

### Understanding MYGERD and Donors Using Data Analysis

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## Summary

Mygerd, the official giving platform for the Great Ethiopian renaissance dam was launched on July 22, 2021. The platform enables Ethiopians around the globe to support one of the biggest projects in the country. Since the launch of the platform a number of donors have left their fingerprint. In this report we analyse different behaviours of transactions, donors, people's feeling about Mygerd, GERD and answer various interesting questions. After our analysis, on average, there are around \$1,500 USD donations daily, 61% of the tweets about GERD are neutral, 69% of the donation comes from people in the US. The report covers a deep analysis on both transactions and people's feeling, from the most widely used social media.

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## Chapter 1

### Introduction

Since the Ethiopian Electric Power launched mygerd.com, the official giving platform to collect gifts from all over the world, for the Great Ethiopian Renaissance Dam, more than \$233,926 USD has been collected.

In this report, we walk through a summary of donors' behaviour, transactions' behaviour, and people's reflection on social media about the donation platform and GERD in general.

The next sections of the report are the analysis which will answer most of the above questions. Finally we will conclude with the general findings.

### Chapter 2

## Data Analysis

Data analysis is a process of inspecting, cleansing, transforming and modelling data with the goal of discovering useful information, informing conclusions and supporting decision-making. The data used for this report ranges from the launch date of the platform, July 22/2021, to October 16/2021. The analysis includes transaction behaviours to reactions on the donation platform and GERD on social media.

#### 2.1 Donation Behaviour

#### 2.1.1 How many countries are reached by this platform?

People who donate to GERD live in different corners of the world. In this case, people from 46 different countries have made successful transactions. Those countries include:-

AustraliaEstoniaHungary

AustriaEthiopiaIreland

• Bahrain • Finland • Israel

• Belgium • France • Italy

CanadaGeorgiaJapan

Czech Republic
Germany
Kenya

Denmark
Guinea
Republic of Korea

• Kuwait	• Portugal	Switzerland
• Mali	• Qatar	Thailand
• Mozambique	• Rwanda	
• Namibia	• Saudi Arabia	• Tunisia
• Netherlands	• South Africa	• Uganda
• New Zealand	• Spain	• United Arab Emirates
• Nigeria	• Sudan	
• Norway	• Swaziland	• United Kingdom
• Poland	• Sweden	• United States

#### 2.1.2 Rank of countries by donor participation

As mentioned in Section 2.1.1, people from 46 different countries have donated on mygerd and the top 10 countries by the recurrent gifts are shown in 2.1.

	Counts	Percentage(%)
United States	1190	69.226294
Canada	90	5.235602
United Kingdom	73	4.246655
Germany	48	2.792321
Ethiopia	46	2.675974
Australia	42	2.443281
Sweden	33	1.919721
Norway	26	1.512507
Switzerland	22	1.279814
Italy	20	1.163467

Figure 2.1: Top 10 countries with percentage of people participating.

#### 2.1.3 Rank of countries based on the total amount of donation contributed

This rank is based on the total amount of money the people living in different countries have contributed. Since 69% of the donors are from the US, we expect a huge portion of the total amount to be from there. As anticipated, people in the US contributed \$182,866 which is approximately 78% of the total donation to date. Other top countries by donation

amount rank are Canada \$9436, UK \$5970, Germany \$5193, Australia \$5895, Ethiopia \$4090, Sweden, Norway, UAE, Switzerland, Italy and so on.

#### 2.1.4 What are the common gift amounts made by donors?

Donors are making their donations in different amounts. Figure 2.2 shows the most common donation amounts.

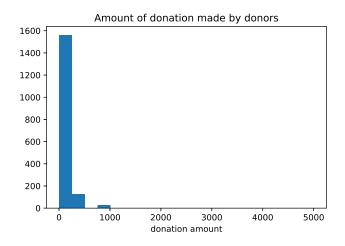


Figure 2.2: Distribution of donation amounts

As we can see from the figure the most common amount of donation is below \$200, mostly around \$100. But there are a number of \$500 and \$1000 donations as well.

#### 2.1.5 What is the highest amount of donation made?

Here we look at the amount of donations made by individuals. In this context we mean the cumulative amount by an individual: if the individual contributed five times, we added the five transaction amounts. Accordingly, The 3 highest donations by individuals are \$10,000, \$4,000 and \$2,100 respectively, with many individuals maxing at \$1,000 US dollars. There are some donations as well with \$5, which is the lowest amount of donation that could be made through he platform.

