

# Data Analysis Portfolio:SQL

PREPARE BY: HABIB



## **Professional Background:**

I am a graduate of Obafemi Awolowo University from the department of International-Relations, human resource professional certified and license by Chattered Institute of Personnel Management of Nigeria and also, health and safety officer with International general certification in occupational Health and Safety under the National Examination Board in Occupational Safety and Health United Kingdom.

I have been in the managerial corridor over the years in the financial sector, managing numerous employees, keeping and managing data by making use of Excel and google sheet in an organization to identify possible problems, make future insight and decisions.

Given my skills and experience with data management using Microsoft excel, google sheet, and SQL has increased my desire to further acquire more knowledge in data analysis in order to have in-depth knowledge of big data and how to solve numerous problems with it.

## TABLE OF CONTENT

Professional Background-----	1
Table of Contents-----	2
Introduction (project background & the business problems) -----	3
Root cause analysis process-----	4
Insight from dataset (SQL Code) -----	5
Tableau visualization of insight-----	6
Findings and Recommendations-----	8
Conclusion-----	9

## Introduction (project background & business problems)

The business problems is difficulty is getting enough fund raising for their charity and educational projects

The project mission is to present an explanatory data on donor insights and donation rates for a charity and education organization, and proffer strategies within two weeks with visualization to achieve the following objectives.

- Increase the number of donors in database
- Increase the donation frequency of donor
- Increase the value of donations in dataset

Two data set was provided one of which is Donation\_data and second one was Donor\_data.

## Root cause analysis process

In order to find solutions to the business problems highlighted in chapter three (3), the organization must search for more donors, who can donate regularly and increase the value of their donation.

It was needed to ask some questions in order to help identify the root cause of the problem and how to achieve the solution.

- Which of the gender has more daily donation in total
- Which of the gender has more weekly donation in total
- Which of the gender has more monthly donation in total
- Which of the gender has more yearly donation in total
- Is amount of donation and frequency base on gender

These are the five questions that will help us have deeper understanding of the problems, insight and recommends possible solutions.

## Insight from dataset (SQL Code)

This SQL code is to find all the questions highlighted in the root cause analysis.

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

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

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

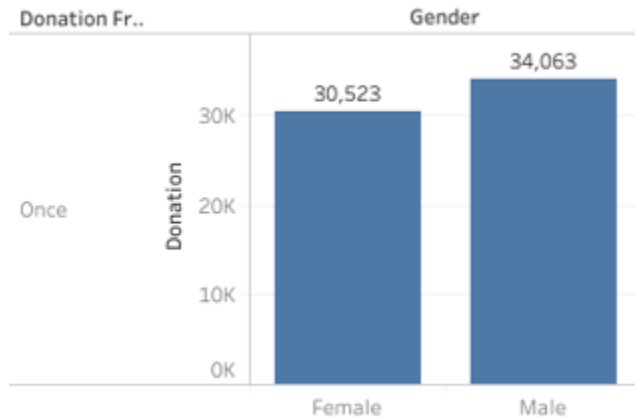
```
SELECT Donation_Data.gender, Donation_Data.donation, Donor_Data2.donation_frequency FROM Donation_Data JOIN Donor_Data2 ON Donation_Data.id = Donor_Data2.id WHERE donation_frequency = 'Yearly';
```

```
SELECT SUM(donation) FROM Donation_Data WHERE gender = 'Female';
```

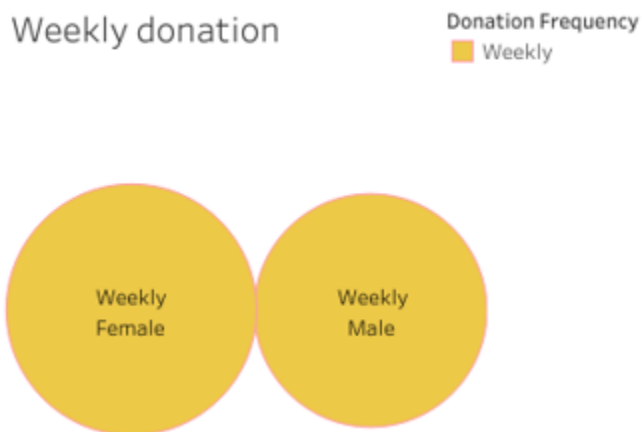
```
SELECT SUM(donation) FROM Donation_Data WHERE gender = 'Male';
```

