



Ratio analysis of twitter social media accounts for qualitative research using the explorative method

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ABSTRACT

Social Media is an online medium that is used by one another where users can easily participate, communicate, and interact without being limited by space and time. One application that is often used is Twitter. Twitter is a social media application that provides a space to communicate with anyone without usage limits. This research was conducted to find the ratios contained in Twitter social media accounts. The research method used is an explorative method to find the variables contained in Twitter. These variables will then be compared to be tested for relevance to find the relevant ratio. These ratios can later be used to perform analysis that can be measured mathematically so that they can be used to assess the performance of a Twitter account. The results of this Twitter social media research show that there are 33 relevant ratios for assessing, measuring, and comparing the credibility of a Twitter account.

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1. INTRODUCTION

Communication is one of the basic human needs, humans cannot live alone because humans are social creatures. The development of the current era of digital information and communication has changed the communication media used. Face-to-face interaction and communication are now being taken over by communication mediated by information technology, and netted in virtual culture (Putri, 2021). Today's modern life is surrounded by various types of media such as audio, visual, and audio-visual media. The development of information and communication technology causes changes in the culture of everyday society, these developments are inseparable from the use of media for human activities in the economic, social, political, and cultural fields (Rafiq, 2020). Current technological developments can facilitate human activities in carrying out social relations to interact and obtain information globally in various fields. Currently, humans can exchange information and communicate online with the help of social media, humans do not need to meet physically to communicate (Ahmad et al., 2020). Social media is very influential in today's interacting life so there are various kinds of social

media applications with different functions. Internet users in Indonesia in the age range 15-19 years reach 91%, then in the age range 20-24 years it is 88.5%, 25-29 years is 82.7%, 30-34 years is 76.5%, and 35-39 years of 68.5% (Maulana et al., 2020). Some applications that are often used today are Instagram, Telegram, Twitter, Facebook, WhatsApp, and so on. With the speed of information that can be disseminated, social media applications are often used to promote a brand (Wilopo, 2021).

One of the most frequently used applications is Twitter. Twitter is a real-time information network that connects people with the latest stories, ideas, and news opinions about what users are interested in (Widagdhaprasana et al., 2022). Twitter is an online social networking and microblog service that allows its users to send and read text-based messages. Researcher Arif Arizal explained that Twitter is a social networking site that is currently growing rapidly because users can interact with other users from their computers or mobile devices from anywhere and anytime (Arizal, 2023). Twitter has become a daily log for most of its users. On Twitter, users can write down their activities, Twitter users are free to express and tell what they are doing or just chat with other Twitter users (Yunita, 2019). Twitter can be used to send messages in the form of text, photos videos, or what are usually called tweets. Through tweets, Twitter users can interact more closely with other users by sending messages about what they think, events that have just happened, and so on. Twitter also has a Top Trending feature, which is a feature that makes it easier for users to see what tweets are currently popular and frequently tweeted by Twitter users (Annisa Batu Bara et al., 2022). Researcher Suharso explained that the Twitter social media application can quickly climb hashtags and make the news trending or a hot topic of discussion to talk about (Suharso, 2019). However, this can also be misused by Twitter account users so it has a negative impact or influence on the users.

Twitter is the most frequently used social media application. One of the advantages of the social media Twitter is that it can use hashtags regarding the latest news quickly (Muhammad & Isnaini, 2021). This makes Twitter an application that quickly provides the latest or newest information that is currently happening. Tomaso's research explains the evils or negative impacts that occur when using the Twitter social media account incorrectly. For example, using the hashtag function on Twitter pages to create issues that are not true so that people believe about these issues (Sanusi et al., 2021). Twitter is included in micro-blogging, which is a system that can send and receive short posts commonly called tweets that have a maximum length of 140 characters, tweets that have been created and sent cannot be edited again (Nur Akbar et al., 2022).

