

# Social Network Data Manipulation

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## 1. Introduction

Today, on social networks, every user can upload content freely without restrictions and can promote their own personal agenda, including misinformation, and more. Anyone can be at the center of the platform and consume any type of content they desire.

The vast amount of content on social networks can serve as a broad infrastructure through which texts can be analyzed from various aspects.

An example of analyzing different features in a sentence is, for instance, analyzing verbs and descriptive words. Through this, we can understand the impact of the proliferation of verbs, descriptions, and sentence structure on the quality of content based on the results it brings in social networks. Additionally, specific verbs can be assigned to expressing emotion/opinion, allowing users to know which words to use to maximize the exposure of their post and enhance its potential.

Another example: If I post a sentence talking about the wartime period, descriptions and verbs related to emotions might be the ones that yield better results compared to sentences that do not follow this pattern. The same sentence might produce different results if it was posted before or after the war.

The target audience of the system is content creators and anyone who wants to improve their presence and the quality of their posts, as well as the direction of the posts themselves.

## 2. Strategy

In order to assess a sentence numerically, we would need to place sentences on an axis, allowing us to understand how to improve and enhance the sentence. There is significant importance in the relationship between the number of views, the number of followers, and the timeframe.

For example, posting two identical content posts about the situation in Gaza by the same user before and after the outbreak of war can lead to different levels of engagement. In other words, trends can be a decisive factor in the popularity of the content. There can also be a bias in the reaction data, especially if it involves a popular user with a large number of followers.

The initial formula the system uses involves searching for common words in all sentences and assessing how much they impact the sentence's quality based on audience ratio data.

The formula is:  $(Views / (Likes * A3 + Comments * A2 + Shares * A1))$

Weights can be assigned in the formula under the condition that: Note:  $A1 + A2 + A3 = 1$

### **3. System Operation**

The system will receive a sentence and generate queries that analyze the sentence structure, returning the likelihood of its success on the social network based on user data such as follower count and other parameters.

It will include a database that collects information from social network posts and undergoes text analysis as outlined above.