## DATA ANALYSIS FOR TALKATIV

Hello, my name is Glory Agunwa and today I will be presenting to you the results of the Data Analysis of the Designers' WhatsApp group chat for Talkativ.

#### **AGENDA**

- 1. Project Recap
- 2. Problem
- 3. The Analyst
- 4. The Process
- 5. Insights
- 6. Summary

Today's agenda will be as follows:

- 1. We will recap the overall project to give a high-level understanding of the problem I will be tackling and the specific requirements.
- 2. We will dive into the specific problem that the I, the Data Analyst have been focusing on and will give some background as to why this is such a big problem.
- 3. After the introducing the problem, I will give a brief introduction of myself who tackled this task.
- 4. I will then go over the high-level process I followed to complete this task, so that you have complete clarity on how I tackle these kinds of tasks.
- 5. Finally, I will go over all the important results and I will present them as series of insights and visualizations from my analysis.

To wrap up, I will summarize and open for any questions.

### **PROJECT RECAP**

I, Glory Agunwa have embarked on a data analysis project task for Talkativ, aligned with one of the biggest challenges you are facing.

Talkativ has built an organic community of designers on WhatsApp and is looking to improve their content creation in line with the interest of their online community. I am here to help you manage this and guide you in the right direction.

I will be conducting an analysis on your WhatsApp chat data to find insights regarding your needs which are:

- 1. Finding the topics that are of interest to your community and,
- 2. Identifying the champions of the within your community.

#### **PROBLEM**

Talkativ wants to uncover the following insights from the data gotten from their online community:

- 1. Topics that are of interest in their online community
- 2. The champions within their online community.

To give a background of the amount of data involved:

- There is a total of 4,649 words generated by community members
- A total of 375 members in the community
- A total of 590 texting times.

In this day and time, community is key but how do you capitalize on it when there is so much of unstructured data?

It's not just about having a large community. The real value is in understanding their needs and responding to them thereby providing a more personalized and enjoyable experience for each community member.

And this is where my data analytics expertise comes in. With the right insight I have uncovered from this task, you can create a content marketing strategy and as well identify the champions within your online community.

## THE DATA ANALYST



Hello there,

Skills: SQL, Google Analytics (in view), R (in view), Visualization, Blogging, Data Entry, Data Analysis, Data Management, Data Cleaning and Modeling, Statistics, Python(beginner), Data Exploration, ETL, Google sheet, Team Collaboration, Attention to detail, Ability to work remotely, Critical thinking, Problem-solving, Analytical thinking, and Effective communication.

Tools: Microsoft Excel, Power Query, Tableau, MS Word, MS PowerPoint, MS Outlook, Google Suite.

Check out my portfolio blog @ <a href="https://gloryagunwa.blogspot.com/">https://gloryagunwa.blogspot.com/</a> and

LinkedIn profile @ https://www.linkedin.com/in/glory-agunwa-453760233/

I am a focus-driven data analyst. Passionate about helping people and organizations make well-informed decisions and eager to contribute to team success through hard work, attention to detail, and excellent organizational skills while staying motivated to learn, grow and excel in the industry. I believe that tremendous organizational improvement can be achieved when quality decisions are drawn out of properly wrangled and analyzed datasets that address the situation. I am vast in the use of Excel, SQL, and Tableau for Data Modeling, Analysis, and Visualization. I am excited about channeling my data analysis skills to helping with making sense of data and helping people and organizations achieve their desired results. Are you working on something exciting? I would love to hear about it and connect with you. I can also be reached at oluomachiagunwa@gmail.com. I will be happy to hear from you.

#### THE PROCESS

So how did I tackle this problem?

