

Marketing Konten Analysis of Korean Drama Streaming Platforms : Social Network Analysis on Twitter

Analisis Konten Pemasaran Platform Streaming Drama Korea : Analisis Jaringan Sosial di Twitter

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Abstract. *The primary purpose of this research is to assist in providing input for digital marketing of VIU and iQiyi from the results of Twitter users' tweets, as well as to find out the focus of discussions from Twitter users on VIU and iQiyi Video Streaming Platforms. This research collected tweet data from June 2020 to June 2022. The existing data is then carried out in the preprocessing stage with a combination of methods so that there is no noisy data as a maximum. Furthermore, the final step is to analyze the results of the images visualized using Gephi. The results of the data visualization show that each of the data withdrawal criteria is responded to by users so that this phenomenon can provide input for the future in improving existing marketing strategies on the VIU and iQiyi video streaming platforms.*

Keywords - *Subscribe, Promo, User Satisfaction, Video On Demand (VOD), Twitter*

Abstrak. *Tujuan utama dari penelitian ini adalah untuk membantu memberikan masukan untuk pemasaran digital VIU dan iQiyi dari hasil tweet pengguna Twitter, serta untuk mengetahui fokus diskusi dari pengguna Twitter di Platform Video Streaming VIU dan iQiyi. Penelitian ini mengumpulkan data tweet dari bulan Juni 2020 hingga Juni 2022. Data yang ada kemudian dilakukan tahap preprocessing dengan kombinasi metode agar tidak terjadi noise data secara maksimal. Selanjutnya langkah terakhir adalah menganalisis hasil citra yang divisualisasikan menggunakan Gephi. Hasil visualisasi data menunjukkan bahwa setiap kriteria penarikan data ditanggapi oleh pengguna sehingga fenomena ini dapat memberikan masukan untuk kedepannya dalam perbaikan strategi pemasaran yang ada pada platform video streaming VIU dan iQiyi.*

Kata Kunci - *Langganan, Promo, Kepuasan Pengguna, Video On Demand (VOD), Twitter*

I. INTRODUCTION

People depend heavily on digital technology in today's all-digital era, which is multiplying. One of these advancements is video streaming or Video on Demand (SVOD) subscriptions [1] which has changed the consumption habits recent years of home entertainment and television consumers [2]. Subscription services are defined as a new business model in their own right, not just another approach to selling a service product [3]. Previously, people had to wait for hours to watch TV or go to the cinema according to a specific schedule, and now everything has become more practical with digital VOD devices or services [4]. Video-on-Demand (VOD) combines the logic of television, film, home video, the Internet, and existing technologies [5]. Several companies use Video-on-Demand (VOD) services to set up streaming platforms in Indonesia, which are considered to have great potential. Marketing is a process of planning and execution, starting from the conception stage, pricing, promotion, to the distribution of goods, ideas and services, to make exchanges that satisfy the individual and his institutions [6]. According to Tjiptono in Marlizar (2020) [7] marketing performance is a function that has the greatest contact with the external environment, even though the company only has limited control over the company's environment. In the world of marketing, consumers are assets that must be maintained and maintained their existence in order to remain consistent with the products we produce [8].

The increasing sophistication of social media is closely attached to every individual. Therefore this situation can be used as a marketing area and an opportunity. The internet has become a significant community need to carry out various functions of communication, information, entertainment, and many others. According to the Association of Indonesian Internet Service Providers (APJII), the number of internet users in Indonesia reached 196.7 million people in the second quarter of 2020 or 73.7% of Indonesia's total population, but according to the Central Statistics Agency (BPS) it reached 266.9 million souls [9]. Through this social media, users can access various video streaming platforms such as VIU and iQiyi. By accessing the video streaming platform it helps users to get information about the dramas or films contained in them, as is currently being discussed in cyberspace and the real world, namely the spread of the Korean Wave (Hallyu), one of which is Korean Drama which is liked by people of all ages [10]. The topic of discussion in this research is the video streaming platform industry that excels in Korean dramas. Korean dramas are mostly short series that run for a few hours in a few weeks. Generally, K-Drama can only be watched for two to three hours daily. Until now, K-Drama is still a drama that is quite popular in the world [11]. The objects in this study are the video streaming platforms Drakor VIU and iQiyi. Researchers use two streaming media, VIU and iQiyi, because these streaming platforms are legal applications that provide various Asian dramas such as Korean, Japanese and Chinese. The Playstore shows that around 100 million+ people have downloaded VIU. VIU content is always released a few hours after broadcast on television, making this streaming service widely used. For all streaming service users who like various shows from South Korea, especially Drakor, VIU is a streaming platform that has a complete package. Economic costs and good image quality make this application widely downloaded. While iQiyi has around 50 million+ people who download it, iQiyi has advantages over other streaming platforms. Drakor, which airs on iQiyi, has the same broadcast time as TV shows. The program also offers subtitles in multiple languages; the first episode is free to watch. Dramas that air or appear on VIU usually air on iQiyi, but conversely, dramas that air on iQiyi may not necessarily air on VIU. Both of these applications have the advantage that they can be said to be faster in updating dramas that are broadcast for the first time.

