DATA ANALYTICS ASSESSMENT

for World Food Program USA

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The dataset provided lists various donors and their trends about donating to the WFP. Studying such real dataset is challenging as well as interesting at the same time.

The methodologies used to study and analyze this data set are:

1. SQL
2. Microsoft Power BI

Questions:

1. In **May 2022**, how many unique **Core**, **Mid-Level**, and **Major** donors provided active monthly gifts?

Using SQL:

```
select Account_type, count(distinct Donor_Id) as Count
from Active_Monthly_Gifts
where year(donation_date) = 2022 and month(donation_date) = 05
group by Account_type
```

100 %

Results | Messages

	Account_type	Count
1	Core	3540
2	Major	5
3	Mid-Level	211

From the above result, in May 2022:

-Majority of the donors belonged to the Core Account type followed by the Mid-Level Account type.

-The Major account type had least number of donors.

-With the vast difference in donor count, we can assume that maximum donation amount was also received from the Core Account type donors.

2. In the year **2021**, how much monthly revenue, on average, did active monthly gifts account for?

Using SQL:

```
select ROUND(SUM(donation_amount)/12 , 2) as Average_Monthly_Revenue
from Active_Monthly_Gifts
where year(donation_date) = 2021
```

100 %

Results | Messages

	Average_Monthly_Revenue
1	97975.63

-In the year 2021, Active monthly gifts accounted for **$97,975.63** on an average every month.

3. In **months**, what is the average length of time donors with active monthly gifts remain active? Assume no active monthly gifts were received prior to January 2021.

Using SQL:

```
with cte as (
select
distinct donor_id, count(donation_amount) as tmc,  month(Donation_date) as months
from Active_Monthly_Gifts
group by Donor_Id, month(Donation_date)
)
select ROUND(CAST(SUM(case when tmc = 0 then 0 else 1 End) as float)/count( distinct donor_id),2) as total
from cte
```

0 %

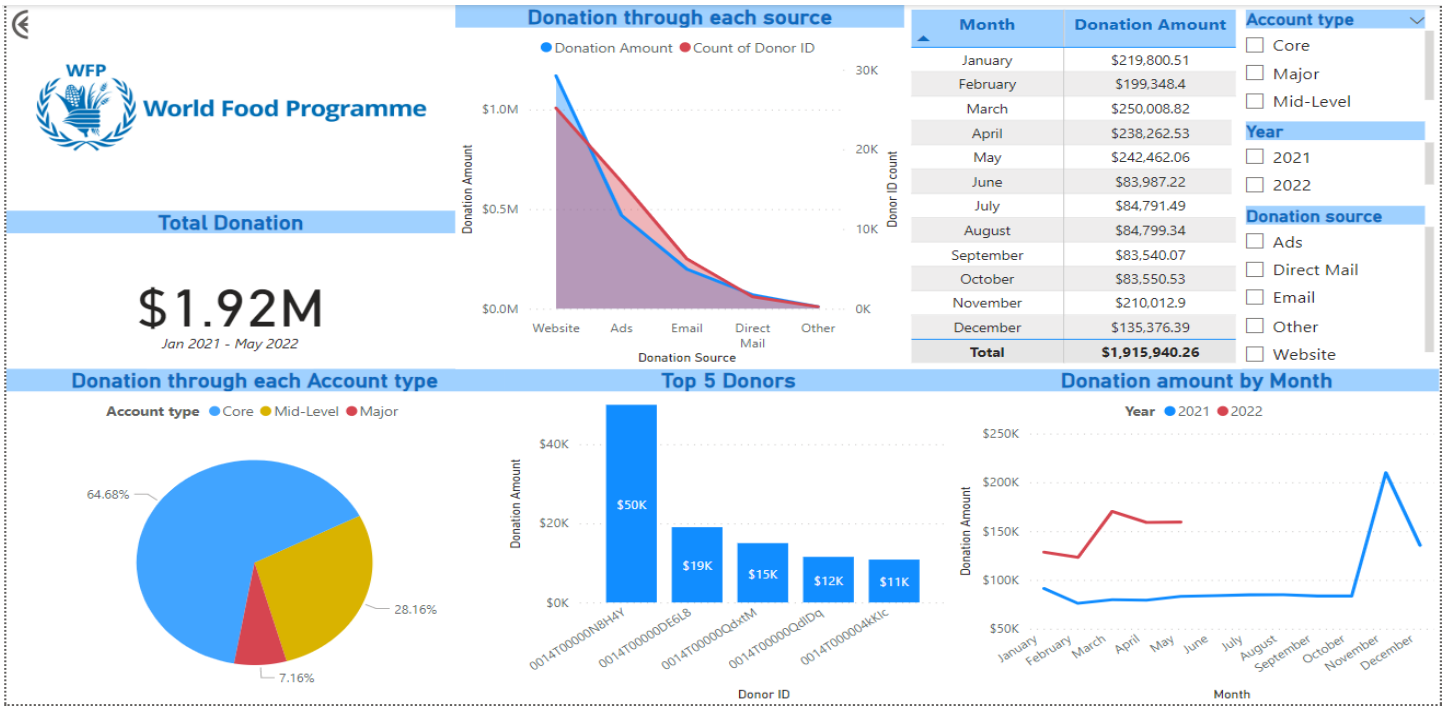
Results | Messages

	total
	6.93

-As per the above result, active monthly gifts donors were active on an average for **6.93 months** in the duration of Jan 2021-May 2022.

