Data Analysis Report: Engagement Time and Views for Different Post Categories

Introduction:

I have analyzed the engagement time and views data for different post types on the website. The data was collected from Google Analytics and uploaded to the site's database for analysis. The goal of this analysis is to understand how different post categories perform in terms of engagement time and views. This report presents the findings and insights gained from the analysis.

Methodology:

A PHP script was developed to leverage chatGPT's API to classify the posts. The data was obtained by running an SQL query that joined the WordPress posts table (wp_posts), the Google Analytics data table (GoogleData), and the WordPress post meta table (wp_postmeta). The SQL query filtered the data based on the matching post names and post IDs, and retrieved relevant columns such as post title, post date, average engagement time, views, and the GPT classification stored in the wp_postmeta table.

The resulting dataset was exported as a CSV file and imported into a Python environment for further analysis and visualization. A Python script was developed to plot scatter plots for each post category, with engagement time on the x-axis and views on the y-axis.

Categories and their descriptions (Provided by Allison):

HARD NEWS
- Acquisitions | "[COMPANY NAME] has acquired [COMPANY NAME]"
- Legislation changes, municipal law
- Right to Repair
- Headline includes "BREAKING NEWS" (not always)

SOFT NEWS
- OEM Procedure Updates
- [COMPANY] raises $__ for [CHARITY]
- People on the Move
- Recalls
- "[HEADLINE], says [COMPANY/PERSON]"
- Report analyses; *…report says/reads the report..etc*
- Single quotes in the headline
- OEM/automaker news
- NHTSA, safety, crash tests
- Tuesday Ticker, EV/AV Report, Welcomes of the Week | *Headlines used in weekly stories*

WHIMSY

- Can You Believe This | *Weekly Friday video*
- Usually tagged *#whimsy* on the back-end
- More of a goofy tone, article on the shorter side

PRODUCT
- Describes a singular product
- Product or logo in the featured photo
- Also featured on buyersguide.collisionrepairmag.com

PROFILE
- Any article focusing on one person/company
- Q&A format (not always)
- Discuss operations or tells a story of an individual's career
- Executive Vision, Shop Profile, Company Profile, Profile

SURVEY
- Anything with the main headline "Stand Up Speak Out"
- Some (newer) will have a Google Form attached; old ones linked to Constant Contact

COLUMNS
- Publisher's Page
- By [ANY NAME] *aside from: Max Reid/Allison Rogers/Kate Ng/Maddy Kylie/Sophie Price/Gideon Scanlon/Sam Houpt/Elizabeth Sargeant/Bianca Mazziotti/Erin McLaughlin*

EVENT
- "[COMPANY NAME] held its/their _____"
- Anything with a Flickr album attached
- Car show/conference/national/event/golf tournament/gathered/meeting/CCIF

EVENT NOTICE
- "[COMPANY NAME] has announced _____"
- Includes dates; words like **announce, taking place, scheduled for, early bird rates…**

Insights:

Engagement Time and Views Relationship:

- Across all post categories, the engagement time generally fell within the range of 20 to 60 seconds.
- The views varied significantly, with some categories having lower average views (around 50) compared to others (around 200).
- There is no strong linear relationship observed between engagement time and views. Other factors may contribute to the number of views a post receives.

Categories with Higher Engagement Time:

- The "Columns" category stands out with a significantly higher average engagement time (65.65 seconds) compared to other categories.
- The "Profile" category also has a relatively higher engagement time (32.49 seconds).
- These categories may contain content that encourages readers to spend more time reading the posts, such as in-depth articles or opinion pieces.

Categories with Lower Engagement Time:

- The "Whimsy" category has the lowest average engagement time (19.88 seconds), indicating that readers tend to spend less time engaging with this type of content.
- The "Event Notice" category also has a relatively lower average engagement time (30.65 seconds).

Views Variation:

- Categories such as "Hard News," "Soft News," "Event," and "Profile" generally have similar average views (around 150 to 200).
- "Product" and "Survey" categories have slightly lower average views compared to others.