The increasing number of active social media users can facilitate company interaction with users, one of which is on Twitter social media. Twitter is a social media that is used as a data source [12]. Twitter occupies the top 5 positions as a social media platform that Indonesians actively use [13]. In 2019, Indonesians who use Twitter reached 6.43 million, or around 52% of social media users. The Twitter application is one of the social media platforms used by civil society, government agencies, and also the private sector [14]. Twitter can be used as a decision-making tool; Twitter is seen as an elite medium in times of crisis or need. Twitter includes interactive communication with other users and also helps gather information from various sources [15].

Various analyses of the use of digital-based marketing have been carried out, written through scientific articles. Both national and international, several marketing studies for subscription streaming platforms have been carried out in various countries, such as Germany [16] Portugis [17] and Spanyol [1]. On a national scale, there is also research on the marketing of subscription streaming platforms which is disclosed through the text of scientific articles in Indonesia [18] as well as research that reviews the analysis of subscription streaming platforms mediated by user satisfaction [10] and [19]. In line with this information, research regarding the linkage of marketing analysis to Drakor subscription streaming platforms in scientific articles has never been done. A previous study conducted by Deborah Castro and Concepcion Cascajosa compared the impact of two streaming platform services (Netflix and Movistar+) on consumer purchase intentions to subscribe to Video On Demand (SVOD) [1]. In contrast to this research, Felix Dittmann examines Disney+'s strategic actions to achieve success rates in the on-demand video subscription (SVOD) sector [2]. The two studies discuss the marketing of streaming platforms that affect subscriptions to Video-on-Demand (SVOD), where subscription video-on-demand services have changed how entertainment content is consumed today [2]. In previous research, there was no research related to VIU and iQiyi's marketing strategy using the SNA method on Twitter.

This study aims to compare two Streaming Platform services (VIU and iQiyi), which arguably many Drakor enthusiasts access this streaming platform. This kind of research needs to be done to contribute information about various types of marketing analysis and their relationship to subscription intentions through consumer satisfaction. On the other hand, it can be used as a research developer on marketing topics and to find out the response of users who subscribe. In this regard, this analysis uses three marketing strategy criteria as keywords for data collection. Subscription is buying and selling regularly where in this criterion, the researcher wants to know about the responses from users to get input from users to correct existing deficiencies and increase sales; in subscribing, users will get bills automatically in each renewal period based on pre-existing subscription requirements, such as monthly or yearly [20]. Promos are VIU subscription product offers where subscription service prices are lower and faster for enjoying existing content to attract consumers to subscribe. Promotional activities are beneficial in increasing sales of a product [21], also gives a positive impression because of information related to the advantages possessed by

the product [22], and finally user satisfaction can be seen by the way these consumers make repeat purchases, even to the point where they are reluctant to move or are attracted to other competitors' products [19]. This user satisfaction means evaluating the completion of the choice caused by individual purchasing choices and the experience of using the product. In previous studies comparing the marketing strategies between Netflix and Moviestar+, in this analysis, the researcher wanted to compare the marketing strategies between VIU and iQiyi, which constantly update their content, especially Korean dramas, as a differentiator and renewal. This comparison was made to determine whether the application of Social Network Analysis can assist in providing input for digital marketing of VIU and iQiyi from the results of Twitter user tweets and mapping the interactions of VIU and iQiyi users on Twitter social media.

II. METHOD

VIU and IQIYI Video Streaming Platforms. This research requires hashtags and tweets to search for keys on Twitter user accounts as data that will be tested later. In this study, the theme taken is marketing content; there are three criteria: subscription, promo, and user satisfaction. The data collection for this research was in June 2020 – June 2022; a minimum of 500 data were taken for each keyword criterion.