The Twitter application is felt to have high power and influence on information about events that are currently occurring. This raises the quality of the account which determines the strata and credibility of the account owner. Dinda Farissa's research explains that the credibility of an account is very important because it affects the accuracy and objectivity of news delivered to the public (Dinda Farissa Faatin, 2022). News created on an online account not only prioritizes speed and conciseness but also the news can be trusted.

Credibility according to Aristotle refers to the strength of character or personal privilege that a person has so that he can control the emotions of the audience he is listening to (Wahyuning, 2021). Three components influence the credibility of an account, namely the honesty of a source depending on the audience's perception, the skill or knowledge of a communicator, and the high attractiveness of the post so that it can form a positive image (Anjani & Irwansyah, 2020). The credibility of an account can be measured from the account's performance which must be measured mathematically. In measuring the performance of an account, a measurement scale is needed which will be expressed in ratios. There are various kinds of measurement scales, including nominal scale, ordinal scale, interval scale, and ratio scale (Permana, 2021). This measurement scale will produce data in the form of ratios.

The widespread use of Twitter social media is currently making researchers research accounts that exist on Twitter social media. So far, researchers have conducted research on social media Twitter, for example, research on the use of social networking Twitter as a medium for disseminating public information by (Amanda, 2021) in this study discussing the use of Twitter as a medium for disseminating public information by DGPL's PR, which has not run optimally. Second, research titled Analysis of Twitter users as a medium of communication with celebrities, in this study has proven that effective use of Twitter can give an impression and awareness of the issue of river protection, especially among followers (Kandung et al., 2022). Third, research with the title Anies Baswedan's Political Communication through social media Twitter, this study reveals that Anies Baswedan's political communication on Twitter social media is very focused on public services in DKI Jakarta (Alim & Rahmawati, 2021). However, there are no researchers who have researched the ratios contained in the Twitter social media application. The ratios contained in Twitter are found by finding the variables contained in Twitter, and then each variable is compared to find a relevant ratio. These ratios will later be used to assess the performance of the Twitter social media application. The theoretical implication of this research is that it will find a new measuring tool in the form of ratios that can be used as a reference in determining the credibility of an account on Twitter social media. Meanwhile, the practical implication of this research is that the existence of relevant ratios can analyze and determine the credibility of an account. Considering that on social media it is now increasingly easy to make lies and spread fake news, this ratio can help users determine the credibility of a Twitter account.

2. RESEARCH METHOD

Twitter is a social media application that is quite popular and used. The widespread use of social media Twitter has created a new phenomenon that companies or individuals use to interact and communicate (Karina et al., 2022). Currently, social media is used to gain followers by creating innovative content, marketing, and communicating online (SIBUEA, 2022). Content that has gone viral often has a certain appeal which makes social media users like the activity of re-sharing the content (Isnawati, 2022). 6 categories of account types are recognized or verified by Twitter, including Government Category, Company Category, News Organization Category, Entertainment Category, Sports Category, Activist Category, and Personal.

This research uses an exploratory type which will examine all categories of Twitter account users to deepen knowledge and look for ideas to find out a particular symptom, describe a social phenomenon, and explain how a social phenomenon occurs. Exploratory research is used to formulate problems in more detail or develop hypotheses instead of testing hypotheses (Darwin et al., 2021). Research analysis was carried out by looking for references from journals and books. Next, the researchers carried out an analysis of the Twitter application to look for the features available in the application. Then this feature will be compared so that it can produce a ratio. This study aims to find variables on Twitter social media which will later be formulated into ratios. Twitter accounts that can be analyzed must meet the technical requirements in the Twitter settings for analysis to be carried out, namely: (a) It is an account with public or non-private status so data can be accessed without having to ask permission from the account owner. (b) The comments column is not disabled (disabled), so the comments column defines a number that indicates the number of comments on a post.

This study aims to be a reference for quantitative research so that the variable to be analyzed is an object that has a value in the form of a number so that it can be counted in the process of making or formulating it as a ratio. The following is the process of finding variables on social media Twitter.