Well, I approached it in five steps:

- 1. Understanding business needs: I made sure that I knew what the business wanted me to do with their data first before starting out because the key to success on any data project is to understand the business problem.
- 2. Data Extraction: after understudying the business problem, I exported data from the Designers' WhatsApp chat (their online community).
- 3. Data Processing: after extracting the raw data, I needed to process it to fit into a data frame that can answer the business questions and produce insights. I was able to achieve this using Microsoft Excel Power Query where I created four tables from the raw data, cleaned the data and saved the workbook.
- 4. Creating relationship model and visuals: with my new data sets, I used my analytical skills to uncover insights from the datasets and produce visualizations to describe the insights. These visuals were created using Tableau where I created a relationship in data model from my four data tables.
- 5. And finally, I used these insights to unlock business decisions and to make recommendations on next steps.

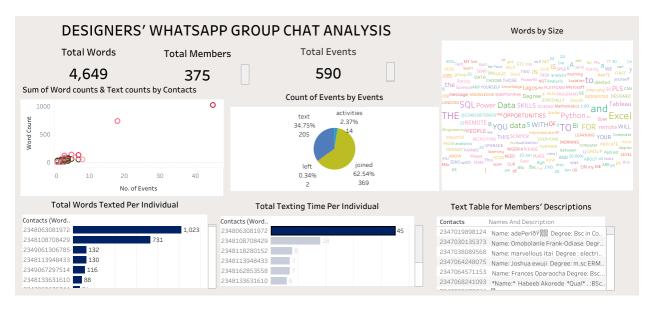
#### INSIGHTS AND VISUALIZATIONS

https://public.tableau.com/views/DesignersWhatsappGroupChatAnalysis/DesignerswhatsappDashboard?:language=en-US&:display count=n&:origin=viz share link

When managing a group, it's important to understand how the members are interacting and participating. A dashboard can provide valuable insights into group activity, such as the total number of members, total words generated, and total texting times. In this presentation, we'll take a closer look at some of the visualizations and information that can be found on the analysis dashboard, and discuss how this data can be used to make decisions about community rewards and content creation.

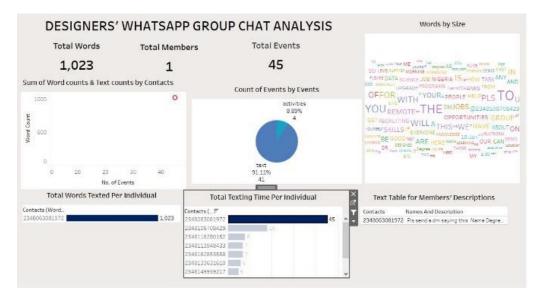
The dashboard includes a bar chart that shows the top 10 active members, along with their total word count. This information can be used to identify who the most active members of the group are, and how much they are contributing to the conversation. It also includes a text table, pie chart and a word cloud visualization.

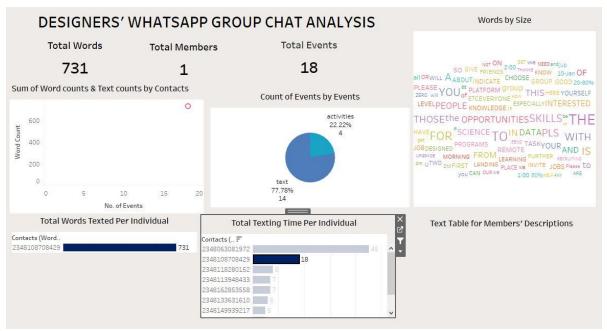
Next to the bar chart, there is a chart that displays the total texting times of the top 10 active members. This can give an idea of how frequently members are participating in the group. It's also worth noting that the highest texting time is 45 while the least is 4. This can be used to understand the activity level of the group members.



Another important visualization on the dashboard is the pie chart that displays the percentages and counts of different events in the group. This chart shows that the event "joined" has the most count of 369, while "left" has the least count of 2. This can be used to understand how stable the group's membership is over time and also points to the fact that the group was newly created (joined event bearing a greater percentage of the total events). Additionally, this chart also shows that "texting" has the count of 205 and "activities" which includes adding or removing a group participant, restricting the members from texting has the count of 14. "Activities" is only for the group administrators or coordinators.

The scatterplot on the dashboard also provides useful information. It shows two outliers for the sum of word count (731 & 1023). These outliers are the group administrators, they have the most word counts because they happen to be the only members texting when other group members are restricted from texting. This information can be used to understand how the group's administrators are contributing to the conversation.