<u>Hard News:</u>

Engagement Time vs. Views - Category: HARD NEWS (424 posts)
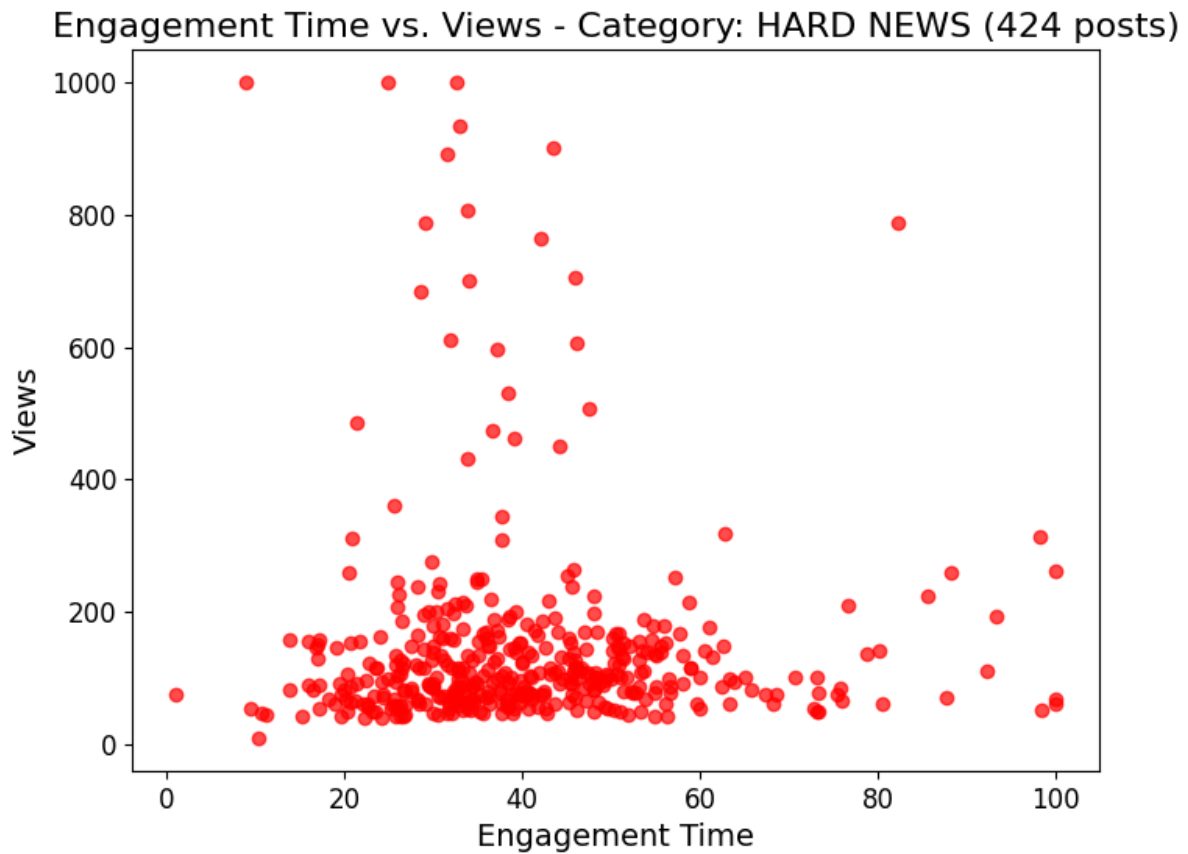
- Average Views: 144.40
- Average Engagement Time: 40.8 seconds