We also observed the frequency of donations by individual donors. Individual accounts have visited the platform and are leaving their prints on GERD. A single account have made successful donations with 12 times being the most frequent one. There are other individuals who have made successful transactions 10 times and 7 times as well.

#### 2.1.6 What are the most commonly used cards to make the donations?

There are different kinds of cards used to make donations including VISA card, MasterCard, Dankort, Discover and others. As we can see from Figure 2.3 the most frequently used cards are VISA and MasterCard.

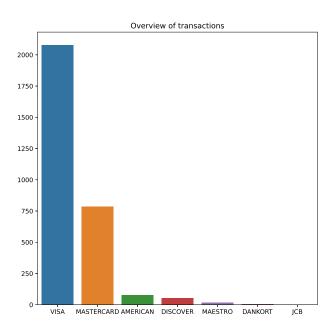


Figure 2.3: Cards used by donors

#### 2.1.7 Number of campaigns based on continents?

People from five continents have participated in the donation. There are campaigns created from each of them so people can donate on their continent's campaigns.

Table 2.1: This table shows the number of existing campaigns in each continent.

ID	Continent	Number of campaigns
1	North America	19
2	Europe	8
3	Africa	9
4	Oceania	2
5	Asia	1

#### 2.1.8 What is the distribution of campaign owners?

There are 63 campaigns in total. Of these, 49 have started getting successful donations. In the donation platform, campaigns were started to create a sense of competition and generate donations. So far, both organisations and individuals have started campaigns and are getting donations as well. Here, we look at the distribution of campaign owners.

Table 2.2: This table shows the distribution of campaign owners.

ID	Owner type	Number of campaigns
1	Organisations	10
2 Individuals		39

#### 2.1.9 Which campaigns attract most people?

Out of the 63 campaigns created. 49 of then have started generating donations. The top 5 campaigns where people are participating commonly are: -

Table 2.3: Top five campaigns with the number of people participating in them

Campaign Name	Number of participants	Percentage
GERD Initiative	1054	61.3%
MyDam	171	9.9%
* ኢትዮጵያዊነታችን ለዓባያችን* *ዓባያችን ለስልጣኔያችን*	151	8.7%
"ገንዘባችን ለግድባችን!" በኤልያስ <i>መ</i> ሰረት	58	3.3%
Ethio Metro Community	47	2.7%

#### 2.1.10 Which campaigns have the highest total amount of donation?

As explained in the above questions, donations are created by organisations or individuals to motivate donors and achieve the created campaign's goal. Here, we look at the top five campaigns that have collected a high amount of total donation since they were started. Table 2.4 shows the top five campaigns created by organisations.

Table 2.4: Top five campaigns with high amount of total donation created by organisations

Campaign Name	Total amount of donation	Creator
GERD Initiative	145,964	Ethiopian Electric Power (EEP)
MyDam	24,535	APUE
DFW GERD Fundraising TASKFOR	15,480	DFW GERD Taskforce
* ኢትዮጵያዊነታችን ለዓባያችን* *ዓባያችን ለስልጣኔያችን*	11,338	Unity For Ethiopia
FRIENDS OF ETHIOPIA FOR GRAND ETHIOPIAN RENAIS	6,665	Asres Woldemaryam

Table 2.5: Top five campaigns with high amount of total donation created by individuals

Campaign Name	Total amount of donation	Creator
"ገንዘባችን ለግድባችን!"	5,130	Elias Meseret Taye
Put Your Fingerprint to Finish the	2,300	Alem Gebriel
እኔ ለ <i>አገሬ ምን አደረግ</i> ኩሳት?	1,330	SOFI
አለን ለግድባችን We are for GERD	1,241	Ashruka
LightUp Ethiopia	1,234	BT

#### 2.1.11 What does the daily total donation behavior look like?

In the 84 days since the launch of mygerd, donations have been flowing in everyday. Figure 2.4 shows a summary of the top 20 days with the highest amount of donation. To get the daily average donation, we exclude the first five days from the launch date where there was a high amount of daily donations. On average, \$1,500 USD donations are made each day.

	donation	sum_cols
date		
2021-07-25	40483	40483
2021-07-26	25530	25530
2021-07-24	19391	19391
2021-07-27	12362	12362
2021-07-28	11035	11035
2021-10-15	10300	10300
2021-07-29	8850	8850
2021-08-01	6625	6625
2021-07-30	6341	6341
2021-07-31	4925	4925
2021-09-11	3850	3850
2021-08-03	3798	3798
2021-08-19	3660	3660
2021-08-10	3555	3555
2021-08-02	3415	3415
2021-08-15	3360	3360
2021-08-04	3128	3128
2021-09-04	2760	2760
2021-08-14	2737	2737
2021-08-09	2460	2460

Figure 2.4: Total daily donation behavior

#### 2.1.12 What is the average number of people donating each day?

The number of donors changes every day. There were a huge number of donors on the first three days after mygerd's launch. Of the total 84 days, we look at the average number of donors in the last 74 days (August 01 - October 15). As the first 10 days of the launch had a huge number of donors, it may lead us to a false average. The average number of donors who make successful daily transactions are 10.