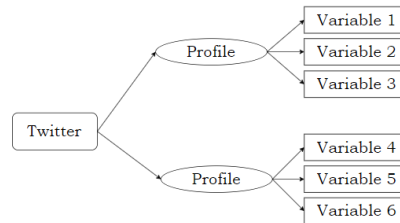


Figure 1. Finding Variables on Twitter

Ratio is a comparison of one number with another number that forms a relationship. The ratio is a number described in the comparison of a pattern with another pattern and is expressed as a percentage (HANGGARA, 2020). In determining a ratio, at least 2 variables are compared to produce a value whose final result is expressed in a percentage. All the determined variables will be compared with all the variables found and then tested for relevance so that it can be determined whether the comparison between the two variables can be categorized as a ratio.

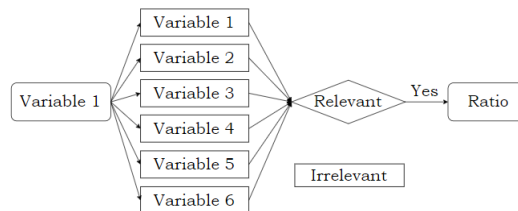


Figure 2 . Variable Relevance To Ratio

In the picture, the relevance of the variable to the ratio shows a comparison, namely a comparison between variable 1 and other variables to find 2 relevant variables to be used as a ratio. After variable 1 has been analyzed, proceed to analyze variable 2 as shown below.

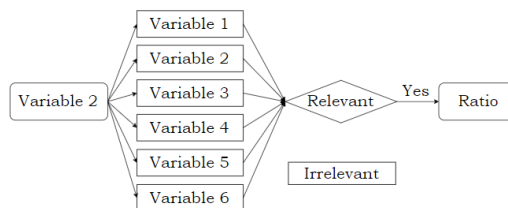


Figure 3 . Comparison of Variable 2 with Other Variables

Figure 2, compared to all other variables, shows a comparison between variable 2 and the other variables, so that after comparison, you can find 2 relevant variables to be used as a ratio. After the second variable has been analyzed, it is continued by comparing the variables three, four, five, and so on until all the existing variables are compared with all the other variables.

The relevance of the ratio is shown by analyzing the influence of the ratio on the assessment of the Twitter account being analyzed. The ratio that belongs to the irrelevant category if the comparison between the 2 variables has the following conditions: (a) Make comparisons on the same variable. (b) The first variable tends to have a greater value than the second variable. (c) Both variables are not influenced or determined by the public. (d) The two variables are inappropriate or inappropriate to compare.

3. RESULTS AND DISCUSSIONS

In 13 variables will go through the next analysis process, namely comparisons between variables and testing the relevance between the two variable comparisons. The ten variables are: Tweets, Followers, Following, Image Likes, Image Retweet, Image Comments, Video Likes, Video Comments, Retweet Videos, Video Views, Quote Likes, Quote Comments, Quote Retweet.

Table 1 . Comparisons Between Variables and Relevance Analysis of Comparisons Between Variables

Variable 1	Variable 2	Relevance	Reasons are irrelevant
Tweets	Tweets	Irrelevant	Both variables are the same
Tweets	followers	Relevant	
Tweets	following	Irrelevant	Post interactions do not affect Following
Tweets	Image Likes	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Image Retweet	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Image Comments	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Video Likes	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Video Comments	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Retweet videos	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Video Views	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Quote Likes	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Quote Comments	Irrelevant	The number of tweets has no effect on the interaction of each post
Tweets	Quote Retweet	Irrelevant	The number of tweets has no effect on the interaction of each post
followers	Tweets	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	followers	Irrelevant	Both variables are the same
followers	following	Irrelevant	Post interactions do not affect Following
followers	Image Likes	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Image Retweet	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Image Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Video Likes	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Video Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Retweet videos	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Video Views	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Quote Likes	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Quote Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
followers	Quote Retweet	Irrelevant	The number of variables 1 tends to be greater than variable 2
following	Tweets	Irrelevant	Both variables are not defined by the public
following	followers	Relevant	
following	following	Irrelevant	Both variables are the same
following	Image Likes	Irrelevant	The number of following has no effect on the interaction of each post
following	Image Retweet	Irrelevant	The number of following has no effect on the interaction of each post