- Views typically ranged around 200 or less.
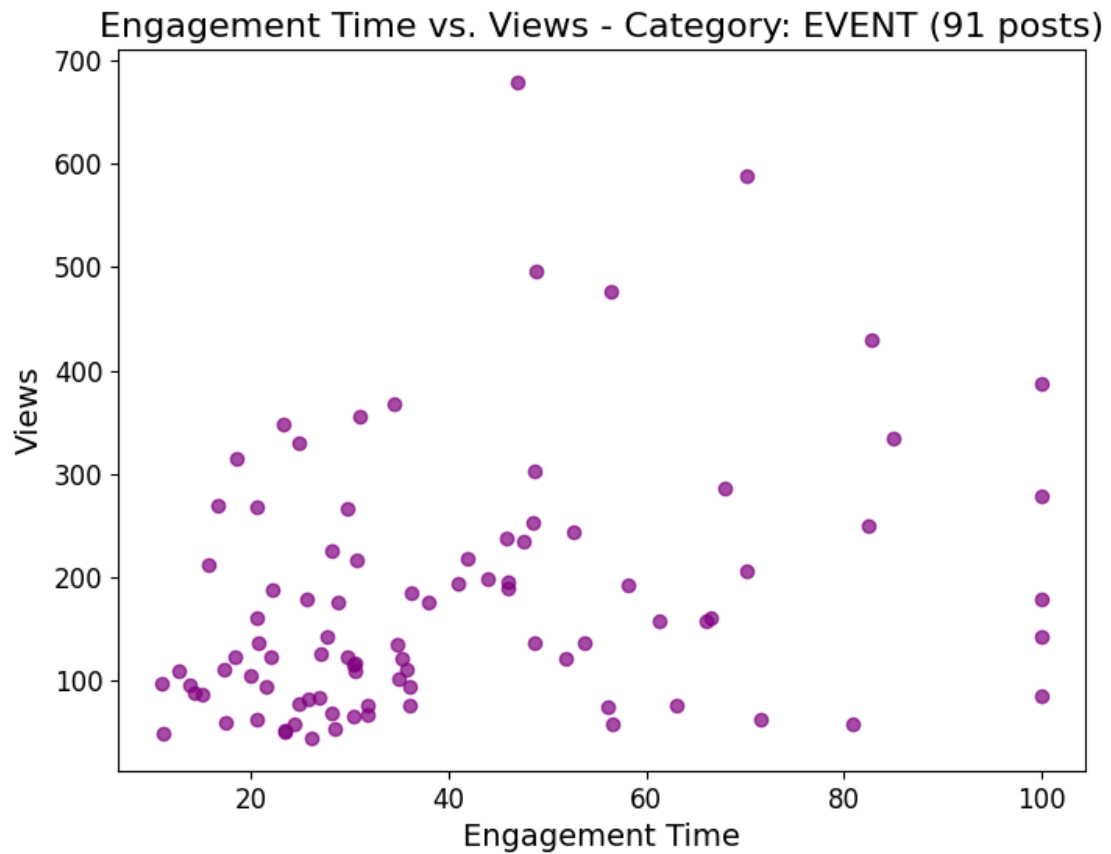- Engagement time varied between 20 seconds and 60 seconds.