From the visualizations on the dashboard, it's clear that the top two active members are the group administrators since they are the only group members who can partake in the event "activity". For community rewards or recognition, you can choose any 8 of the top active members (if you group coordinators are being paid and not your target audience).

| Contacts                       | A     | Names And Description                  |
|--------------------------------|-------|--|
| 23481403                       | 43019 | Name Rafiu Rukayat Bukola Degree :     |
| 23481442                       | 16099 | Name:Olugbemi Timothy Degree:Soil s    |
| 23481457                       | 65539 | Name: Peter Alaba Degree: Pure and A   |
| 23481466                       | 40444 | Name: Kehinde Bola-Dennis Degree: C    |
| 23481499                       | 39217 | Name: Gbemisola Busari Degree: B.Tec   |
| 23481630                       | 04109 | Name: Olaoluwa Idowu Degree: Bsc, M    |
| 23481642                       | 32275 | Name: Abdullateef Degree: Business A   |
| 23481651                       | 54436 | Name: Odefunke O. Degree: Industrial   |
| 2348167472084                  |       | Name: Omotosho Oladele Degree: B. T    |
| 23481680                       | 79172 | <b></b>                                |
| 23481704                       | 55308 | Name:Oluwafemi Adedeji Degree:Ban      |
| 23481783                       | 35383 | Name: Christopher Ajewole Degree: B    |
| 23481807                       | 63152 | Good day house Name; Aderoju Degre     |
| 23481813                       | 27160 | Name: Abdullahi Mujaheed Aliyu Degr    |
| 23490207                       | 03860 | Name: Dominique Kishatingunimye •••    |
| 23490212                       | 37295 | Name: Akinlade Tunde Degree: B.sc St., |
| 23490319                       | 61554 | Name: Oseni Saheed A. Degree: Bs.c Ec  |
| 23490384                       | 00903 | Name: Chukwudi Jeffrey Field: Data A   |
| 23490502                       | 33827 | Name: Ibezim Matthew Degree: Bsc Fi    |
| 23490613                       | 06785 | Name: Agunwa Glory Oluomachi Degre     |
| 23490635                       | 09134 | Name: Awosoro Sunday Degree: comp      |
| 2349064470706<br>2349066238378 |       | Name: ishola okuwaseun Degree: indu    |
|                                |       |  |

Additionally, the dashboard also includes a text table containing information about the group members. This can help align content creation with the interests of the group's members.

#### Words by Size



Finally, the word count by size on the dashboard shows the most discussed words in the group. Words like SQL, PYTHON, Power BI, computer, tableau, BI, Excel, Skills, remote, visualization, learning, data, analytics shows that the group's primary focus is on data and related topics. This information can be used to create content that aligns with the group's interests and keeps the conversation relevant.

## **CONCLUSION**

In conclusion, a group dashboard can provide valuable insights into group activity and participation. By analyzing the data on the dashboard, group managers can make more informed decisions about community rewards and content creation. Additionally, this data can be used to understand the group's interests and keep the conversation relevant.

From the word cloud, some potential topics that could be discussed in a group that focuses on SQL, data, BI, Excel, Python, visualization, Tableau, analytics, science, Power BI, computer, remote, skills, and learning include:

- 1. Techniques for querying and analyzing large datasets using SQL
- 2. Best practices for data visualization and creating effective dashboards in Tableau or Power BI
- 3. Strategies for using Excel or Python for data cleaning and preprocessing
- 4. Tips for using advanced analytics techniques such as machine learning to gain insights from data
- 5. Ways to improve remote work skills and productivity
- 6. Discussion of the latest trends and developments in the field of data science and analytics.
- 7. How to use computer and software tools to collect and analyze data.
- 8. Sharing examples of interesting projects or case studies related to data analysis and visualization.
- 9. Techniques for self-learning and skills development.
- 10. Sharing resources and tutorials for learning new data analysis tools and technologies.

# **THANK YOU!**