following	Image	Irrelevant	The number of following has no effect on the interaction of each post
following	Comments	Irrelevant	The number of following has no effect on the interaction of each post
following	Video Likes	Irrelevant	The number of following has no effect on the interaction of each post
following	Video	Irrelevant	The number of following has no effect on the interaction of each post
following	Comments	Irrelevant	The number of following has no effect on the interaction of each post
following	Retweet	Irrelevant	The number of following has no effect on the interaction of each post
following	videos	Irrelevant	The number of following has no effect on the interaction of each post
following	Video Views	Irrelevant	The number of following has no effect on the interaction of each post
following	Quote Likes	Irrelevant	The number of following has no effect on the interaction of each post
following	Quote	Irrelevant	The number of following has no effect on the interaction of each post
following	Comments	Irrelevant	The number of following has no effect on the interaction of each post
following	Quote	Irrelevant	The number of following has no effect on the interaction of each post
following	Retweet	Irrelevant	The number of following has no effect on the interaction of each post
Image Likes	Tweets	Irrelevant	The number of image likes has no effect on the number of posts
Image Likes	followers	Relevant	
Image Likes	following	Irrelevant	Post interactions do not affect Following
Image Likes	Image Likes	Irrelevant	Both variables are the same
Image Likes	Image	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Likes	Retweet	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Likes	Image	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Likes	Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Likes	Video Likes	Relevant	
Image Likes	Video	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	videos	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	Video Views	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	Quote Likes	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Likes	Quote	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	Quote	Irrelevant	The two variables cannot be compared & juxtaposed
Image Likes	Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Image Retweet	Tweets	Irrelevant	The number of image retweets has no effect on the number of posts
Image Retweet	followers	Relevant	
Image Retweet	following	Irrelevant	Post interactions do not affect Following
Image Retweet	Image Likes	Relevant	
Image Retweet	Image	Irrelevant	Both variables are the same
Image Retweet	Retweet	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Retweet	Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Retweet	Video Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Image Retweet	Video	Irrelevant	The two variables cannot be compared & juxtaposed
Image Retweet	Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Image Retweet	Retweet	Relevant	
Image Retweet	videos	Irrelevant	The two variables cannot be compared & juxtaposed
Image Retweet	Video Views	Irrelevant	The two variables cannot be compared & juxtaposed
Image Retweet	Quote Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Image Retweet	Quote	Irrelevant	The two variables cannot be compared and juxtaposed
Image Retweet	Comments	Irrelevant	The two variables cannot be compared and juxtaposed
Image Retweet	Quote	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Retweet	retweeted	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Comments	Tweets	Irrelevant	The number of image comments has no effect on the number of posts
Image Comments	followers	Relevant	
Image Comments	following	Irrelevant	Post interactions do not affect Following
Image Comments	Image Likes	Relevant	
Image Comments	Image	Relevant	
Image Comments	Retweet	Irrelevant	Both variables are the same
Image Comments	Image	Irrelevant	Both variables are the same
Image Comments	Comments	Irrelevant	Both variables are the same
Image Comments	Video Likes	Irrelevant	The two variables cannot be compared & juxtaposed