4. Please provide any additional analysis, visualizations, or commentary that helps tell a story about the donors and their journey.

Using PowerBI:



-A total of $1.92 million was received as donations in the time span from Jan2021–May2022.

-We have the list of Top 5 donors with the topmost donor contributing a total of $50K to active monthly gifts.

-There was a boost in the donation amount after October 2021 and quite good donations were received.

-The month of November 2021 is a very crucial month where the donations were at the peak among all the months.

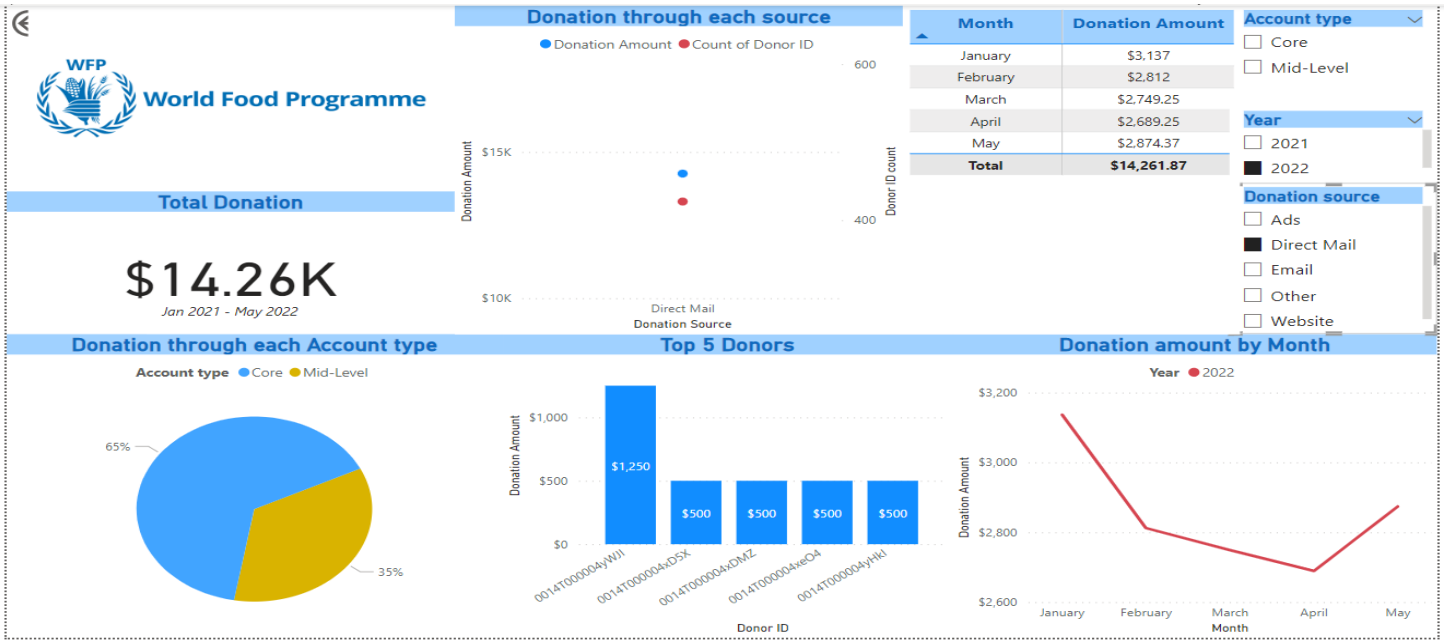
-We can also conclude that we are targeting donors through Websites quite well and receiving good returns. Donations can be increased by focusing on marketing through other sources like Ads, Email, Direct Mail etc.

-As per the dataset, there are some users who have contributed just once and then cancelled their subscription. We can target such users through reminders, emails etc. and try to convert them back as active users. Some of such users are highlighted below who contributed only once in 2021:

Row Labels	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
0014T000004xB65	1	0	0	0	0	0	0	0	0	0	0	0	1
0014T000004xCyH	0	0	0	0	0	0	0	0	0	0	0	1	1
0014T000004kJvf	0	1	0	0	0	0	0	0	0	0	0	0	1
0014T000004xBBY	0	0	0	0	0	0	0	0	0	0	0	1	1
0014T000004kHo0	1	0	0	0	0	0	0	0	0	0	0	0	1
0014T000004xCdh	1	0	0	0	0	0	0	0	0	0	0	0	1
0014T000004xad9	0	0	0	0	0	0	0	0	0	0	0	1	1
0014T000004xCo1	1	0	0	0	0	0	0	0	0	0	0	0	1
0014T000004x2pN	0	1	0	0	0	0	0	0	0	0	0	0	1
0014T000004kH53	0	0	0	0	0	0	0	0	0	0	0	1	1
0014T000004x5NY	0	0	0	1	0	0	0	0	0	0	0	0	1
0014T000004kIpc	0	0	1	0	0	0	0	0	0	0	0	0	1
0014T000004kIh9	1	0	0	0	0	0	0	0	0	0	0	0	1
0014T000004xCBG	0	1	0	0	0	0	0	0	0	0	0	0	1

The attached Power BI file contains different slicers to filter data as per Account type, Year and Donation source. We can use a combination of filters to see reports as per our requirements. The report is interactive and shows results based on the filters chosen by us.

Example: Following snapshot shows result for the year 2022 and the donation received through Direct Mail only.



Here is the link to the Power BI dashboard:

https://app.powerbi.com/groups/me/reports/882d3610-11b6-4176-8d41-548fda461479/ReportSection