarship	Molly Peters
Sharia Cavilla Memorial Scholarship	Nicholas Vance
Hercule G. Skipper Scholarship	Isaac Metcalfe

Spreadsheet B

Student Name	Email	Acad Level	Graduati
Michael Manning	michael.manning@ncsu.edu	Senior	
Robert Rampling	robert.rampling@ncsu.edu	Freshman	
Elizabeth Dickens	elizabeth.dickens@ncsu.edu	Junior	
Katherine Gray	katherine.gray@ncsu.edu	Senior	
Penelope Alsop	penelope.alsop@ncsu.edu	Sophomore	
Amy Short	amy.short@ncsu.edu	Junior	



Pivot tables

Technical definition

Calculate, summarize, and analyze data that lets you see comparisons, patterns, and trends in your data. **Real examples:**

→ Fund/impact reportingdetermine the number of profiles to be printed for mailings

- → Event invitations- dietary preference totals
- → Giving societies- summarize number of donors in each giving societies

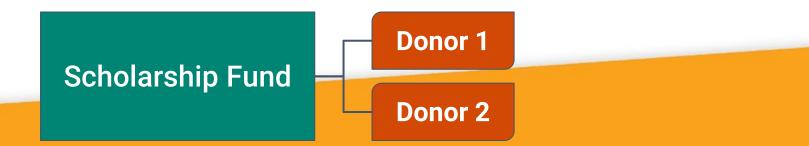


Pivot tables

	D	E	F 🔻	G	
DLD_ID	AGENCY	PREPARED_FOR_LINE	ALLOCATION_ CODE	ALLOCATION_N	
25036	The Endowment Fund of NC	Mrs. Faydra E. Windrass	924694	Ki and Susan Str	
142849	NC State University Alumni A	Mr. Fredrick C. Venables	560674	Lillis C. Fleckney	
69520	NC State University Alumni A	Ms. Amata M. Shrieves	629832	Rochelle Espley	
63901	NCSU Foundation, Inc.	Mrs. Rhea D. Gorman	435494	Joanna Scotsbro	
75572	NCSU Foundation, Inc.	Mr. Sampson M. Grenfell	461018	Tamara and Davi	
108330	NCSU Foundation, Inc.	Mr. Armin E. Huby	635773	Emlen McColgan	
47925	NCSU Foundation, Inc.	Mrs. Gunilla A. Tuffey	569082	Pepsi Scholarshi	
63073	NCSU Foundation, Inc.	Mrs. Aretha K. Bunting	978586	Joseph and Jean	
54916	NC State University Alumni A	Ms. Lucky T. Downes	833170	Sharia Cavilla Me	
65513	NCSU Foundation, Inc.	Ms. Ambur W. Giorgiutti	862017	Hercule G. Skipp	
130170	NC State University Alumni A	Mr. Sebastien R. Guttridge	040538	Cleopatra Fullilov	
52895	NCSU Foundation, Inc.	Mrs. Sissy D. Fagg	308670	Remy & Charles	
56448	NC State University Alumni A	Mrs. Cathy D. Mapholm	929706	Matilde Griffoen I	
59952	NCSU Foundation, Inc.	Mr. Cornall R. Kubecka	504604	Wake County Alu	
38660	The Endowment Fund of NC	Mrs. Raeann M. Yakob	504604	Wake County Alu	
40597	NCSU Foundation, Inc.	Ms. Alma C. Bugg	019158	Art Rumney Ende	

	A	В	С	
1	ALLOCATION_ CODE	ALLOCATION_NAME	COUNTUNIQUE of HOUSEHOLD ID	
2	019158	Art Rumney Endowed Scholarship	2	2
3	040538	Cleopatra Fullilove Scholarship Endowment	1	1
4	160013	NASA Alumni Scholarship Endowment	1	1
5	308670	Remy & Charles Addionizio Scholarship Award Endowment	1	1
6	- 435494	Joanna Scotsbrook Scholarship Endowment	1	1
7	461018	Tamara and David Compfort Endowed Scholarship	1	1
8	504604	Wake County Alumni Endowment	2	2
9	560674	Lillis C. Fleckney Merit Scholarship	1	1
10	569082	Pepsi Scholarship Fund	1	1
11	578429	Jackquelin & Larry Dakers Endowed Scholarship Fund	1	1
12	629832	Rochelle Espley Clark Scholarship	2	2
13	635773	Emlen McColgan Scholarship Endowment	1	1
14	833170	Sharia Cavilla Memorial Scholarship	1	ī