#### 2.2 People's feeling on Mygerd.com and GERD

#### 2.2.1 What is people's perception of the donation site?

Most of the the community share their feelings on social media <sup>1</sup>. The most popular social media used to express feelings, especially by the diaspora community, is Twitter. In this case, we analysed tweets about this donation platform, mygerd, and GERD in general.

Technically, this is called Sentiment Analysis. Figure 2.5 shows that, 38.5% of the tweets are positive, 53.8% are neutral and the rest 7.7% are negative.

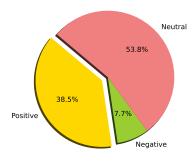


Figure 2.5: Sentiment analysis of tweets on Mygerd.com

We have made a thorough analysis of live tweets on the donation platform and GERD in general. The analysis could be found at www.ai.chapa.co

# 2.2.2 What are the most common words used when talking about the donation platform?

Here we look at the most commonly used words when talking about Mygerd. Figure 2.6 shows that words such as Ethiopian, unity-for-Ethiopia, donate, finish and so on are used most frequently.

<sup>&</sup>lt;sup>1</sup>Interactive demo is available at www.ai.chapa.co/mygerd

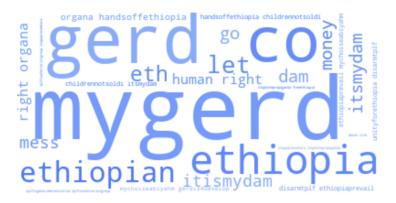


Figure 2.6: Most frequent words used to express feelings about Mygerd.com

# 2.2.3 What languages have been used to express feelings about the donation platform?

The most widely used language to express feelings about the donation platform is English. Which contains 99% of the total reviews. Other used languages make up only 1%.

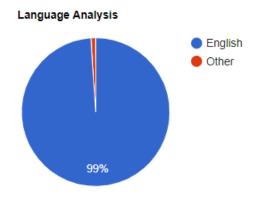


Figure 2.7: Languages used to express feelings on Mygerd.com

# 2.2.4 What is people's perception about GERD, after the donation platform is released?

There are a number of tweets daily about the great Ethiopian renaissance dam. Figure 2.8 shows that, 25.4% of the total reviews are positive, 61.3% are neutral and the rest 13.3% are negative.

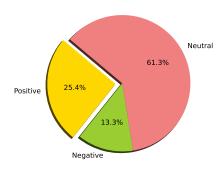


Figure 2.8: Sentiment analysis of tweets on GERD

2.2.5 What are the most common words used when talking about GERD in general after the donation platform is released?

People use various kinds of words when talking about GERD. Here we look at the most frequently used words with Ethiopian, GERD, Egypt, Nile and Sudan being the most common.

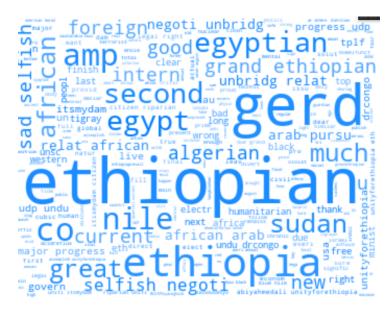


Figure 2.9: Most frequent words used to express feelings about GERD

**2.2.6** What languages have been used to express feelings about GERD after the donation platform is released?

When people write about GERD on Twitter, the most popular social media, the widely used language is English which contains 85% of the tweets. The remaining 15% are in Amharic.

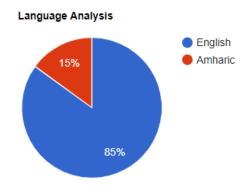


Figure 2.10: Language used when writing about GERD.

## Chapter 3

## Conclusion

In this short report we have analyzed transactions and donors patterns as well as people's reaction about the donation platform on social medias. We tried to answer most of the questions that could be asked regarding the donation platform.

This report is prepared based on the dataset from the launch of the website up to October 16<sup>th</sup>. We will provide more recent reports every 10 weeks<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup>For collaboration send us an email: chair@chapa.co