## Tableau visualization of insight

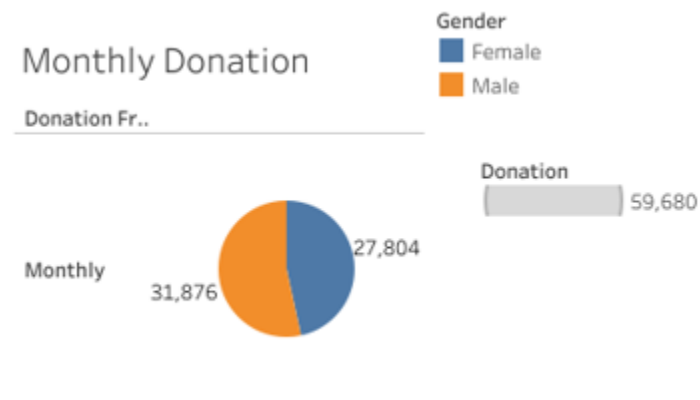
The tableau visualization below shown gender that has the highest donations daily.  
Donation at Once



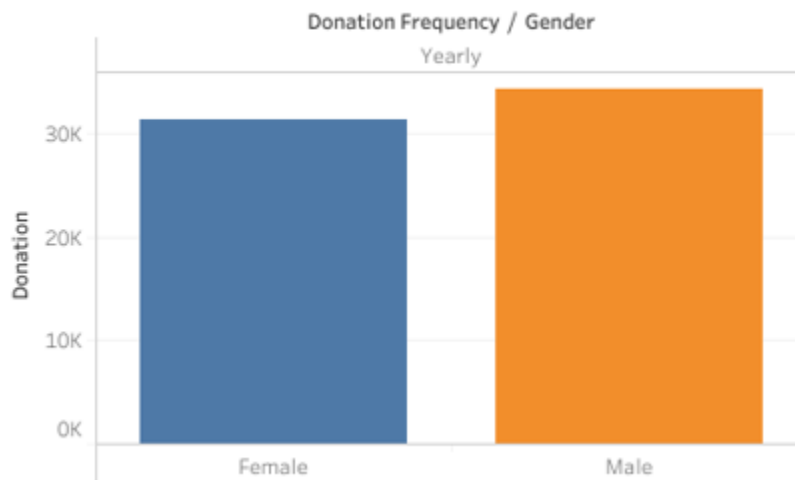
The second visualization shown gender with highest donation weekly.



The third visualization also shown gender with highest donation monthly.

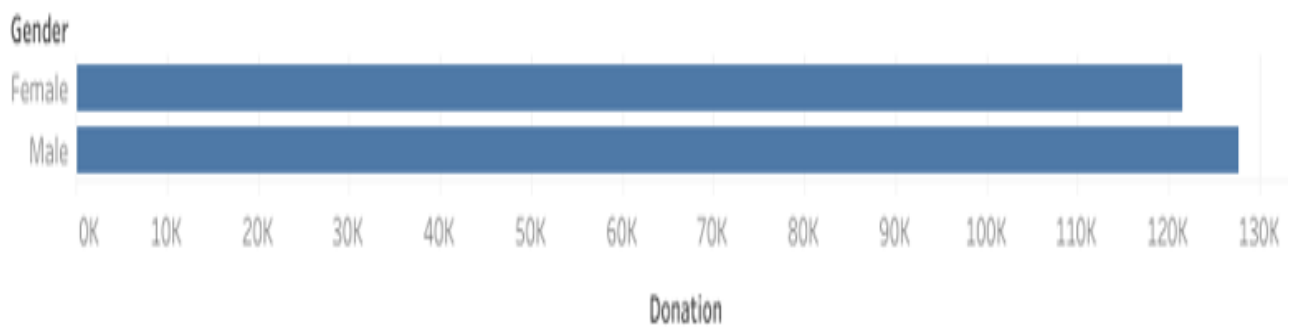


The fourth visualization shows gender with highest donation yearly.



The fifth visualization shows whether gender determines highest donation.

Gender donation.





## Findings and Recommendations

- Male gender donated more on daily
- Female gender donated more on weekly
- Male gender donated more monthly
- Male gender donated more yearly
- Male gender has the highest amount of donation.

I believe more attention should be shifted to male gender in order to bring them onboard for have more and meaningful donation.

Attractive measure should be introduce to attract Male gender that will boost the donation of the organization.

## Conclusion

The two data set has been analyzed in order to find solution to the donation revenue problems of the charity organization.

SQL Code and Tableau visualization has been used to analyzed and visualized the insight found in the two datasets.

It has been identified that Male gender has more capacity to donate more than the Female gender.

It has been recommended that more Male gender should be attracted in order to have valuable donation in the organization.

Hence valuable attractive measure has to be put in place to achieve the recommendations.