DATA ANALYSIS 2 PORTFOLIO

PROFESSIONAL BACKGROUND

I am a graduate of Geology from the University of Ilorin, Ilorin, Kwara state, Nigeria. During my undergraduate degree, I had the opportunity to serve as an intern at the National Petroleum Investment Management Services (NAPIMS) corporate service section of the Nigerian National Petroleum Corporation (NNPC) under the Joint Ventures Operations Department (JV Ops), where I was assigned task which include data entry and documentation. I also developed skills in geophysical interpretation of data.

I have been advancing my career toward a position in the tech sector that I've long desired. After earning my undergraduate degree, I undertook my compulsory graduate internship in the Lagos State Ministry of Local Government and Community Affairs, where I honed my project implementation and multi-project coordination abilities. After finishing my required graduate internship, I started enrolling in courses and projects that will help me move into the IT industry because I wanted to work in the field of technology. I began with the health, safety, and environment levels 1 through 3, (HSE1,2 and 3) certificate which I earned from the British International Safety Organisation. I also did the Fundamental of Digital Marketing course which earned me a certificate in Digital Marketing offered by Google Digital Garage. In my quest to further broaden my tech knowledge I took up of various Udemy courses which include Petroleum Refining Demystified – Oil and Gas Industry Certificate, Tableau 2022 Training for Beginners + Tableau Certification and Complete Microsoft SQL Server Database Administration Course. I also earned a Professional and Graduate certificate from the British Project Management Academy. As an avid tech enthusiast, I also enrolled in the scrum master course and took the assessment. I passed with a score of 91.3%, earning the title of Professional Scrum Master 1 (PSM I). I was able to develop skills in project management, time management, grasp of agile approaches, and teamwork abilities as a result. I enrolled in a Cousera project course to learn how to construct a Jira scrum project as part of my desire to advance my scrum abilities. This project taught me how to acquire, interpret, and analyse data as well as how to use the Jira software.

However, in order to further be well groomed in the tech world, I decided to take up a data analysis course that well help me develop a better understanding of data and tech analysis. I completed entry-level data analysis 1 utilising Google Sheets for cleaning, consolidation, and analysis and Tableau for visualisation. I decided to take a SQL data analysis course after participating in several project.

PORTFOLIO OUTLINE

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INTRODUCTION

INTRODUCTION

The scenario presented to me was that I am a data analyst for the charity, Education for ALL. The Head of fundraising has requested that I give a presentation on donor insights and donation rates. My goal with the fundraising team includes.

- Increase the number of donors in your database.
- Increase the donation frequency of your donors.
- Increase the value of donations in your database.

In two weeks, I must deliver insights from the donation data to my team and inform my fundraising strategy to boost donations for the following year.

I used the datasets EFO_Donation_Data and EFO_Donor_Data to answer the business problem. I employed the following SQL commands to analyse the data:

- JOIN
- SELECT
- WHERE
- LEFT JOIN
- ON
- ORDER BY ()
- GROUP BY ()
- HAVING
- LIMIT
- DESC
- ASC
- SUM ()
- COUNT ()
- MAX ()
- MIN ()
- AVG ()
- ROUND ()
- OR

I used root cause analysis to go deep into the issue and determine the best follow-up inquiries. As a result, I was able to gain critical insights from the data sets provided, create appropriate visualisations, and write a report for my team.

ROOT CAUSE ANALYSIS

ROOT CAUSE ANALYSIS

The charity organisation Education for All is facing a challenging business environment because expanding their funding base is difficult. They need to find more donors who can contribute on a consistent basis and add financial value to their contributions.

In two weeks, I had to give a report. In order to get a handle on the situation, I analysed databases containing information about Donors and their donations. In addition, I need to show off some vital statistics and data visualisations.

I decided to probe the issue further by using root cause analysis to ask the following questions:

- Why are there not enough donation for the charity?
  A: because there are no regular donations for the charity.
- Why are there not regular donations for the charity?
  A: because we do not have enough donors for the charity.
- Why are there not enough donors for the charity?
  A: because only few job fields have heard about the charity.
- Why have only few job fields heard about the charity?
  A: because enough advertisement has not been made concerning the charity.

INSIGHTS

INSIGHTS FROM ANALYSIS

The following data sets were sent to me to help with the business problem: EFO_Donation_Data and EFO_Donor_Data. The data sets were queried and analysed using the SQLite Database Management System and visualisation of the analysed data were created using Tableau.

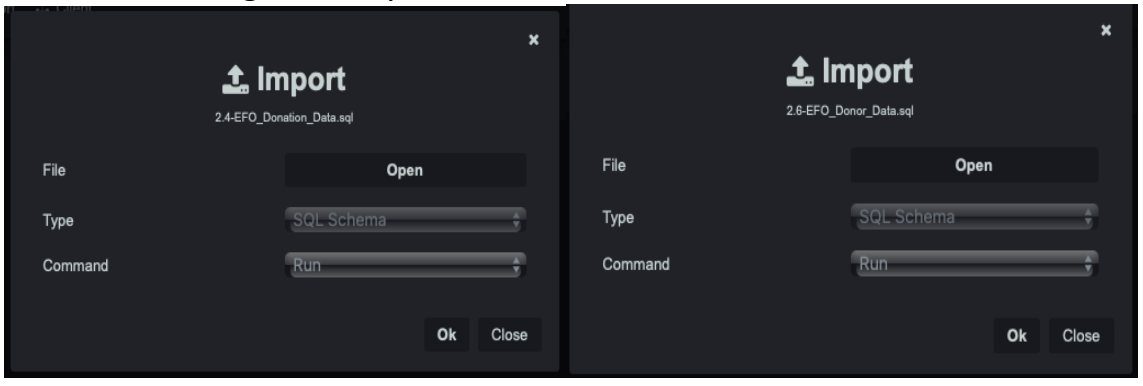
Donation Dataset includes:

- Id
- First name
- Last name
- Email
- Gender
- Job field
- Donations
- State
- Shirt size

Donor Dataset includes:

- Id
- Donation frequency
- University
- Car
- Second language
- Favourite colour
- Movie genre

The following images depicts how the datasets were loaded into the SQLite Database Management System.