Image Comments	Video Comments	Relevant	
Image Comments	Retweet videos	Irrelevant	The two variables cannot be compared & juxtaposed
Image Comments	Video Views	Irrelevant	The two variables cannot be compared & juxtaposed
Image Comments	Quote Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Image Comments	Quote Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Image Comments	Quote Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Video Likes	Tweets	Irrelevant	The number of Video likes has no effect on the number of posts
Video Likes	followers	Relevant	
Video Likes	following	Irrelevant	Post interactions do not affect Following
Video Likes	Image Likes	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Likes	Image Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Video Likes	Image Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Video Likes	Video Likes	Irrelevant	Both variables are the same
Video Likes	Video Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Likes	Retweet videos	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Likes	Video Views	Relevant	
Video Likes	Quote Likes	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Likes	Quote Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Video Likes	Quote Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Video Comments	Tweets	Irrelevant	The number of video comments has no effect on the number of posts
Video Comments	followers	Relevant	
Video Comments	following	Irrelevant	Post interactions do not affect Following
Video Comments	Image Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Video Comments	Image Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Video Comments	Image Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Comments	Video Likes	Relevant	
Video Comments	Video Comments	Irrelevant	Both variables are the same
Video Comments	Retweet videos	Relevant	
Video Comments	Video Views	Relevant	
Video Comments	Quote Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Video Comments	Quote Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Comments	Quote Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Retweet videos	Tweets	Irrelevant	The number of video retweets has no effect on the number of posts
Retweet videos	followers	Relevant	
Retweet videos	following	Irrelevant	Post interactions do not affect Following
Retweet videos	Image Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Retweet videos	Image Retweet	Irrelevant	The number of variables 1 tends to be greater than variable 2
Retweet videos	Image Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Retweet videos	Video Likes	Relevant	
Retweet videos	Video Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Retweet videos	Retweet videos	Irrelevant	Both variables are the same
Retweet videos	Video Views	Relevant	

Retweet videos	Quote Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Retweet videos	Quote Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Retweet videos	Quote Retweet	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Views	Tweets	Irrelevant	The number of video views has no effect on the number of posts
Video Views	followers	Relevant	
Video Views	following	Irrelevant	Post interactions do not affect Following
Video Views	Image Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Video Views	Image Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Video Views	Image Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Video Views	Video Likes	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Views	Video Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Views	Retweet videos	Irrelevant	The number of variables 1 tends to be greater than variable 2
Video Views	Video Views	Irrelevant	The two variables are the same
Video Views	Quote Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Video Views	Quote Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Video Views	Quote Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Likes	Tweets	Irrelevant	The number of quote likes has no effect on the number of posts
Quote Likes	followers	Relevant	
Quote Likes	following	Irrelevant	Post interactions do not affect Following
Quote Likes	Image Likes	Relevant	
Quote Likes	Image Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Likes	Image Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Likes	Video Likes	Relevant	
Quote Likes	Video Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Likes	Retweet videos	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Likes	Video Views	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Likes	Quote Likes	Irrelevant	Both variables are the same
Quote Likes	Quote Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Quote Likes	Quote Retweet	Irrelevant	The number of variables 1 tends to be greater than variable 2
Quote Comments	Tweets	Irrelevant	The number of quote comments has no effect on the number of posts
Quote Comments	followers	Relevant	
Quote Comments	following	Irrelevant	Post interactions do not affect Following
Quote Comments	Image Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Comments	Image Retweet	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Comments	Image Comments	Relevant	
Quote Comments	Video Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Comments	Video Comments	Relevant	
Quote Comments	Retweet videos	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Comments	Video Views	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Comments	Quote Likes	Relevant	
Quote Comments	Quote Comments	Irrelevant	Both variables are the same
Quote Comments	Quote Retweet	Relevant	
Quote Retweet	Tweets	Irrelevant	The number of retweet quotes has no effect on the number

			of posts
Quote Retweet	followers	Relevant	
Quote Retweet	following	Irrelevant	Post interactions do not affect Following
Quote Retweet	Image Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Retweet	Image Retweet	Relevant	
Quote Retweet	Image Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Retweet	Video Likes	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Retweet	Video Comments	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Retweet	Retweet videos	Relevant	
Quote Retweet	Video Views	Irrelevant	The two variables cannot be compared & juxtaposed
Quote Retweet	Quote Likes	Relevant	
Quote Retweet	Quote Comments	Irrelevant	The number of variables 1 tends to be greater than variable 2
Quote Retweet	Quote Retweet	Irrelevant	Both variables are the same