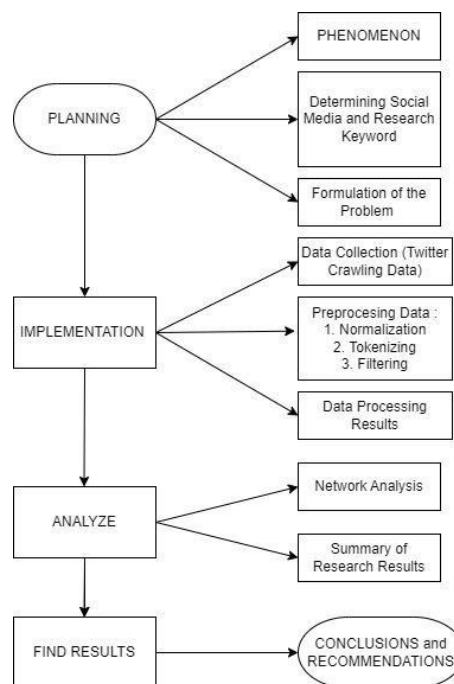


Figure 1. Research Flow

The method used in this research is using the Social Network Analysis (SNA) method using big data (Murshed et al., 2020). Social Network Analysis (SNA) is an analytical method in research that focuses on the study of human relations and is often used to measure human relations and describe individual data [23]. After crawling the data obtained from Twitter, the researcher then carried out the preprocessing stage [24], where the data is filtered or cleaned from incomplete data structures. At the stage of the data cleaning process, researchers use Normalization (a method that processes related data preparation), Tokenizing (a method of separating words in sentences for further text analysis), Filtering (filtering words/object words that often appear) [25]. There are also tools like Google Colab [26], dictionary [25], Wordij and Gephi are used in this study.

After processing the data, the researcher obtained several topic groups and network structures in the interaction/correlation between VIU and iQiyi users. The existing (already formed) network structure then moves on to the final stage, namely, an explanation regarding the results of the analysis and visualization using Gephi software [27]. After that, researchers can obtain valuable information from network assets that can be calculated using the SNA method by showing the most prominent promotional media in the pattern of distribution and correlation of network tweets (Figure 1).

III. RESULT AND DISCUSSION

Following are the results of the data obtained from data collection (crawling) from Twitter, which shows the number of tweets as follows:

Table 1. Marketing Content Recall Results.

No	Application	Content	Year	Amount Of Data
1	VIU	Subscriber	June 2020 – June 2022	1000
		Promo		1000
		Satisfied		702
2	IQIYI	Subscriber	June 2020 – June 2022	1000
		Promo		1000
		Satisfied		384

Table 1. shows the number of tweets obtained from the results of data collection (crawling) tweets with the keywords to be studied, namely focusing on marketing content such as subscriptions, promos, and satisfied. This research retrieved data from June 2020 – June 2022, a minimum of 500 data using Google's integrated development environment (IDE) called the Google Collab. VIU data obtained from June 2020 – June 2022 included 1000 subscription keywords, 1000 promos, and 702 satisfied keywords. In the IQIYI data, the results obtained from June 2020 – June 2022, 1000 subscription keywords and 1000 promos satisfied as many as 384.

After carrying out the data collection process (crawling), the process is carried out next is data preprocessing, which aims to eliminate irrelevant tweets which, make it easier to carry out the analysis process; this process is called the filtering process, which removes words that are not used and then processed using words. The following table 2 is the result of Wordij data processing.

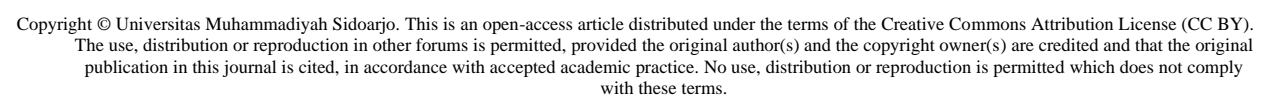
Table 2. Wordij Data Processing Results

No	Focus	Year	Total Number of Words	Unique Word	Average Number
VIU					
1	Subscriber	Juni 2020 – Juni 2022	9.185	552	16.639493
2	Promo		10.883	453	24.024283
3	Satisfied		12.145	441	27.539683
IQIYI					
1	Subscriber	Juni 2020 – Juni 2022	7.833	495	15.824242
2	Promo		15.579	435	35.813793
3	Satisfied		7.710	199	38.743719