D



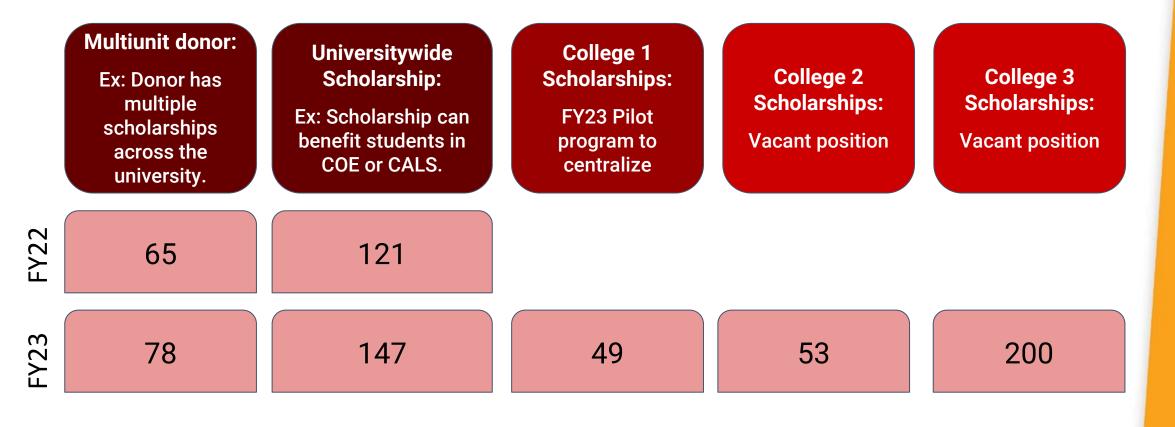
Real world applications



The challenge

- → Managing five separate scholarship reporting processes
- → Partnered with three colleges to determine and identify donor data
- → Donor information managed four different ways
- → Worked with various campus partners to confirm scholarship recipient information
- → Scope tripled but deadline didn't change





2.8x



The solution

 \rightarrow Used the five data management strategies

- Built donor lists for three colleges (based on three different data sets)
- ◆ Identified scholarships not awarded
- Identified donors who should be stewarded



The outcome

- → Went from 180 donor reports in FY22 to 500+ donor reports in FY23
- → Full transparency with campus partners
- → Happy campus partners (colleges) & positive donor feedback about the quality of their reports
- → Met the deadline



Spreadsheet clean up + ChatGPT

The challenge

- → Student scholarship recipient data from centralized scholarship awarding platform
- → Data download has two spreadsheets each with 400+ columns that aren't the same

The solution

→ Used Chat GPT to write a Google Apps script to delete all columns except for predefined columns



Spreadsheet clean up + ChatGPT

"Write GoogleSheets AppScript that removes all columns from a specified sheet except for the following:

- → Name
- → Primary Email
- → UID
- → Award Period
- → Category
- → Portfolio Name
- → Season
- → Auxiliary Fund Code
- → Last Name
- → First Name
- → Middle Name
- → Suffix

- → City
- → State
- → Country
- → Acad Level
- → Acad Prog
- → Major Description
- → Major SubPlan Description
- → Minor Description
- → High School/Transfer School
- → Expected Grad Date



Spreadsheet clean up + ChatGPT

Copy code function removeColumns() { // Specify the sheet you want to remove columns from var sheet = SpreadsheetApp.getActiveSpreadsheet().getSheetByName("Sheet1") // Set up an array of the column names you want to keep var columnsToKeep = ["Name", "Primary Email", "UID", "Award Period", "Cate // Get the range of all columns in the sheet

var range = sheet.getRange(1, 1, 1, sheet.getLastColumn());