Twitter is a real-time social media application that connects people with the latest stories, ideas, and news opinions about what is of interest to its users. Twitter has the advantage of being able to quickly climb trending or news hashtags and events that are happening and are currently hotly discussed. The main use of Twitter is to upload photos, videos, and also tweets in the form of writing to other users. Twitter account users can also provide comments, likes, and retweet posts from other users.

a. Tweet to Followers Ratio

The ratio of the number of Tweets to the number of Followers. This ratio shows the effectiveness of posted content on someone's desire to follow the account. The fewer the number of tweets, the more attractive the content will be for the public, who eventually want to become followers. The weakness of this ratio is that the resulting data has the potential or possibility of not being able to be compared with other accounts because the account owner can delete his post so of course the calculation of the resulting ratio will change.

b. Following to Followers Ratio

The ratio of the number of Followers to the number of Followers. This ratio shows the ratio of the number of accounts followed to the number of account followers. The weakness of this ratio is that the data generated has the potential or possibility that it cannot be compared with other accounts because the account owner can increase or decrease his following so of course the calculation of the resulting ratio will change.

c. Image Likes to Followers Ratio

The ratio of the number of Image Likes to the number of Followers. This ratio shows the ability of an image post to generate likes compared to the number of followers it has. Likes for an image post are not only generated from followers but can also be generated from non-followers, so this ratio is not considered as a direct comparison between image likes and followers. This ratio describes the ability and performance of an image post when viewed from the parameter number of followers.

d. Image Likes to Video Likes Ratio

The ratio of the number of Image Likes to the number of Video Likes. This ratio shows a comparison of the public's response to liking an image or video post. If this ratio shows data below 100%, then video posts tend to invite more likes than picture posts on that account. If this ratio shows data above 100%, then image posts tend to invite more likes than video posts on that account.

e. Image Retweet to Followers Ratio

The ratio of the number of Image Retweets to the number of Followers. This ratio shows the ability of an image post to generate retweets compared to the number of followers it has. Retweets of an image post are not only generated from followers but can also be generated from non-followers, so this ratio is not considered as a direct comparison between image retweets and followers. This ratio describes the ability and performance of an image post when viewed from the parameter number of followers.

f. Image Retweet to Image Likes Ratio

The ratio of the number of Image Retweets to the number of Image Likes. This ratio shows the percentage of retweets compared to likes on a post in the form of an image. The higher this ratio, the higher the interest (engagement) in the post.

g. Image Retweet to Video Retweet Ratio

The ratio of Image Retweets to Video Retweets. This ratio shows a comparison of the public's response to retweeting an image or video post. If this ratio shows data below 100%, video posts tend to invite more retweets than picture posts on that account. If this ratio shows data above 100%, then image posts tend to invite more retweets than video posts on that account.

h. Image Comments to Followers Ratio

The ratio of the number of Image Comments to the number of Followers. This ratio shows the ability of an image post to generate comments compared to the number of followers it has. Comments on image posts are not only generated from followers, but can be generated from non-followers, so this ratio cannot be considered as a comparison between comments on images and direct followers. This ratio describes the ability or performance of an image post when viewed from the number of followers parameter.

i. Image Comments to Image Likes Ratio

The ratio of the number of Image Comments to the number of Image Likes. This ratio shows the percentage of comments compared to likes on a post in the form of an image. The higher this ratio, the higher the interest (engagement) in the post.

j. Image Comments to Image Retweet Ratio

The ratio of the number of Image Comments to the number of Image Retweets. This ratio shows the percentage of comments compared to retweets on a post in the form of an image. The higher this ratio, the higher the interest (engagement) in the post.

