Listeners’ Engagement and Interactivity in News Radio Twitter in Indonesia

Agus Rusmana†, Edwin Rizal‡, Ute Lies Siti Khadijah§, Rully Khaireul Anwar∥, Khoiruddin Muchtar¶

Abstract: Although radio has traditionally been recognized as a medium dependent on listener engagement, social media platforms such as Twitter have introduced new forms of interactivity due to their real-time and networked characteristics, facilitating the emergence of novel engagement types. Employing a case study approach, this research delves into the various forms of engagement on @PRFMnews, the official Twitter handle of PRFM Radio in Indonesia. Data was collected through observation of posts and interactions on the @PRFMnews account and through comprehensive interviews with the chief editor and two online editors of the station. Document studies were also conducted throughout October 2021 to gather research data. The study yielded several findings. Firstly, Twitter has been identified not only as a source of news but also as a platform that augments listener engagement in citizen journalism. Secondly, user-to-user interactivity was evident in the manner in which users tweeted and responded to posts from both their peers and account administrators. Thirdly, user-to-system interactivity was characterized by how individuals engaged with the social networking platform itself, particularly in actions like clicking URLs and viewing media containing hyperlinks. Lastly, user-to-document interactivity was observed in the way users retweeted and liked posts on the @PRFMnews account. These findings demonstrate that the dynamics between radio stations and their listeners have evolved in conjunction with the popularity of Twitter.

Keywords: Radio, Listener’s Engagement, Interactivity, Social Networking Sites, Twitter, @PRFMnews.

1. Introduction

Radio has long been recognized as a medium with a distinct ability to create what is known as the theatre of the mind; that is, radio can explore and stimulate listeners’ imaginations (Jackson-Scheibetta, 2014). Radio has evolved from being an auditory medium to one that is perceived to have an emotional connection with its listeners. Radio, particularly during its golden age, provided opportunities for listeners to connect, ranging from using a listener card to making phone calls or sending SMS messages (Algan, 2013; Ewart & Ames, 2016). This capability transforms radio into a medium that allows listeners to express themselves on topics ranging from personal perspectives to political matters, providing an overview of broadcast radio’s interactivity.

The rapid development of the Internet platform as the prima donna of cutting-edge information and communication technology does not imply that traditional mass media will vanish (Fakhruroji, 2019; Snoddy, 2003). On the contrary, the Internet converts a variety of traditional analogue to digital mass media. This phenomenon, known as remediation (Bolter & Grusin, 2000), is one of the fundamental characteristics of the Internet, and radio is one of the analogue mass media that has also undergone digitalisation. As an auditory medium, the Internet platforms will provide audiences with a unique experience; for example, as the radio streaming interface, they will be presented with buttons and visual displays.

In the midst of the celebrations surrounding the emergence of streaming-based digital radio and websites or smartphone-based apps, some radio stations decided to survive and continue to broadcast analogously, despite the fact that radio listeners’ behaviour has changed, and they no longer enjoy radio broadcasts from a single device as they previously did. Instead, people are now using radios as one of the features built into automobiles, smartphones, and other devices. Changes in consumer behaviour, combined with advances in information and communication technology, have resulted in analog radio becoming a medium that requires some adaptations. Among the
changes implemented is the use of streaming technology as part of a convergence strategy that incorporates old and new media (Jenkins, 2006) to improve broadcast quality.

In the Indonesian context, numerous commercial broadcast radios have taken convergence initiatives, such as extending live-streaming broadcasts based on websites or apps like Spotify. Furthermore, other broadcast radios do not rely solely on streaming technology but rather on social networks as a means of sustaining their existence. The PRFM 107.5 news channel on the radio in Bandung is one that uses this method. Established in 2009, this radio has grown using Twitter as a supporting medium for the dissemination of public information, whether obtained from the public or official institutions.

Practically, the audience is given the convenience to convey as well as obtain information related to public services around their neighborhood in real-time through @PRFMnews, the official Twitter account of PRFM 107.5 News Channel, which they can directly comment on by other listeners, so it creates interactions at various levels: interaction among listeners, listeners with the administrator, even listeners with the Radio announcers. Social media participation as an interaction support certainly has an impact on the pattern of interactivity on PRFM Radio broadcasts.