// Get the values of all columns in the sheet var values = range.getValues();

// Loop through all the values in the array

for (var i = 0; i < values[0].length; i++) {</pre>

// If the column name is not in the array of columns to keep, delete the

if (columnsToKeep.indexOf(values[0][i]) == -1) {

sheet.deleteColumn(i+1);

SCSS

// Decrement the loop counter because we just deleted a column and the i--:

400+ columns to 35 columns within 1 minute



Day of Giving stewardship + ChatGPT

The challenge

- → How do you steward donors effectively and efficiently in real time?
- → Previously used Google Sheets to segment donors
 - Spreadsheet has problems around 10,000 rows
 - Multiple functions/formulas makes everything very slow
 - Not as dynamic



Day of Giving stewardship + ChatGPT

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=IF(ISNA(VLOOKUP(M2,Sent!B:B,1,FALSE)),

IF(X2="Yes","Suppress",

IF(COUNTIF('Hot List'!C:C,M2) > 0,"Hot List",

fx IF(AND(COUNTIF(M:M,M2) = COUNTIF(AG:AG,AG2),COUNTIF('Area ThankView assignments'!A:A,C2)>0),VLOOKUP(C2,'Area ThankView assignments'!A:B,2,false), IF(AND(COUNTIF(M:M,M2) = COUNTIF(AH:AH,AH2),COUNTIF(UTMs!A:A,AC2)>0),VLOOKUP(AC2,UTMs!A:B,2,FALSE),

IF(AND(C2 <> "Office for Institutional Equity and Diversity", COUNTIF(AF:AF,AF2) < COUNTIF(M:M,M2)), VLOOKUP(AI2, 'Fund list'!F:G,2,false), "")))), "Sent")

	Q	•	•	S d	•	▶ U	V 4	▶ X	Y	Z	AA	AB	► AI	
													Campaign+	
Ŧ	State	Ŧ	Count	iry —	e I	Preferred Af $=$	Preferred Gr $=$	Anonymous \Xi	Number of E $=$	Referral Sou =	Referral Mec =	Referral Campaign =	Fund Number	.



Day of Giving stewardship + ChatGPT

The solution

- → Used Chat GPT to write a Google Apps script to segment Day of Giving donors based on:
 - Gift to specific areas/funds
 - Specific prospects
 - Multiple gifts
 - Perfect Attendance (+), etc.
- → Ran much faster and no concerns about the spreadsheet being too large
- → Even more possibilities for future enhancements







Professional development opportunities

- → Google
- → YouTube videos
- → Instagram
 - ♦ forgoodcode
- → Linkedin Learning
- → PRACTICE!





ChatGPT

→ Google platform?

- ♦ JavaScript
- Who is your website person?
- Codecademy

→ Microsoft Excel?

- Macros
- VBA (estimated time to learn 1 - 8 weeks)

Remember:

- → Poor instructions = poor results
- → AI has limitations
- → Review everything



Hiring

→ Interview questions

- Give project example. Tell us about the most detailed/challenging project you have worked on using MS Excel/Google Sheets that required you to aggregate data from multiple sources.
 - (Follow-up question if they don't mention it in the initial response): Can you tell us specific types of formulas or data management skills you use when working with large datasets?
- Thinking of the mantra "work smarter, not harder," can you tell me a time when you applied this to your work? Such as learning a new computer program/technology or making a change that made a difference to your workload without sacrificing the quality of the work produced.



Hiring

→ Data assessment

- Instructions: The primary focus of this position will be preparing and creating reports to share the impact of scholarship support with NC State donors. Here is an <u>example</u> of a donor report for your reference.
 - To prepare donor reports, pulling and compiling data from multiple sources will be necessary. In the assessment linked below, use formulas and functions to complete each activity listed.
- Functions assessed:
 - COUNTIF statement; IF statement; VLOOKUP; Pivot table