In the Table 2., this is the result of data processing using Wordij, which from the table states that the number of tweets on VIU is and on tweets on IQIYI many.... From the table above, it can be concluded that the section on the total number of words with the highest value is the IQIYI tweet section for the June 2020 – June 2022 promo keywords, with a total of 15,579 words. Then the special word section with the highest value is the VIU tweet section on the keywords subscription June 2020 – June 2022 with a total of 552. And the average number section that has the highest value is the IQIYI tweet section on the keyword satisfied June 2020 – June 2022 with the number 38.743719. From the data processed by the researcher, it can be seen that the calculation of the "Subscription, Promo, Satisfied" social network property is as follows:

Network Properties	Subscriber	Promo	Satisfied
VIU			
Nodes	552	453	441
Edges	650	1205	630
Average Degree	2.355	5.32	2.857
Average Weighted Degree	25.228	62.269	76.444
Network Diameter	6	7	6
Modularity	0.219	0.335	0.588
Avarege Path Lenght	2479	2.616	2.944
IQIYI			
Nodes	495	435	199
Edges	528	1649	122
Average Degree	2.133	7.582	1.226
Average Weighted Degree	21.208	110.657	122.854
Network Diameter	6	6	6
Modularity	0.207	0.338	1.565
Avarege Path Lenght	2.422	2.603	2.891

The next stage is to visualize the existing data. The visualization process aims to eliminate irrelevant tweets, making the analysis process easier to carry out. The visualization results are shown in Figure 2 and Figure 3.



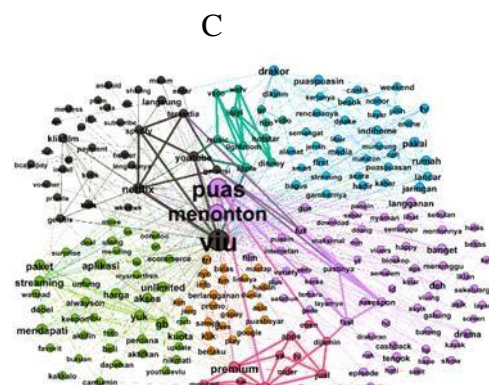


Figure 2. Visualization Results of the VIU Twitter Network June 2020 – June 2022

The visualization results (Figure 2 A) of Drakor "subscription" content on VIU Twitter June 2020 - June 2022 show that VIU's video streaming platform, in this case, users often talk about watching Disney, and Netflix, wherein the application there are also various k-dramas (Korean drama). This is because the response to watching Disney and Netflix is related. The VIU subscription keywords are also interconnected with the words Premium and Drakor. The VIU application offers a subscription to VIU Premium or an exclusive membership to the VIU application to get benefits that are only available to VIU Premium subscribers. The conclusion that can be drawn from the marketing promotion keyword "subscription" to Drakor on VIU is that many users are interested in subscribing to VIU. K-Drama is one of the popular dramas in this VIU application. VIU can be accessed free of charge and paid (subscription); if the user doesn't want to subscribe, he must wait one month for the Korean drama he will watch. Conversely, if the user subscribes, they can immediately watch the Korean drama without waiting a month. There is no doubt about the films in this VIU application because the content is constantly updated.

The visualization results (Figure 2 B) of the Drakor "Promo" content on VIU Twitter June 2020 - June 2022 show that VIU's video streaming platform, in this case, users often talk about Premium. The VIU application offers a subscription to VIU Premium or is called an exclusive membership to the VIU application to get benefits that are only available to VIU Premium subscribers, such as: free of advertisements, being able to watch the latest episodes of Korean dramas, Asian dramas, and also variety shows, free to download your favorite movies, theaters, and variety shows can also access exclusive content without limits. In the VIU Promo keywords, users often talk about sharing and privacy, where sharing and private are related words. Users also talk about Payment VIU Premium which can use e-wallets such as OVO, Gopay, Shopeepay, and Dana, where each payment through several of these e-wallets, of course, also gets cashback. The conclusion that can be drawn from the marketing promotion keyword "Promo" Drakor at VIU is that by activating VIU Premium, users can enjoy the various advantages that exist and make it easier for users in the payment system to be able to use their digital wallet.