k. Image Comments to Video Comments Ratio

The ratio of the number of Image Comments to the number of Video Comments. This ratio shows a comparison of the public's response to commenting on an image or video post. If this ratio shows data below 100% then video posts tend to invite more comments than picture posts on that account. If this ratio shows above 100%, then image posts tend to invite more comments than video posts on that account.

l. Video Likes to Followers Ratio

The ratio of the number of Video Likes to the number of Followers. This ratio shows the ability of a video post to generate likes compared to the number of followers that the account has. Likes on video posts are not only generated from followers, but can be generated from non-followers, so this ratio cannot be considered as a direct comparison between likes and followers. This ratio describes the ability or performance of a video post when viewed from the number of followers parameter.

m. Video Likes to Video Views Ratio

The ratio of the number of Video Likes to the number of Video Views. This ratio shows the success rate of a video post to convert views into likes. The higher the percentage of this ratio, the better the performance of the video post.

n. Video Comments to Followers Ratio

The ratio of the number of Video Comments to the number of Followers. This ratio shows the ability of a video post to generate comments compared to the number of followers it has. Comments on video posts are not only generated from followers but can be generated from non-followers, so this ratio cannot be considered a comparison between comments on videos and direct followers. This ratio describes the ability or performance of a video post when viewed from the parameter number of followers.

o. Video Comments to Video Likes Ratio

The ratio of the number of Video Comments to the number of Video Likes. This ratio shows the percentage of comments compared to likes on a post in the form of a video. The higher this ratio, the higher the interest (engagement) in the post.

p. Video Comments to Video Retweet Ratio

The ratio of the number of Video Comments to the number of Video Retweets. This ratio shows the percentage of comments compared to retweets on a post in the form of a video. The higher this ratio, the interest in the post will be higher.

q. Video Comments to Video Views Ratio

The ratio of the number of Video Comments to the number of Video Views. This ratio shows the success rate of a video post to convert views into comments. The higher the percentage of this ratio, the better the performance of the video post.

r. Video Retweet to Followers Ratio

The ratio of the number of Video Retweets to the number of Followers. This ratio shows the ability of a video post to generate retweets compared to the number of followers it has. Retweets of a video post are not only generated from followers but can also be generated from non-followers, so this ratio cannot be considered as a comparison between video retweets and direct followers. This ratio describes the ability of the performance of an image post when viewed from the parameter number of followers.

s. Video Retweet to Video Likes Ratio

The ratio of the number of Video Retweets to the number of Video Likes. This ratio shows the percentage of retweets compared to likes on a post in the form of a video. The higher this ratio, the interest in a post will be higher.

t. Video Retweets to Video Views Ratio

The ratio of the number of Video Retweets to the number of Video Views. This ratio shows the success rate of a video post to convert views into retweets. The higher the percentage of this ratio, the better the performance of the video post.

u. Video Views to Followers Ratio

The ratio of the number of Video Views to the number of Followers. This ratio shows the ability of a video post to generate viewers (views) compared to the number of followers it has. Viewers (views) on video posts are not only generated from followers, but can also be generated from non-followers, so this ratio cannot be considered as a direct comparison between video views and followers. This ratio describes the ability or performance of a video post when viewed from the parameter number of followers.

v. Quote Likes to Followers Ratio

The ratio of the number of Quote Likes to the number of Followers. This ratio shows the ability of an image post to generate likes compared to the number of followers it has. Likes of a quote post are not only generated from followers but can also be generated from non-followers, so this ratio cannot be considered as a direct comparison between quote likes and followers. This ratio describes the ability and performance of an image post when viewed from the number of followers parameter.

w. Quote Likes to Image Likes Ratio

The ratio of the number of Quote Likes to the number of Image Likes. This ratio shows a comparison of the public's response to giving likes to posts with quotes or images. If this ratio shows data below 100%, then image posts tend to invite more likes than quote posts on that account. If this ratio shows data above 100%, quote posts tend to invite more likes than picture posts on that account.