In order to retrieve data from a database, a SELECT statement was executed:

```
SELECT * FROM Donation_Data;

SELECT * FROM Donor_Data2;
```

I typed in this command to the COUNT () Function in order to find out how many contributors there were:

```
1 SELECT COUNT (donation)
2 FROM Donation_Data;
```

I used SUM () to calculate the total amount of donations raised:

```
1 SELECT SUM (donation)
2 FROM Donation_Data;
```

Donation amounts were averaged and rounded to the nearest two decimal places using the ROUND () and AVG () function:

```
1 SELECT ROUND (AVG(donation), 2)
2 FROM Donation_Data;
```

MAX () I used it to see the maximum amount of money donated:

```
1 SELECT MAX (donation)
2 FROM Donation_Data;
```

If you want the minimum possible sum of money donated, use MIN ():

```
1 SELECT MIN (donation)
2 FROM Donation_Data;
```

To combine the EFO_Donation_data and EFO_Donor_Data dataset, I used the JOIN () clause:

```
SELECT *
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id;
```

The amount donated by donation frequency; ONCE, WEEKLY, MONTHLY and YEARLY were queried using the JOIN AND WHERE clause as shown:

```
SELECT Donation_Data.donation, Donor_Data2.donation_frequency, SUM(donation)
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE donation_frequency = 'Once';
```

```
SELECT Donation_Data.donation, Donor_Data2.donation_frequency, SUM(donation)
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE donation_frequency = 'Weekly';
```

```
SELECT Donation_Data.donation, Donor_Data2.donation_frequency, SUM(donation)
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE donation_frequency = 'Monthly';
```

```
SELECT Donation_Data.donation, Donor_Data2.donation_frequency, SUM(donation)
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE donation_frequency = 'Yearly';
```

By combining the GROUP BY, HAVING, ORDER BY AND ASC queries, I was able to identify the states with less than 80 donors:

```sql
SELECT state, COUNT (*)
FROM Donation_Data
GROUP BY state
HAVING COUNT (*) < 80
ORDER BY COUNT (*) ASC;
```

The JOIN and WHERE clause, together with AND, BETWEEN, ORDER BY, and DESC queries, were used to retrieve the male and female donors with university degrees who gave between $5 and $249:

```sql
SELECT Donation_Data.gender, Donation_Data.donation, Donor_Data2.university, Donation_Data.job_field
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE gender = 'Female'
AND university != 'NULL'
AND donation BETWEEN 5 AND 249
ORDER BY donation DESC;
```

```sql
SELECT Donation_Data.gender, Donation_Data.donation, Donor_Data2.university, Donation_Data.job_field
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE gender = 'Male'
AND university != 'NULL'
AND donation BETWEEN 5 AND 249
ORDER BY donation DESC;
```

For this query, we used the JOIN and WHERE clauses in conjunction with the AND, BETWEEN, ORDER BY, and DESC queries to pull in all the male and female donors without a university degree who donated between $5 and $249:

```sql
SELECT Donation_Data.gender, Donation_Data.donation, Donor_Data2.university, Donation_Data.job_field
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE gender = 'Female'
AND university IS NULL
AND donation BETWEEN 5 AND 249
ORDER BY donation DESC;
```

```sql
SELECT Donation_Data.gender, Donation_Data.donation, Donor_Data2.university, Donation_Data.job_field
FROM Donation_Data
JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE gender = 'Male'
AND university IS NULL
AND donation BETWEEN 5 AND 249
ORDER BY donation DESC;
```

The queries depicted in the image below were used to obtain the Job field with less than 80 donors:

```sql
SELECT job_field, COUNT (*)
FROM Donation_Data
GROUP BY job_field
HAVING COUNT (*) < 80
ORDER BY COUNT (*) DESC;
```

The subsequent queries, depicted in the image below, show the total number of donations for each donation frequency for the LEGAL job field:

```sql
SELECT Donation_Data.job_field, Donor_Data2.donation_frequency, COUNT (donation_frequency)
FROM Donation_Data
LEFT JOIN  Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE job_field = 'Legal'
AND donation_frequency = 'Once';
```

```sql
SELECT Donation_Data.job_field, Donor_Data2.donation_frequency, COUNT (donation_frequency)
FROM Donation_Data
LEFT JOIN  Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE job_field = 'Legal'
AND donation_frequency = 'Weekly';
```

```sql
SELECT Donation_Data.job_field, Donor_Data2.donation_frequency, COUNT (donation_frequency)
FROM Donation_Data
LEFT JOIN  Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE job_field = 'Legal'
AND donation_frequency = 'Monthly';
```

```sql
SELECT Donation_Data.job_field, Donor_Data2.donation_frequency, COUNT (donation_frequency)
FROM Donation_Data
LEFT JOIN  Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE job_field = 'Legal'
AND donation_frequency = 'Yearly';
```

The image below shows the job field with the lowest amount of donations:

```sql
SELECT Donation_Data.job_field, SUM(donation)
FROM Donation_Data
GROUP BY job_field
ORDER BY SUM(donation) ASC;
```

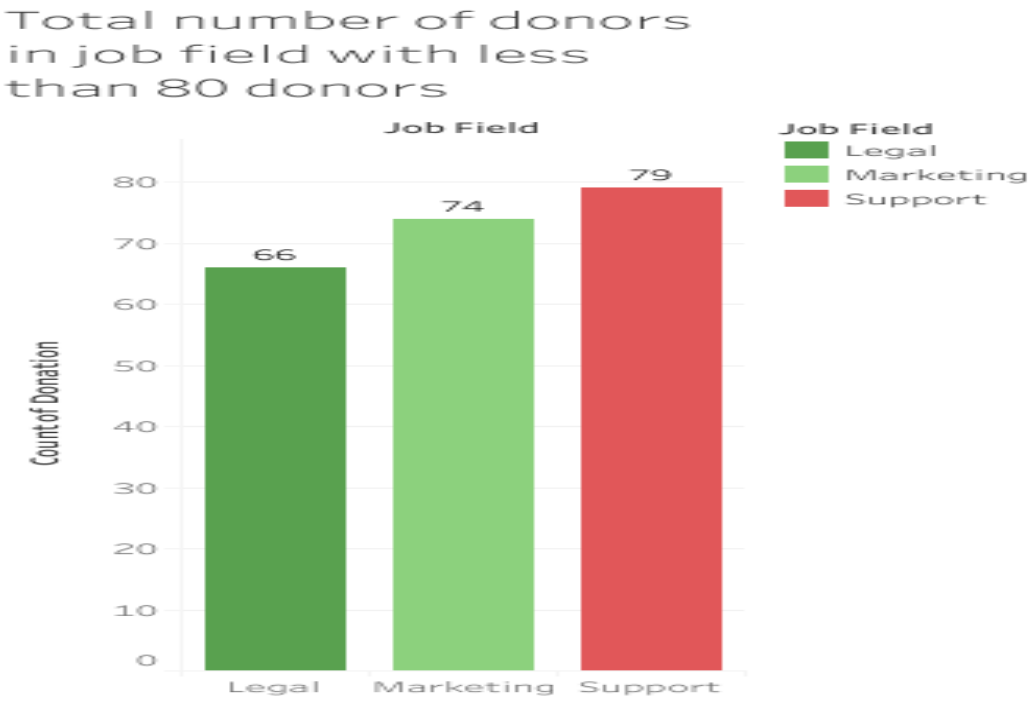
The image below depicts the top ten and bottom ten donations in the LEGAL job field:

```sql
SELECT Donation_Data.donation, Donation_Data.gender, Donation_Data.state, Donor_Data2.donation_frequency, Donor_Data2.car, Donor_Data2.university, D
FROM Donation_Data
LEFT JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE job_field = 'Legal'
ORDER BY donation DESC
LIMIT 10;
```