The visualization results (Figure 2 C) of the "Satisfied" Drakor content on VIU Twitter June 2020 - June 2022 show that VIU's video streaming platform, in this case, users often talk about watching. Users feel satisfied watching VIU with service facilities in the application, dramas or movies that are constantly updated, as well as the convenience of subscribing, where these words are interconnected (with thick lines) and are widely discussed by users. The presence of VIU is an alternative for satisfaction for Drakor and other drama lovers who want affordable subscription prices because VIU is also one of the official viewing sites, which is relatively cheap among other video streaming platforms. The conclusion that can be drawn from the marketing promotion keyword "Satisfied" Drakor at VIU is that while watching VIU, users are satisfied with the services available in the application, dramas or movies that are constantly updated (especially Korean dramas), and ease of subscription.

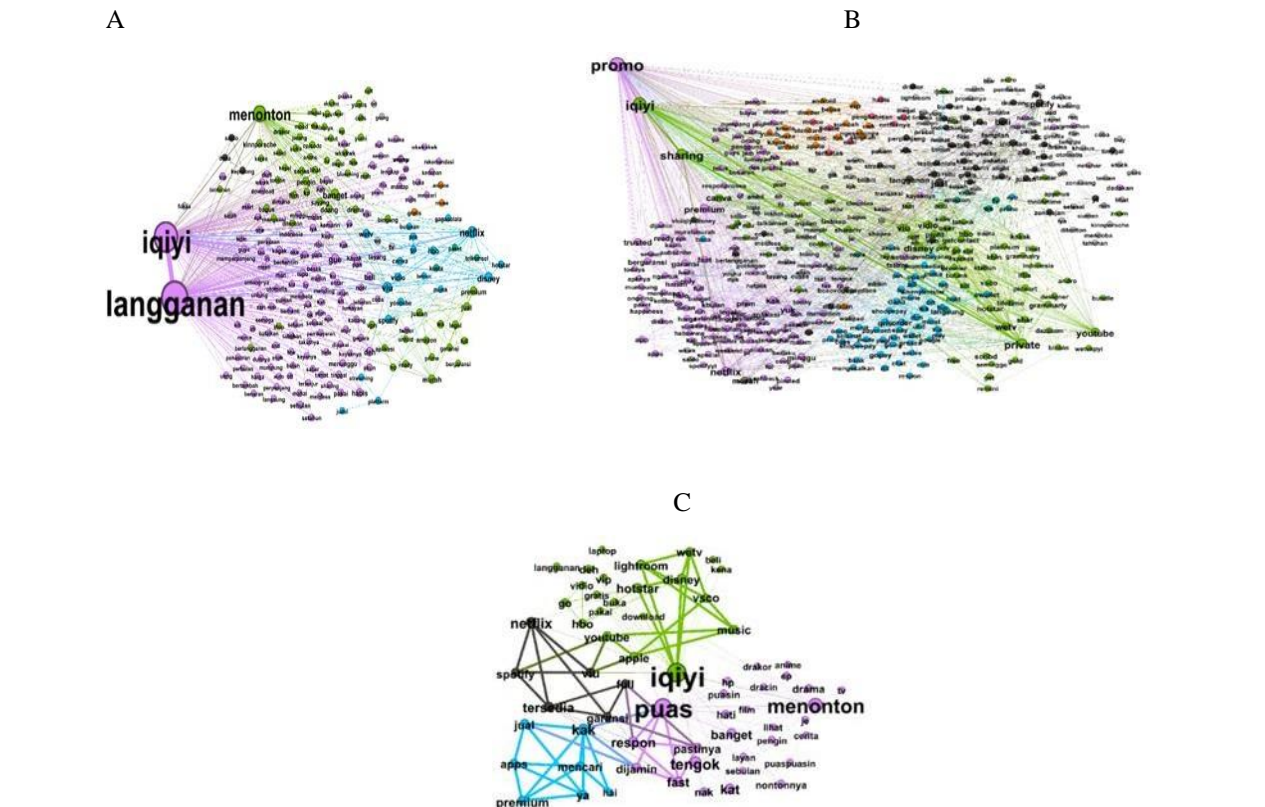


Figure 3. Visualization Results For the iQiyi Twitter Network June 2020 – June 2022