x. Quote Likes to Video Likes Ratio

The ratio of the number of Quote Likes to the number of Video Likes. This ratio shows a comparison of the public's response to liking a quote or video post. If this ratio shows data below 100%, then video posts tend to invite more likes than quote posts on that account. If this ratio shows data above 100%, then quote posts tend to invite more likes than video posts on that account.

y. Quote Comments to Followers Ratio

The ratio of the number of Quote Comments to the number of Followers. This ratio shows the ability of a quote post to generate comments compared to the number of followers it has. Comments on quote posts are not only generated from followers but can be generated from non-followers, so this ratio cannot be considered a comparison between comments on quotes and direct followers. This ratio describes the ability or performance of a quote post when viewed from the parameter number of followers.

z. Quote Comments to Image Comments Ratio

The ratio of the number of Quote Comments to the number of Image Comments. This ratio shows a comparison of public response to comments on posting quotes or images. If this ratio shows data below 100%, then image posts tend to invite more comments than posting quotes on that account. If this ratio shows above 100%, it tends to post quotes inviting more comments compared to posting pictures on that account.

Quote Comments to Video Comments Ratio, The ratio of the number of Quote Comments to the number of Image Comments. This ratio shows a comparison of the public's response to commenting on posting quotes or videos. If this ratio shows data below 100%, then video posts tend to invite more comments than posting quotes on that account. If this ratio shows data above 100%, it tends to post quotes inviting more comments compared to video posts on that account.

Quote Comments to Quote Likes Ratio, The ratio of the number of Quote Comments to the number of Quote Likes. This ratio shows the percentage of comments compared to likes on a post in the form of a quote. The higher this ratio, the higher the interest (engagement) in the post.

Quote Comments to Quote Retweet Ratio, The ratio of the number of Quote Comments to the number of Quote Retweets. This ratio shows the percentage of comments compared to retweets on a post in the form of a quote. The higher this ratio, the interest in the post will be higher.

Quote Retweet to Followers Ratio, The ratio of the number of Quote Retweets to the number of Followers. This ratio shows the ability of a quote post to generate retweets compared to the number of followers it has. Retweets of a quote post are not only generated from followers but also generated from non-followers, so this ratio cannot be considered a direct comparison between quote retweets and followers. This ratio describes the ability of the performance of a quote post when viewed from the parameter number of followers.

Quote Retweet to Image Retweet Ratio, The ratio of the number of Quote Retweets to the number of Image Retweets. This ratio shows a comparison of the public's response to retweeting a quote or image post. If this ratio shows data below 100%, then image posts tend to invite more retweets than quote posts on that account. If this ratio shows data above 100%, it tends to post quotes inviting more retweets than posting pictures on that account.

Quote Retweet to Video Retweet Ratio, The ratio of the number of Quote Retweets to the number of Video Retweets. This ratio shows a comparison of the public's response to retweeting a quote or video post. If this ratio shows data below 100%, video posts tend to invite more retweets than quote posts on that account. If this ratio shows data above 100%, quote posts tend to invite more retweets than video posts on that account.

Quote Retweet to Quote Likes Ratio, The ratio of the number of Quote Retweets to the number of Quote Likes. This ratio shows the percentage of retweets compared to likes on a post in the form of a quote. The greater the ratio, the interest in a post will be higher.

4. CONCLUSION

This study aims to find the ratios contained in Twitter accounts using explorative methods. 13 variables will be analyzed and compared so that they become a relevant ratio. Assessment of the credibility of an account can be assessed using the ratios found in this study. 33 ratios can be used as parameters for assessing the performance of a Twitter account. The implication of finding these ratios is so that future researchers can conduct quantitative research in measuring, assessing, and comparing accounts on Twitter.

Suggestions for further research are to analyze and compare the performance between two or more accounts on a similar account. Apart from that, further research can analyze the latest features on Twitter social media so that it can produce new ratios on Twitter.

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