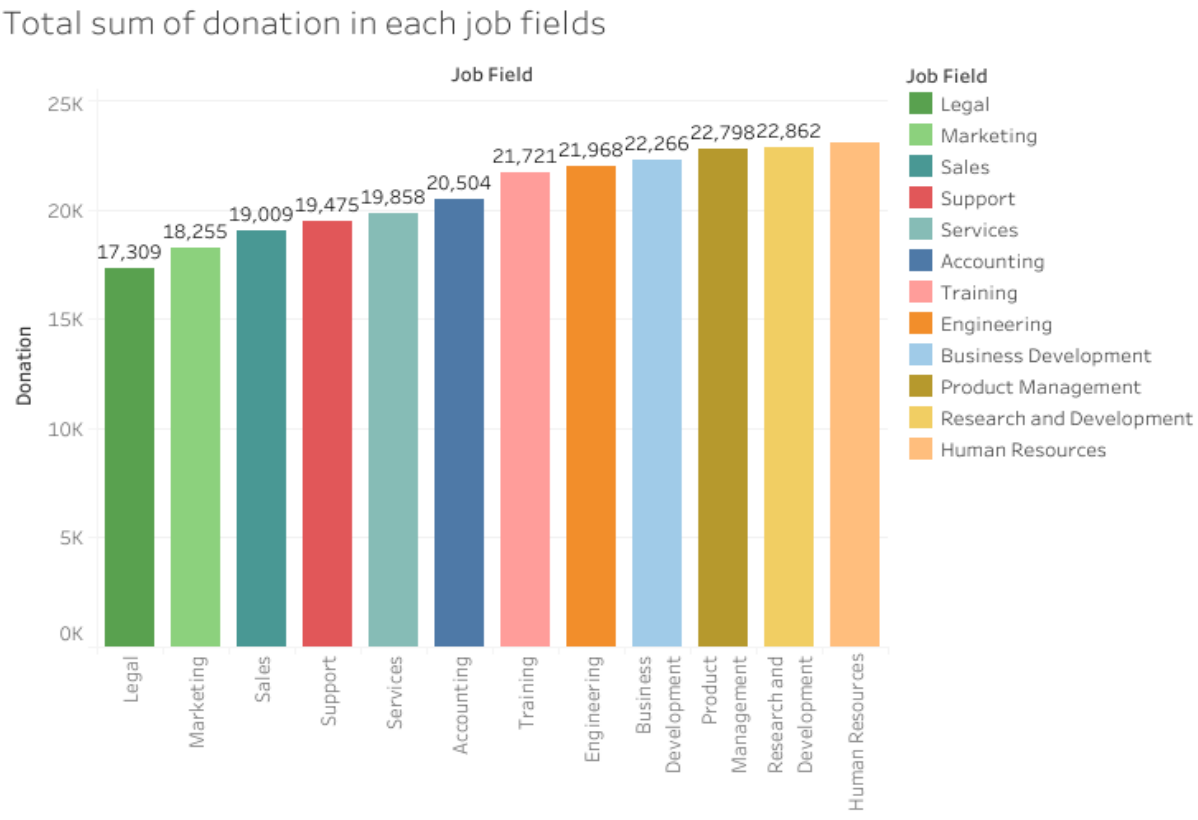
```sql
SELECT Donation_Data.donation, Donation_Data.gender, Donation_Data.state, Donor_Data2.donation_frequency, Donor_Data2.car, Donor_Data2.unive
FROM Donation_Data
LEFT JOIN Donor_Data2
ON Donation_Data.id = Donor_Data2.id
WHERE job_field = 'Legal'
ORDER BY donation ASC
LIMIT 10;
```

The data that was queried was visualised with the help of Tableau.

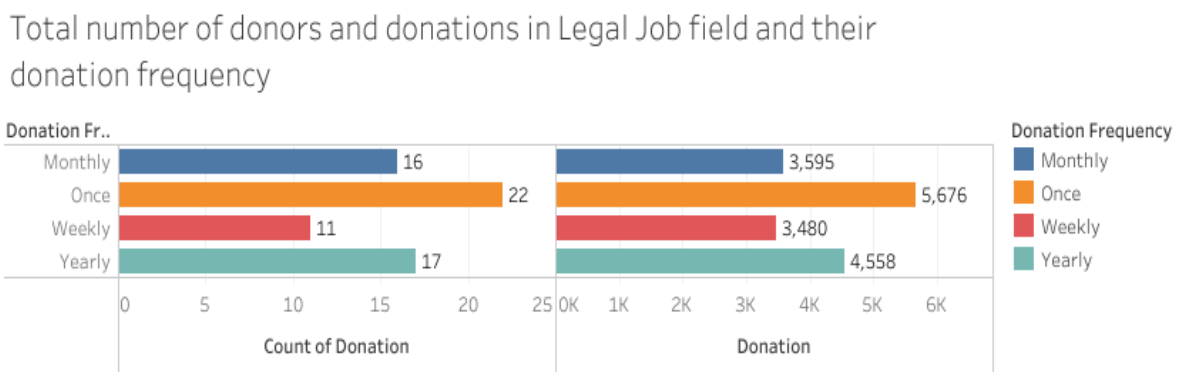
The total number of job fields with less than 80 donors is shown visually below:



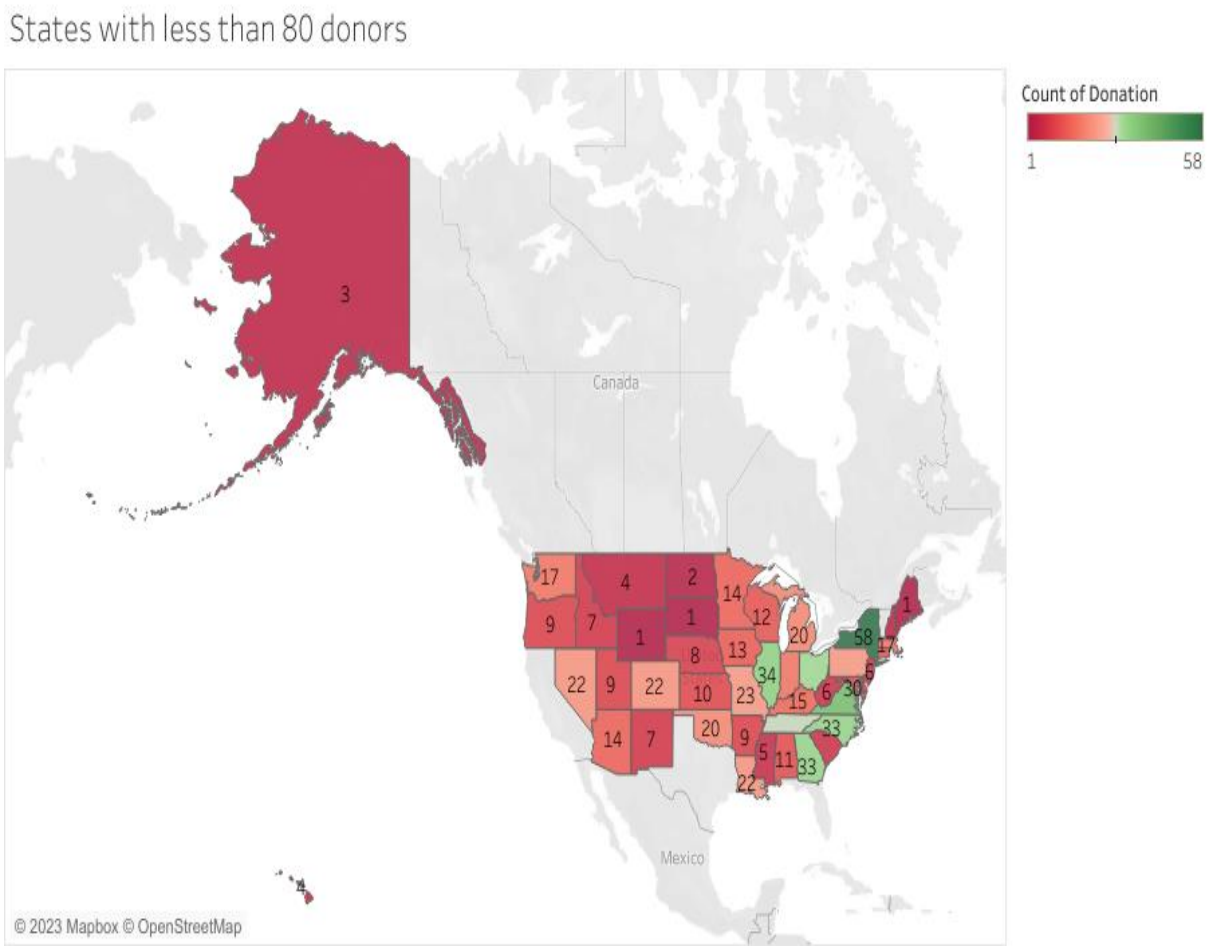
The total sum of donations in each job field is shown visually in the image below:



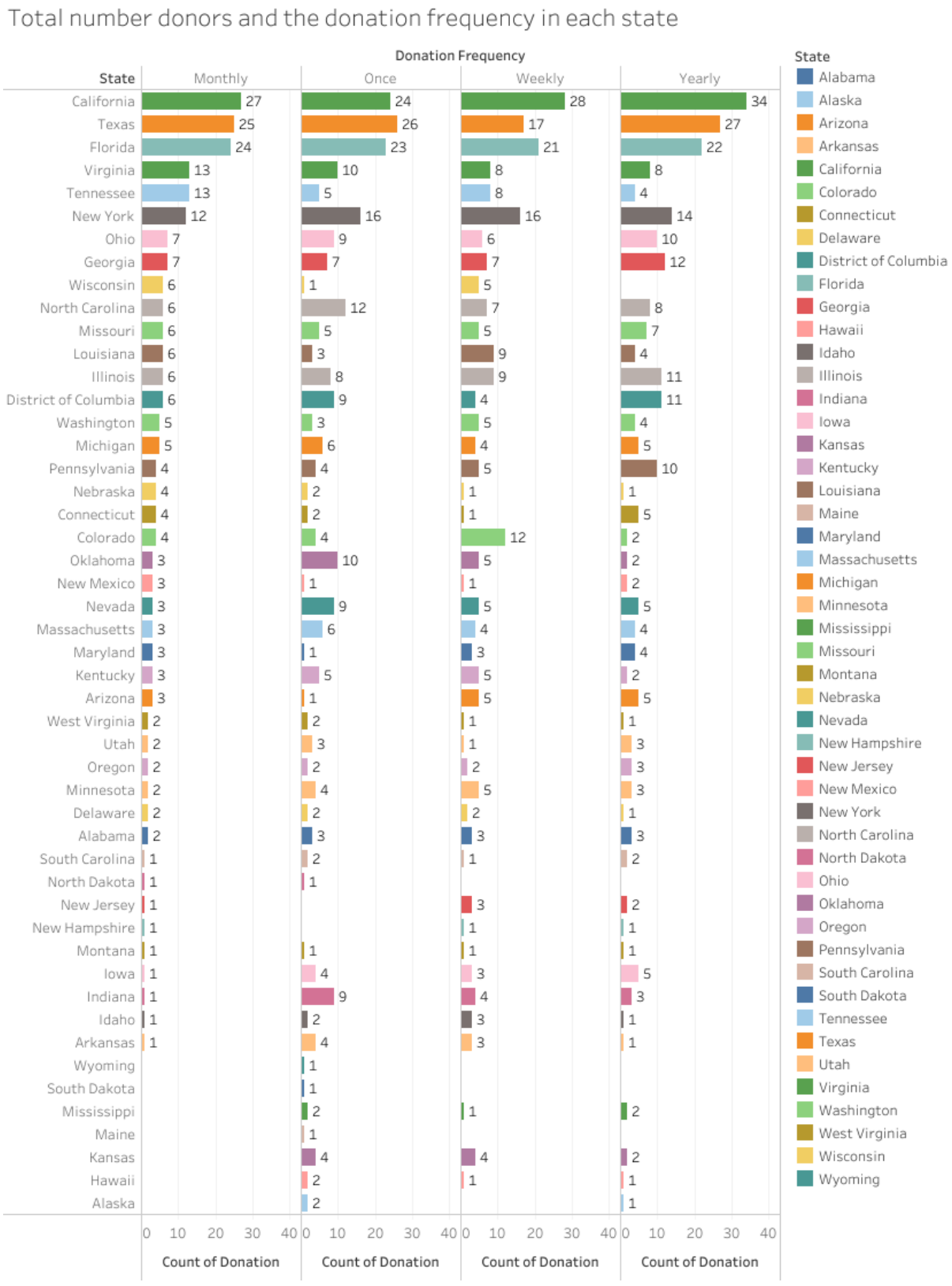
Below is a visual image of the total number of donors and donations in the LEGAL job field and their donation frequency:



A visual representation of the total number of states with less than 80 donors is provided below:



Below provides a visual illustration of the total number of donors as well as the donation frequency in each state:



FINDINGS AND RECOMMENDATIONS

FINDINGS AND RECOMMENDATIONS:

Following the analysis of the data sets, I came to the following findings:

- The total sum of donation is $249085.
- The average donation rounds up to two decimal places is $249.09.
- The minimum amount of donations is $5.
- The maximum amount of donations is $500.
- The total number of donors is 1000.

I was able to determine the total sum of donations as well as the number of donations in each donation frequency.

donation	SUM (donation)	donation frequency
292	64586	Once
28	59152	Weekly
178	59680	Monthly
255	65667	Yearly

From the preceding table, it is obvious that only 753 of the 1000 donors identified in the database are active. Consequently, 247 donors don't donate. The 247 inactive donors should be enlightened and motivated to start making donations. Also, the findings clearly demonstrate that weekly donors are the least active donors and, as a result, contribute the least to the total donations. The total number of donors and amount donated may be increased if the 247 inactive donors were urged to give on a weekly basis.

The states with lesser than 80 donors are shown in the following table:

States	COUNT (*)
Maine	1
South Dakota	1
Wyoming	1
North Dakota	2
Alaska	3
New Hampshire	3
Hawaii	4
Montana	4
Mississippi	5

New Jersey	6
South Carolina	6
West Virginia	6
Delaware	7
Idaho	7
New Mexico	7
Nebraska	8
Arkansas	9
Oregon	9
Utah	9
Kansas	10
Alabama	11
Maryland	11
Connecticut	12
Wisconsin	12
Iowa	13
Arizona	14
Minnesota	14
Kentucky	15
Indiana	17
Massachusetts	17
Washington	17
Michigan	20
Oklahoma	20
Colorado	22
Louisiana	22
Nevada	22
Missouri	23
Pennsylvania	23
District of Columbia	30
Tennessee	30
Ohio	32
Georgia	33
North Carolina	33
Illinois	34
Virginia	39
New York	58

The table above shows 46 states have fewer than 80 donors. Most states have fewer donors. Hence, those states should promote more contributions.
The following table provides information regarding the number of university-educated male and female donors who contributed between $5 and $249:

Female

gender	donation	university	job_field
Female	249	Brugmann	Legal
Female	247	Cow	Training
Female	244	Di Francecshi	Support
Female	243	Dangerfield	Product Management
Female	243	Dyett	Training
Female	235	Dresser	Services
Female	233	Polin	Business Development
Female	232	Grzelak	Sales
Female	230	Moggle	Marketing
Female	227	Abramof	Business Development
Female	227	Stops	Training
Female	223	Meharg	Business Development
Female	222	Blackhall	Sales
Female	216	Winterbotham	Accounting
Female	215	Hardway	Sales
Female	214	Eustes	Research and Development
Female	213	Ghirardi	Training
Female	213	Timpany	Engineering
Female	212	Laurentin	Engineering
Female	210	Anthon	Marketing
Female	207	Silby	Sales
Female	207	Kytter	Engineering
Female	206	Pietranek	Business Development
Female	203	Easeman	Services
Female	203	Vanyukhin	Sales
Female	202	Lammers	Engineering
Female	202	Shelton	Accounting
Female	202	Shobrook	Business Development
Female	201	Denkin	Human Resources
Female	201	Benne	Training
Female	201	McElane	Marketing

Female	201	Roland	Accounting
Female	197	Jery	Sales
Female	197	Hargroves	Business Development
Female	193	Crisford	Sales
Female	192	Andrusov	Training
Female	192	Earthfield	Engineering
Female	191	Brugmann	Support
Female	190	Deyenhardt	Services
Female	190	Plampin	Accounting
Female	188	Dandie	Services
Female	188	Ridoutt	Business Development
Female	187	Freschi	Sales
Female	187	McCarrick	Marketing
Female	187	Brosnan	Sales
Female	186	Bellas	Accounting
Female	186	Medlar	Training
Female	184	Ghilks	Engineering
Female	184	Beckenham	Human Resources
Female	183	Dollar	Product Management
Female	182	Amburgy	Human Resources
Female	182	Beel	Human Resources
Female	181	Blumire	Product Management
Female	181	McKeggie	Engineering
Female	180	Deely	Business Development
Female	180	Hearons	Product Management
Female	180	Sandars	Marketing
Female	180	Prickett	Human Resources
Female	179	Yeabsley	Support
Female	178	Ragsdall	Engineering
Female	177	Megroff	Accounting
Female	176	Mann	Legal
Female	175	Twiname	Business Development
Female	175	Cameron	Legal
Female	173	Ellsom	Services
Female	172	Jillard	Human Resources
Female	170	Tinto	Business Development
Female	167	Beves	Sales
Female	165	Ales	Sales
Female	165	Sandiford	Human Resources