Soft News:

gagement Time vs. Views - Category: SOFT NEWS (108 pc
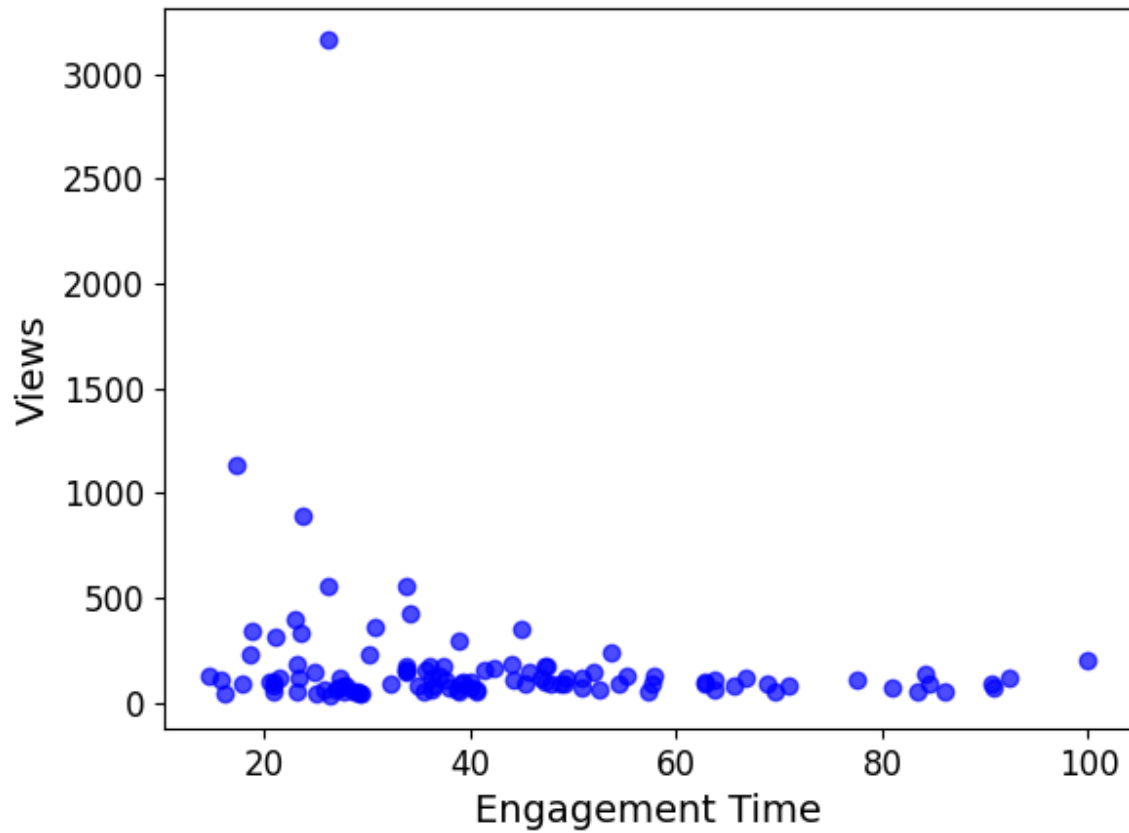
- Average Views: 173
- Average Engagement Time: 42.78 seconds
- Views usually ranged around 200 or less.
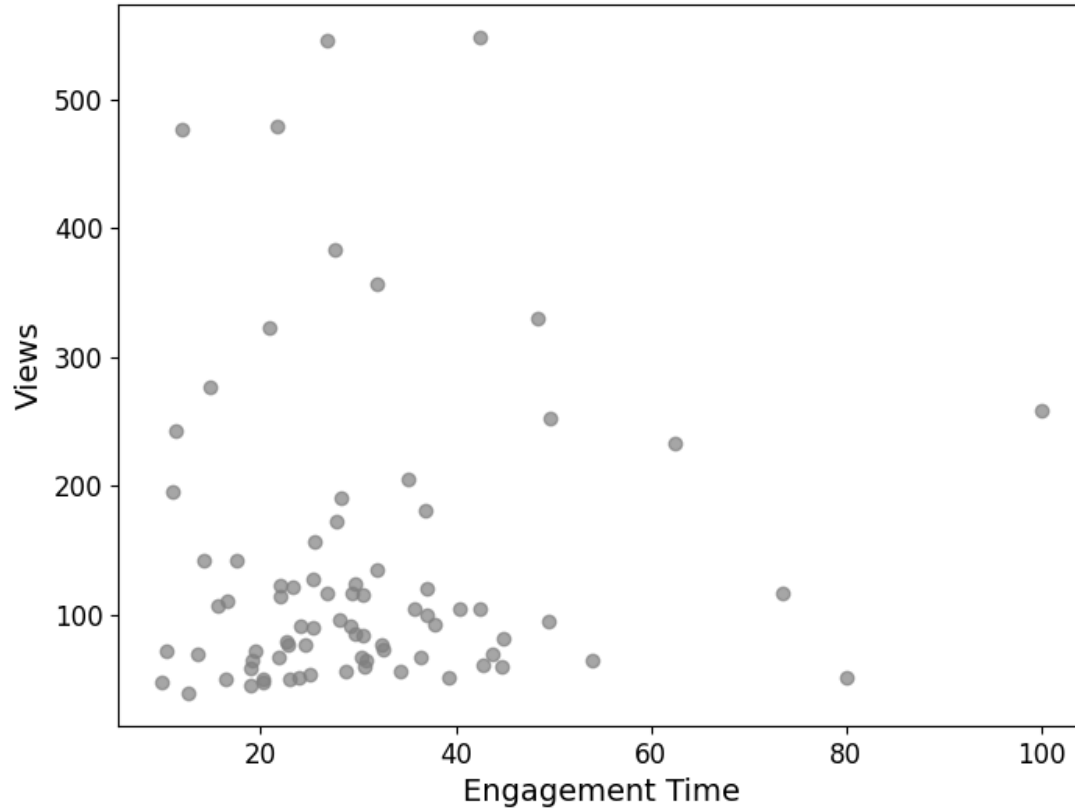- Engagement time varied between 20 seconds and 60 seconds.