The visualization results (Figure 3 A) of Drakor "subscription" content on iQiyi Twitter June 2020 – June 2022 show that the iQiyi video streaming platform, in this case, users often talk about watching, where in the iQiyi application, users don't only talk about Korean dramas, but in This application also excels in its anime series. This is because the response to watching Drakor and anime is related. This application provides free services for its users. Still, suppose the user wants to watch or continue to access the whole episode. In that case, the user must first subscribe to iQiyi VIP, where Premium and standard VIP subscription packages are already available in this feature. In the premium package, users can get all the boxes in the Standard VIP package, plus they can also watch the latest movies or movies that have just been updated first, see or watch VIP movies on four devices simultaneously, and watch paid movies. For free with a discount. The conclusion that can be drawn from the marketing promotion keyword "subscription" to K-Drama on iQiyi is that even though drakor is not the featured drama in this application, few Korean drama lovers access or view K-Drama through the iQiyi application. The iQiyi application also provides subscription services and various advantages, such as features and good-quality broadcasts.

The visualization results (Figure 3 B) of Drakor "Promo" content on iQiyi Twitter June 2020 - June 2022 show that the iQiyi video streaming platform, in this case, users often talk about Premium. Similar to VIU, that iQiyi also offers a premium package. Subscribing to iQiyi can be done in 2 ways, namely the VIP Standard and iQiyi Premium packages, but in the online image above, users often talk about iQiyi Premium. In the iQiyi Promo keyword, users often talk about sharing and privacy, where sharing and private are related words. Users also talk about iQiyi Premium Subscriptions using OVO, Gopay, Google Play, Shopeepay, Funds, and Credit. The conclusion that can be drawn from the marketing promotion keyword "Drakor" on iQiyi is that by activating iQiyi Standard and Premium VIP Packages, users can enjoy the various advantages offered in each existing package, of course, getting a lower price. iQiyi makes it easy for users in the payment system to use their digital wallet, also with credit.

The visualization results (Figure 3 C) of the "Satisfied" Drakor content on iQiyi Twitter June 2020 – June 2022 show that the iQiyi video streaming platform, in this case, users often talk about watching. Users also talk about drakor (Korean drama), dracin (Chinese drama), and anime because the responses to watching drakor, dracin, and anime are related. The words Satisfied and iQiyi have larger nodes than the others, but the edges between the two words tend to be not thick, so it can be said that between the two words, there is a relationship, but not that strong. Whereas other words such as lightroom, Disney Hotstar, vsco, music, youtube, apple, and others have pretty large

nodes and edges that tend to be thick, so it can be said that many Twitter users discuss these words and among the words, these words have such a strong connection. The conclusion that can be drawn from the marketing promotion keyword "Satisfied" drakor on iQiyi is that the response to Satisfaction with iQiyi is interconnected but not so strong; in this case, it can be concluded that user satisfaction with iQiyi is often discussed on Twitter, even though it is not Drakor that becomes the central drama on the iQiyi application, but not a few Drakor lovers are satisfied watching Korean dramas on this application. Because iQiyi always updates its dramas and films.

IV. CONCLUSION

This research shows that by using SNA and building relationships between words, we can see the various topics/foci being discussed by Twitter social media users. Visualization results of the VIU network on Twitter June 2020 - June 2022 show that while watching Drakor on VIU, users are satisfied with the services available in the application, dramas or movies that are constantly updated (especially Korean dramas), and ease of subscription. After that, a comparison was made with iQiyi. The visualization results of the iQiyi network on Twitter June 2020 - June 2022 show that while watching Drakor on iQiyi, the response to Satisfaction with iQiyi is interconnected but not so strong; in this case, it can be concluded that user satisfaction with iQiyi is often discussed on Twitter, even though Drakor is not the central drama on the iQiyi application, but not a few Drakor lovers are satisfied watching Korean dramas on this application. Visualization of the three criteria for collecting research data is essential to find out the user's response so that other users who have not yet subscribed feel interested in enjoying streaming services on VIU and iQiyi. This is because each data withdrawal criteria is responded to by the users so that this phenomenon can provide input for the future in improving existing marketing strategies on the VIU and iQiyi video streaming platforms. This research only focuses on analyzing and visualizing the relationship between words from Twitter from June 2020 to June 2022. These results need to be compared with the results of pre-pandemic data to find out changes in the focus of tweets from users during and after the pandemic. Suggestions for further research that can be done with other social media such as Instagram, Facebook, or YouTube also need to be done to validate the results of this research with influences from various other social media.

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Conflict of Interest Statement:

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.