Female	165	Fancutt	Research and Development
Female	164	Pattington	Engineering
Female	164	Tennison	Sales
Female	161	Mesant	Marketing
Female	155	Duckit	Research and Development
Female	154	Droghan	Engineering
Female	153	Corkill	Business Development
Female	153	Jacklings	Research and Development
Female	153	Bicknell	Research and Development
Female	152	Jencey	Business Development
Female	152	Abrahamsson	Marketing
Female	152	Brawley	Research and Development
Female	151	Mc Gaughey	Marketing
Female	150	Poetz	Marketing
Female	150	Abramof	Business Development
Female	148	Dudden	Legal
Female	146	Drysdell	Research and Development
Female	146	Hawkswell	Marketing
Female	144	Rany	Product Management
Female	144	Odcroft	Support
Female	142	McLaverty	Marketing
Female	142	Finlason	Marketing
Female	140	Woodruff	Human Resources
Female	140	Jantel	Support
Female	137	Simoes	Training
Female	136	Figgess	Engineering
Female	135	Runham	Human Resources
Female	130	Aldersley	Product Management
Female	130	Vasiliev	Accounting
Female	130	Skeemer	Training
Female	127	Blackah	Marketing
Female	125	Paoli	Engineering
Female	122	Hessay	Business Development

Female	122	Fancett	Marketing
Female	122	Woodham	Services
Female	121	Scutching	Engineering
Female	121	Oddboy	Marketing
Female	119	Duval	Product Management
Female	118	Maylour	Business Development
Female	117	Tibbles	Services
Female	114	felip	Sales
Female	113	Delacour	Business Development
Female	112	Leven	Engineering
Female	111	Yerrington	Research and Development
Female	111	Oleszkiewicz	Product Management
Female	108	Roser	Support
Female	107	Strand	Legal
Female	107	Duberry	Accounting
Female	105	Giblin	Sales
Female	102	Speller	Training
Female	102	Telezhkin	Product Management
Female	101	Rikard	Marketing
Female	99	Annice	Sales
Female	95	Wilacot	Business Development
Female	94	Hedon	Accounting
Female	94	Tideswell	Research and Development
Female	92	Tree	Marketing
Female	90	Hadye	Product Management
Female	88	Heeney	Human Resources
Female	87	Kalinsky	Services
Female	87	Leader	Engineering
Female	87	Olivazzi	Engineering
Female	86	Murrum	Sales
Female	85	Retallick	Marketing
Female	84	Shilstone	Accounting
Female	83	Vashchenko	Engineering
Female	82	Casper	Services
Female	80	Nuton	Support
Female	79	Lund	Sales
Female	78	McIlmurray	Training

Female	78	Lonsdale	Support
Female	78	Neeves	Support
Female	77	Lennox	Legal
Female	76	Antrim	Accounting
Female	74	Sunock	Human Resources
Female	73	Hundal	Sales
Female	72	O'Dea	Product Management
Female	69	Sweeting	Business Development
Female	68	Rubinovitch	Services
Female	68	Dod	Product Management
Female	66	Easom	Support
Female	66	Annice	Sales
Female	63	Degoy	Business Development
Female	63	Todarello	Sales
Female	61	Dollimore	Business Development
Female	61	Fawkes	Engineering
Female	61	Godsafe	Training
Female	57	Trevorrow	Human Resources
Female	56	Bebis	Sales
Female	54	Mosdell	Services
Female	51	Songest	Marketing
Female	48	Sleeny	Sales
Female	46	Dundon	Services
Female	46	Raikes	Human Resources
Female	44	Setterington	Product Management
Female	44	Mein	Training
Female	44	Edmund	Research and Development
Female	44	Bramble	Product Management
Female	40	Claasen	Business Development
Female	40	Trumper	Training
Female	39	Murrigans	Training
Female	38	Yashaev	Business Development
Female	37	Herries	Product Management
Female	37	Pickover	Training
Female	35	Egar	Services
Female	35	Rude	Support
Female	34	Arnely	Accounting
Female	34	Capnor	Accounting

Female	32	Jopp	Training
Female	31	Ailward	Sales
Female	30	McLaughlan	Sales
Female	27	Downse	Support
Female	27	Giannasi	Research and Development
Female	22	Harrowing	Engineering
Female	22	Cottrill	Business Development
Female	19	Layne	Human Resources
Female	18	Capini	Support
Female	17	Cove	Engineering
Female	15	Gethyn	Business Development
Female	15	Phripp	Accounting
Female	13	Tapenden	Accounting
Female	9	Boichat	Marketing
Female	9	Goodlatt	Research and Development
Female	9	Simoncelli	Support
Female	7	Gurr	Product Management
Female	7	Traher	Product Management
Female	6	Seeborne	Business Development
Female	6	Kleint	Human Resources

Male

gender	donation	university	job_field
Male	249	Lally	Engineering
Male	248	Goodredge	Human Resources
Male	247	Barth	Human Resources
Male	247	Muriel	Human Resources
Male	245	Danzey	Engineering
Male	244	Toolan	Product Management
Male	243	Jerisch	Legal
Male	243	Legg	Business Development
Male	240	Dilleway	Accounting
Male	237	Spire	Product Management
Male	234	Reubbens	Accounting
Male	233	Mathewson	Accounting
Male	233	Vicent	Product Management

Male	233	Berdale	Engineering
Male	232	Lohan	Human Resources
Male	230	Giacomozzo	Training
Male	230	Sleeford	Business Development
Male	230	Mattielli	Research and Development
Male	227	Growden	Business Development
Male	226	Wrankmore	Product Management
Male	226	Harriss	Human Resources
Male	223	Coyish	Support
Male	220	Probert	Human Resources
Male	219	Spitell	Business Development
Male	219	Wafer	Product Management
Male	216	Mcimmie	Legal
Male	216	Melendez	Services
Male	215	Kalisz	Human Resources
Male	215	Pantridge	Accounting
Male	213	Dolan	Marketing
Male	213	Swinerd	Services
Male	212	Sydenham	Services
Male	209	Sitlinton	Engineering
Male	206	Heiden	Business Development
Male	205	Jagg	Legal
Male	205	Kleimt	Legal
Male	203	Eisikowitch	Marketing
Male	201	Sugge	Research and Development
Male	200	Burnip	Accounting
Male	200	Lebel	Legal
Male	196	Mitchiner	Human Resources
Male	196	Laffin	Support
Male	196	Prazor	Support
Male	196	Landell	Support
Male	195	Rallin	Business Development
Male	195	Heading	Research and Development
Male	194	Muir	Product Management
Male	193	Robillart	Services
Male	192	Mitton	Marketing