Event:

Engagement Time vs. Views - Category: EVENT (91 posts)

- Average Views: 179.48
- Average Engagement Time: 40.61 seconds
- Views were generally less than 300.
- Engagement time varied between 20 seconds and 60 seconds.
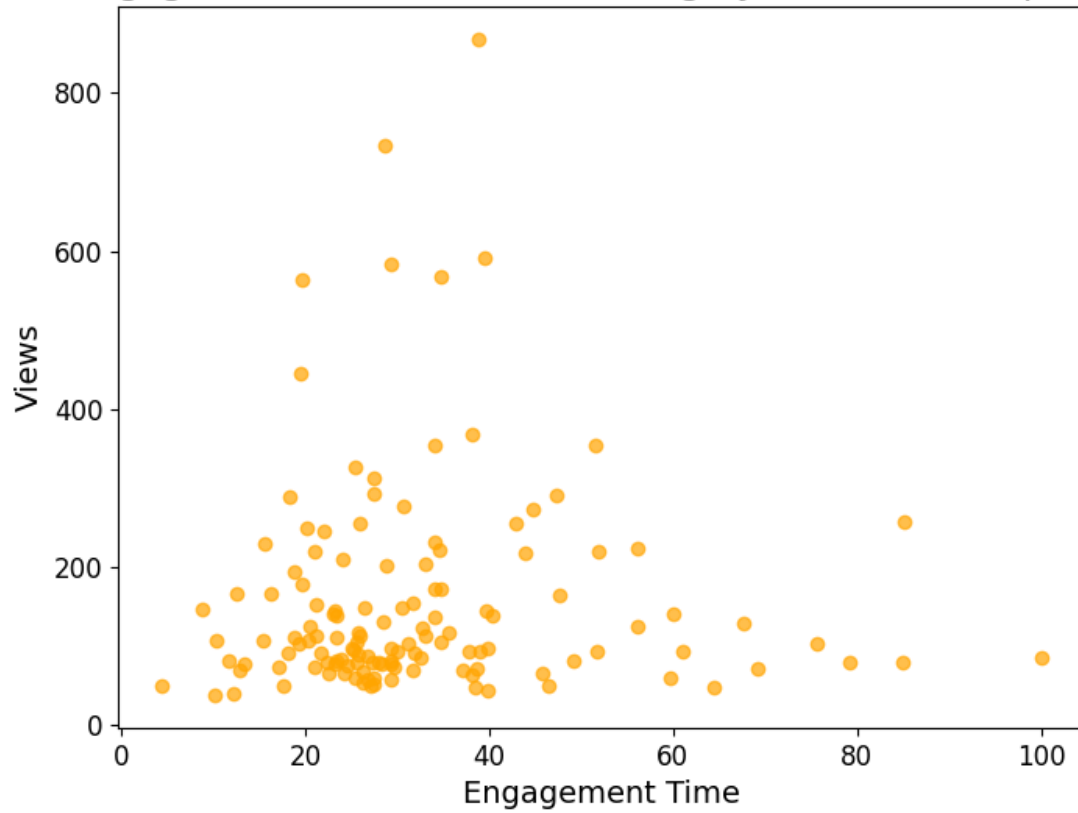
Event Notice:

Engagement Time vs. Views - Category: EVENT NOTICE (79 posts)

- Average Views: 137.92
- Average Engagement Time: 30.65 seconds
- Views typically ranged around 150 or less.
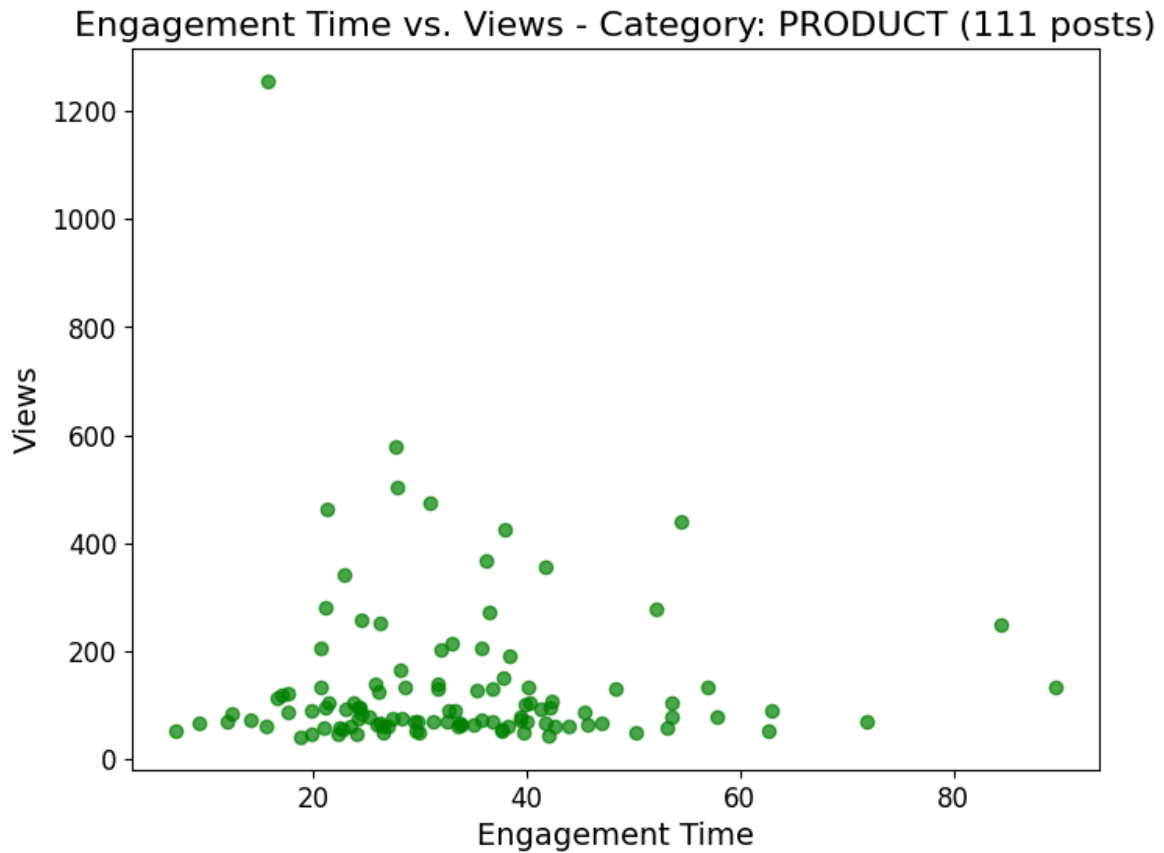- Engagement time varied between 10 seconds and 45 seconds.

Engagement Time vs. Views - Category: PROFILE (132 posts)

- Average Views: 156.92
- Average Engagement Time: 32.49 seconds
- Views usually ranged around 200 or less.
- Engagement time varied between 10 seconds and 60 seconds.

<u>Product:</u>

Engagement Time vs. Views - Category: PRODUCT (111 posts)

- Average Views: 140.06
- Average Engagement Time: 34.06 seconds
- Views were typically around 50.
- Engagement time varied between 15 seconds and 50 seconds.

<u>Survey:</u>

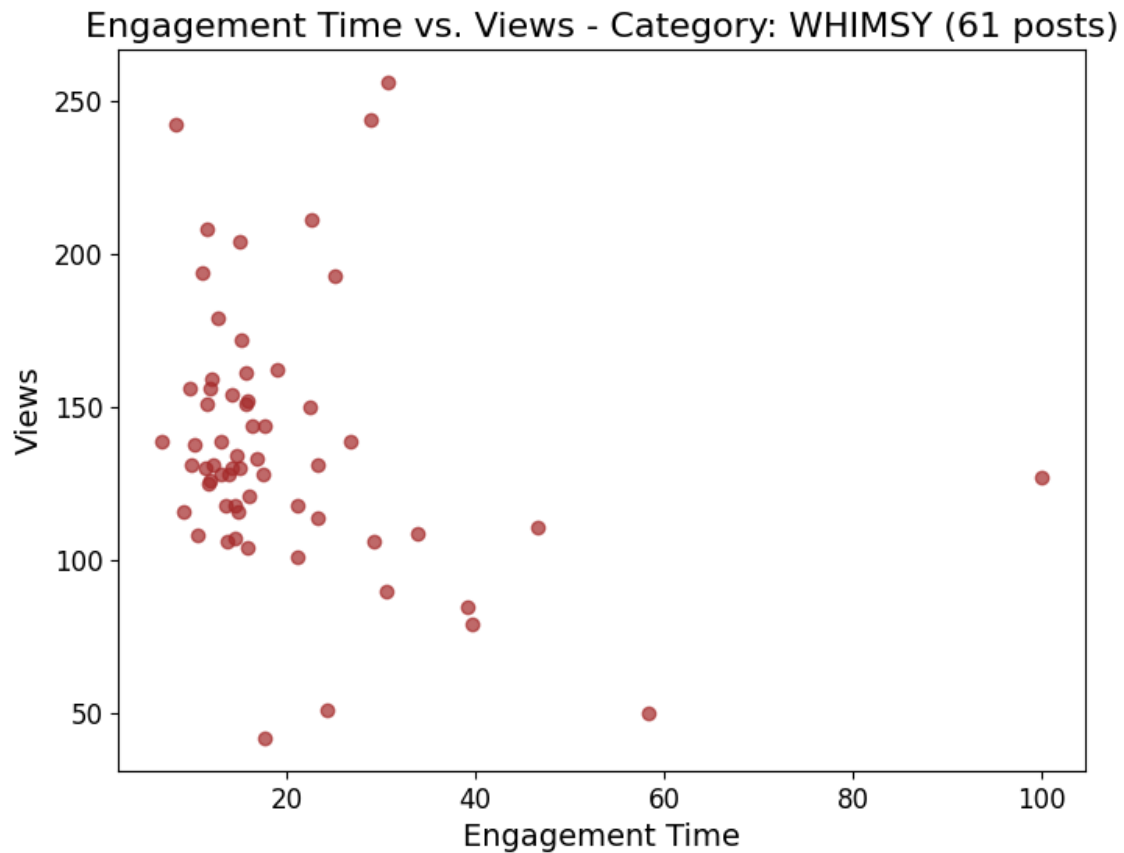Engagement Time vs. Views - Category: SURVEY (32 posts)
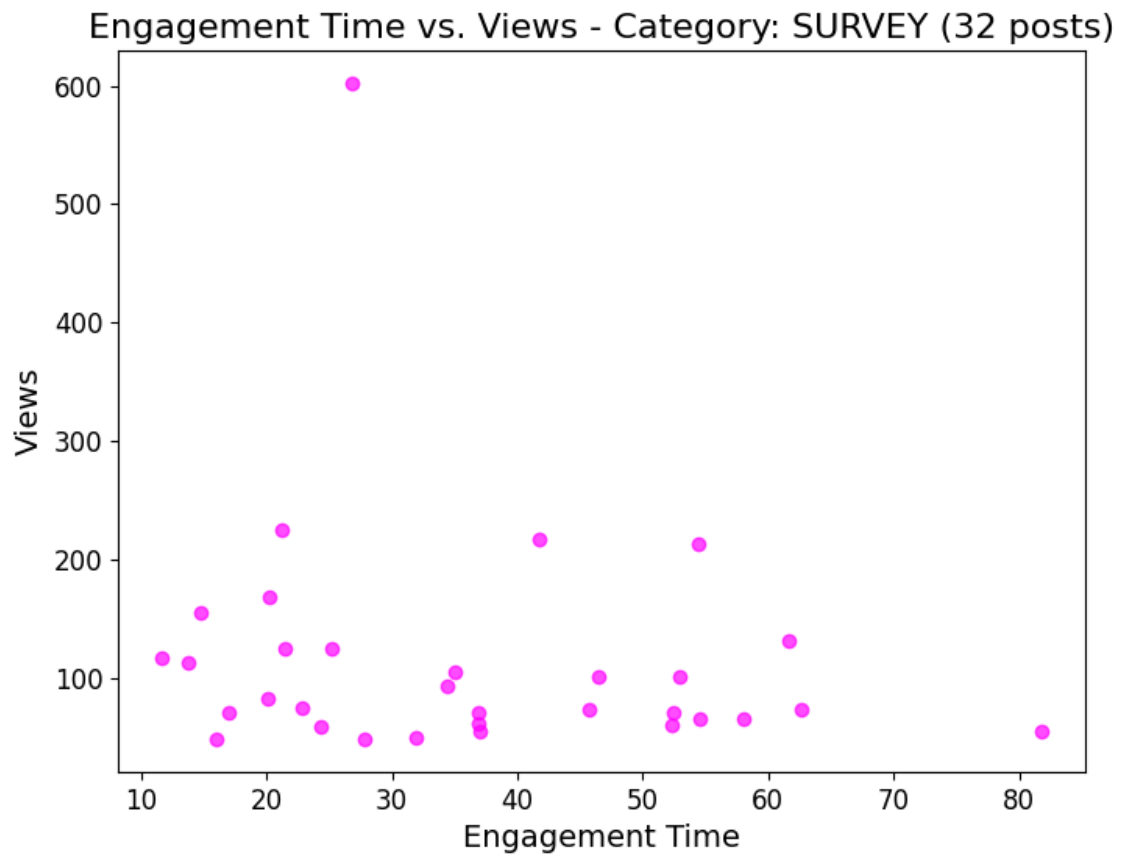
- Average Views: 115.53
- Average Engagement Time: 36.25 seconds
- Views ranged from 100 to 200.
- Engagement time varied between 15 seconds and 60 seconds.