Male	190	Morrallee	Research and Development
Male	189	Muslim	Human Resources
Male	187	Scarratt	Marketing
Male	186	Murr	Support
Male	184	Gisburn	Accounting
Male	184	Hubbins	Business Development
Male	184	Lammiman	Business Development
Male	183	Mordey	Business Development
Male	182	Sucre	Sales
Male	181	Maydwell	Accounting
Male	179	Tulloch	Accounting
Male	178	Ference	Support
Male	178	Smorfit	Product Management
Male	175	Dyos	Legal
Male	175	Goodman	Training
Male	174	Porritt	Training
Male	174	Kesteven	Human Resources
Male	173	Prandy	Sales
Male	173	Chanson	Human Resources
Male	170	Durrand	Research and Development
Male	170	Arr	Legal
Male	169	Leppard	Business Development
Male	167	Daughtrey	Engineering
Male	165	Antognazzi	Services
Male	165	Tibols	Legal
Male	159	Entwhistle	Business Development
Male	155	Feeley	Human Resources
Male	155	Quernel	Business Development
Male	151	Rolph	Product Management
Male	151	Broomhead	Marketing
Male	146	MacShane	Services
Male	144	Castagne	Business Development
Male	143	Trenouth	Services
Male	142	Ivushkin	Accounting
Male	142	Couper	Support
Male	135	Langdale	Training
Male	135	Eckery	Accounting

Male	132	O'Sheilds	Product Management
Male	131	Ronnay	Business Development
Male	131	Esch	Marketing
Male	128	Goldthorpe	Human Resources
Male	128	Ventom	Training
Male	126	Sam	Business Development
Male	123	Moss	Engineering
Male	122	Crystal	Engineering
Male	114	Wawer	Support
Male	114	Huban	Services
Male	113	Cranstoun	Product Management
Male	112	Aimable	Services
Male	111	Gosney	Services
Male	108	Sheerin	Marketing
Male	102	Sipson	Legal
Male	100	Pettersen	Engineering
Male	97	Belbin	Services
Male	96	Yorke	Support
Male	96	Jonuzi	Research and Development
Male	95	Brill	Research and Development
Male	95	Scotter	Product Management
Male	90	Rippingale	Sales
Male	90	Gandrich	Research and Development
Male	89	Morais	Marketing
Male	87	Leve	Business Development
Male	86	Champness	Services
Male	85	O'Lenechan	Human Resources
Male	83	Gorick	Research and Development
Male	83	Mark	Legal
Male	83	O'Doireidh	Support
Male	83	Perris	Product Management
Male	81	Tonna	Human Resources
Male	81	Winchurst	Engineering
Male	81	Alcock	Product Management
Male	78	Angless	Services

Male	76	Kewley	Research and Development
Male	76	Hanes	Support
Male	76	Crinkley	Legal
Male	75	Devon	Human Resources
Male	74	Wintersgill	Engineering
Male	73	Dodds	Engineering
Male	73	Pessold	Sales
Male	73	Burril	Sales
Male	68	Dunnet	Engineering
Male	68	Drain	Accounting
Male	67	Bene	Product Management
Male	67	Glaister	Support
Male	64	Bichard	Accounting
Male	63	Perfect	Sales
Male	63	Amiable	Support
Male	60	Pickrell	Human Resources
Male	59	Worts	Engineering
Male	58	Rexworthy	Sales
Male	58	Kiely	Engineering
Male	56	Mannock	Product Management
Male	55	Beaumont	Training
Male	52	Ivens	Sales
Male	52	Cholerton	Support
Male	51	Blaw	Sales
Male	49	Veare	Sales
Male	46	Tremoille	Services
Male	45	Frankis	Human Resources
Male	42	Halso	Legal
Male	41	Fenge	Engineering
Male	41	Millgate	Marketing
Male	40	Dandison	Legal
Male	39	Caley	Services
Male	39	Howden	Business Development
Male	37	Murison	Accounting
Male	30	Karus	Marketing
Male	28	McSparran	Human Resources
Male	27	Filchagin	Research and Development

Male	25	Benzie	Legal
Male	25	Cayley	Accounting
Male	23	Cranton	Support
Male	19	Kincla	Business Development
Male	17	Poytres	Marketing
Male	17	Rochewell	Training
Male	17	Llewellen	Sales
Male	16	Havers	Business Development
Male	16	Levesley	Training
Male	15	Isaksen	Sales
Male	14	Rozzier	Support
Male	12	Rouchy	Engineering
Male	12	Bonnette	Product Management
Male	11	Schuster	Marketing
Male	10	Currell	Training
Male	6	Marfell	Engineering
Male	6	Franschini	Engineering
Male	5	Eyrl	Engineering

According to the data above, 176 male and 198 female university degree holders donated between $5 and $249. This shows that 374 educated people donate, which means that 37.4% of the total donors donate between $5 and $249.

The following table provides information regarding the number of male and female donors without who contributed between $5 and $249:

Male

gender	donation	university	job_field
Male	242	null	Product Management
Male	242	null	Legal
Male	227	null	Services
Male	221	null	Legal
Male	215	null	Sales
Male	214	null	Human Resources
Male	211	null	Training
Male	211	null	Sales
Male	210	null	Legal
Male	197	null	Engineering
Male	196	null	Business Development
Male	194	null	Training
Male	190	null	Business Development

Male	187	null	Support
Male	186	null	Services
Male	182	null	Research and Development
Male	177	null	Training
Male	172	null	Services
Male	169	null	Support
Male	164	null	Engineering
Male	161	null	Marketing
Male	158	null	Legal
Male	156	null	Support
Male	152	null	Engineering
Male	143	null	Business Development
Male	141	null	Human Resources
Male	137	null	Product Management
Male	133	null	Accounting
Male	130	null	Marketing
Male	117	null	Legal
Male	114	null	Support
Male	112	null	Support
Male	111	null	Accounting
Male	105	null	Training
Male	100	null	Product Management
Male	93	null	Human Resources
Male	81	null	Accounting
Male	80	null	Legal
Male	72	null	Legal
Male	70	null	Accounting
Male	64	null	Research and Development
Male	57	null	Product Management
Male	51	null	Legal
Male	50	null	Accounting
Male	48	null	Sales
Male	47	null	Training
Male	42	null	Engineering
Male	31	null	Support
Male	22	null	Sales
Male	21	null	Sales
Male	19	null	Human Resources
Male	13	null	Engineering
Male	9	null	Support
Male	8	null	Human Resources
Male	6	null	Services

Female

gender	donation	university	job_field
Female	239	null	Product Management
Female	234	null	Business Development
Female	229	null	Product Management
Female	228	null	Legal
Female	220	null	Product Management
Female	218	null	Accounting
Female	217	null	Support
Female	213	null	Training
Female	212	null	Support
Female	208	null	Product Management
Female	205	null	Legal
Female	200	null	Training
Female	199	null	Services
Female	197	null	Training
Female	193	null	Engineering
Female	190	null	Training
Female	186	null	Business Development
Female	182	null	Engineering
Female	176	null	Training
Female	169	null	Human Resources
Female	165	null	Accounting
Female	159	null	Sales
Female	158	null	Engineering
Female	154	null	Legal
Female	154	null	Engineering
Female	153	null	Business Development
Female	152	null	Training
Female	148	null	Business Development
Female	146	null	Product Management
Female	146	null	Product Management
Female	145	null	Training
Female	143	null	Accounting
Female	140	null	Research and Development
Female	135	null	Human Resources
Female	134	null	Services
Female	133	null	Training
Female	126	null	Human Resources
Female	123	null	Training
Female	114	null	Business Development

Female	108	null	Business Development
Female	102	null	Sales
Female	99	null	Human Resources
Female	91	null	Accounting
Female	89	null	Human Resources
Female	87	null	Business Development
Female	77	null	Research and Development
Female	77	null	Marketing
Female	72	null	Human Resources
Female	69	null	Services
Female	69	null	Services
Female	65	null	Research and Development
Female	60	null	Sales
Female	59	null	Services
Female	59	null	Support
Female	58	null	Business Development
Female	56	null	Marketing
Female	51	null	Business Development
Female	46	null	Research and Development
Female	40	null	Human Resources
Female	39	null	Marketing
Female	39	null	Product Management
Female	37	null	Research and Development
Female	36	null	Business Development
Female	33	null	Training
Female	33	null	Services
Female	30	null	Legal
Female	30	null	Research and Development
Female	29	null	Services
Female	26	null	Sales
Female	25	null	Marketing
Female	17	null	Engineering
Female	14	null	Product Management
Female	10	null	Business Development
Female	7	null	Product Management
Female	5	null	Human Resources

According to the information presented above, there were 75 women and 55 men without college degrees who contributed between $5 and $249. This demonstrates that 130 individuals who do not possess a degree from

a university contributed, which indicates that 13.0% of the total donors contributed between $5 and $249.
The following table presents an overview of the job fields that have received less than 80 donors in each job field.

Job field	COUNT (*)
Support	79
Marketing	74
Legal	66

The data presented in the table above reveals that three job fields have less than 80 donors. On the other hand, more charitable awareness training should be provided to people working in this sector of the economy.

The total number of donations made within the LEGAL job field for each donation frequency:

Job field	Donation frequency	COUNT (donation frequency)
LEGAL	Once	22
LEGAL	Weekly	11
LEGAL	Monthly	16
LEGAL	Yearly	17

The results show that people in the LEGAL job field donate only once, and there are fewer people who donate weekly. Hence, people should be encouraged to donate more than once.

The SUM of donations in all the job fields:

job field	SUM (donation)
Legal	17309
Marketing	18255
Sales	19009
Support	19475
Services	19858
Accounting	20504
Training	21721
Engineering	21968
Business Development	22266
Product Management	22798

Research and Development	22862
Human Resources	23060

The table shows that HUMAN RESOURCES job filed has the highest number of donations and LEGAL job field has the lowest number of donations.

Donations that rank among the top ten in the LEGAL job field are as follows:

donation	gender	state	donation_frequency	car	university	job_field
499	Female	Virginia	Yearly	Ford	Sparhawk	Legal
483	Female	Pennsylvania	Monthly	Mazda	null	Legal
468	Male	Oregon	Once	Chevrolet	Gorler	Legal
467	Male	Mississippi	Weekly	null	null	Legal
449	Male	Florida	Weekly	Land Rover	null	Legal
449	Female	Massachusetts	Yearly	Toyota	Markus	Legal
444	Female	California	Once	Toyota	Petticrow	Legal
440	Female	Kansas	Yearly	Chevrolet	Rudolf	Legal
439	Female	Florida	Weekly	Cadillac	Turmel	Legal
428	Female	Kansas	Once	Oldsmobile	Anglish	Legal

According to the data in the table above, most donors who give the most money have university education.

Donations that rank among the least ten in the LEGAL job field are as follows:

donation	gender	state	donation frequency	car	university	job field
25	Male	Alabama	Weekly	Mercury	Benzie	Legal
30	Female	Idaho	Yearly	Cadillac	null	Legal
40	Male	District of Columbia	Monthly	Cadillac	Dandison	Legal
42	Male	Michigan	Once	Chevrolet	Halso	Legal
51	Male	North Carolina	Monthly	Subaru	null	Legal
72	Male	Mississippi	Once	Ford	null	Legal
76	Male	North Carolina	Monthly	Chrysler	Crinkley	Legal
77	Female	North Carolina	Once	Pontiac	Lennox	Legal
80	Male	Ohio	Once	Infiniti	null	Legal
83	Male	Texas	Monthly	GMC	Mark	Legal

According to the data in the table above, 60% of the least number of donors in LEGAL job field have university education.

CONCLUSION

Conclusion:

As a result of conducting research on the datasets EFO_Donation_Data and EFO_Donor_Data, we were able to gain a better understanding of the business challenge faced by Education for ALL regarding how to increase their donations, increase their donors and increase the donation frequency.

The data includes males and females of both sexes, persons of varying shirt sizes, and job fields, as well as a wide range of cars makes and models and educational backgrounds.

I discovered that there are 46 states with fewer than 80 donors, and that donors with university education are more numerous than those without university education among those who donates between $5 and $249.

Based on my examination of the data, I can say that the legal job field has the less donors and the smallest number of donations ($17,309 out of $249,085).

After observing that the legal job field received the fewest donations and donors, I decided to conduct research in that area. When I investigated the top ten donors in the legal field, I discovered that the majority are female and the vast majority (70%) university education. Then I looked into the least ten donors in the legal field and discovered that they are overwhelmingly male and comprise 60% of people with university education.

In conclusion, the datasets should include more information, like job hierarchy and years of experience, instead of the movie genre and shirt sizes.

We need to figure out how to get the word out to more men in the legal field and those who do not have a university degree about the Education for All charity and how their donations can help a lot of individuals. In addition, by demonstrating the impact of past donations, we can inspire current donors to increase their support.