Columns:

Engagement Time vs. Views - Category: COLUMNS (21 posts)
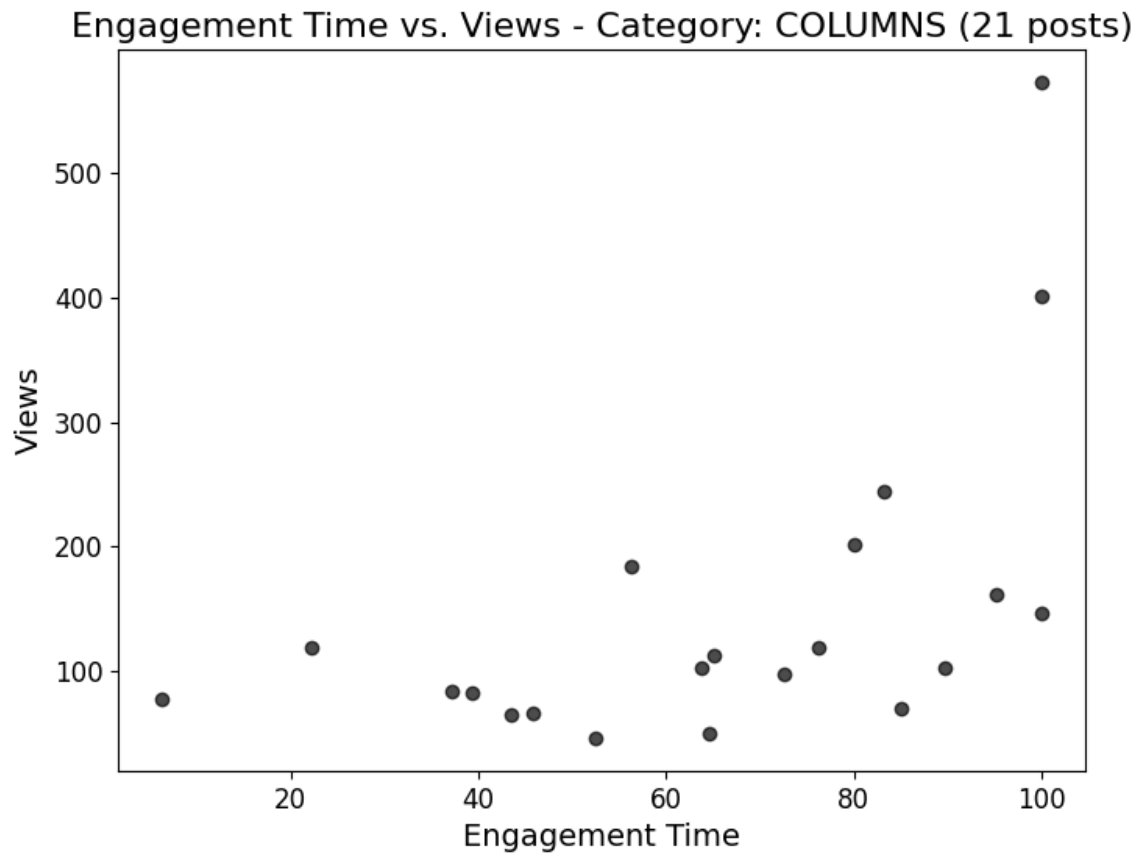
- Average Views: 147.71
- Average Engagement Time: 65.65 seconds
- Views ranged from 100 to 200.
- Engagement time varied between 40 seconds and 100 seconds.

<u>Whimsy:</u>

Engagement Time vs. Views - Category: WHIMSY (61 posts)

- Average Views: 137.38
- Average Engagement Time: 19.88 seconds
- Views typically ranged from 100 to 200.
- Engagement time varied between 10 seconds and 40 seconds.

<u>Conclusion:</u>
The analysis of engagement time and views for different post categories provides insights into how readers interact with the website's content. Although engagement time and views are not strongly correlated, certain categories stand out with higher engagement time or views. The "Columns" category attracts readers with longer

engagement times, while the "Whimsy" category has shorter engagement times. Further analysis and exploration can be conducted to identify factors that contribute to higher engagement and views for specific categories. This information can help content creators and website administrators optimize their content strategy and improve user engagement.

Please note that these findings are based on the available data and analysis conducted. Further analysis or additional data points may provide more comprehensive insights.