PRFM Radio is a Bandung-based radio station that has been airing news programmes for more than a decade. Some of its programmes have been awarded prizes, including an award from KPID (Komisi Penyiaran Indonesia Daerah, Regional Indonesian Broadcasting Commission), the Gold Layang Kencana Award Cup, and more. With the tagline ‘You are our reporter’, PRFM Radio collects information directly from the public and then turns it into accurate, thorough, and balanced news that can be followed through authorised sources. Additionally, PRFM Radio is also actively using various other platforms such as SMS, telephone, social media, websites, podcasts, smartphone-based apps, and YouTube, illustrating that the radio also performs a convergence strategy. But, more specifically, PRFM Radio uses Twitter more to increase interactivity.

On the other hand, Indonesia is one of the most active countries on the Internet and social media (Kemp, 2023). This is one of the causes that has led to an increase in the internet platform used as a supporter of interactivity to strengthen the existence of radio. Because of the interactivity that is one of the characteristics of this new media, PRFM Radio broadcasts are distinct, and their information is highly sought. Furthermore, PRFM is considered to have presented a type of broadcast radio that can involve the listener community in providing public information that other listeners need.

As a result, this article seeks to demonstrate how the @PRFMnews account supports the interactivity of PRFM Radio in Bandung. This study aims to investigate the practice of using Twitter as a supporter of engagement in PRFM Radio broadcasts related to public information in the city of Bandung, how listeners as Twitter users are involved in the interactions that arise, namely user-to-user interactivity, user-to-system interactivity, and user-to-documents interactivity, and what the implications are for the context of interactivity at the user-to-user, user-to-system, and user-to-document levels.

2. Literature Review

Radio stations have long strived to engage with their listeners (Ferguson & Greer, 2011). This is due in part to the economic value of listener presence and engagement in relation to the possible advantages that can be acquired from advertising (McDowell & Dick, 2003). This is, therefore, related to the effort of radio stations to maintain listener pleasure with the information presented (McDowell & Dick, 2003) so they will remain loyal even when frequencies shift (Abelman, 2005). However, the relationship between radio and listeners has developed in line with changes in information technology, especially in the era of the COVID-19 pandemic (Achmad et al., 2021). Radio stations, on the other hand, are coping with new technology, such as satellite radio and portable digital audio players, which have emerged as new options for radio listeners (Sterling, 2006). As a result, the significance of online communication for broadcasters cannot be ignored, as Abelman (2005) found that various websites aided in branding and promotion for some stations that change frequencies for some reasons.

Furthermore, Lind and Medoff (2009) observed that along with the wide use of the Internet, radio stations have become increasingly connected to their listeners online via Twitter and the Web. In terms of Twitter, many news organisations regard it as a significant resource for providing updates on news events, as well as a method for obtaining storeys and ongoing information from individuals who are directly connected to the events (Farhi, 2009). Thus, radio stations will have a greater opportunity to obtain real-time information related to specific events from listeners through tweets they send by ‘mentioning’ the radio account, resulting in a new type of interactivity.

One of the hallmarks of Twitter is the brevity and frequency with which users can do (Jaidka et al., 2019). Furthermore, Twitter, like other social networks, has demonstrated speed, mobility, and simplicity (Farhi, 2009; Murthy, 2011). Although Twitter is limited to 140 characters, users can direct their followers to more detailed information by including links to websites (Fakhruroji & Muchtar, 2018; Greer & Ferguson, 2011). Over time, as Twitter evolved, the maximum Tweet length grew to 280 characters. Although it is still limited to display longer content, it can be equipped with emojis to express the emotions of users (Twitter, 2023). Twitter’s involvement as a supporter of radio broadcasts has become a requirement to stay connected with listeners, demonstrating the development of a new and more participatory culture (Fakhruroji, 2017, 2019).

Studies exploring radio and its relation to new media, including social networks such as Twitter, have been carried out from various perspectives and approaches. Some studies discuss the relationship between radio and the
Internet and also the relationship between the two and their implications (Lind & Medoff, 2009; Pitts & Harms, 2003). Other studies presented the use of new media and the birth of Internet radio with various accompanying discourses as innovations in radio broadcasting (Freire, 2007; Menduni, 2007), factors that make listeners interested in Web/internet radio (Stark & Weichselbaum, 2013), the political economy of Internet radio by emphasising cooperative economic agreements and identifying several types of agreements (Wall, 2004). Social media such as Twitter is also used to expand the reach of a scholarly journal, as the social network makes available virtual researcher communities that can easily help to create, share, and refine new ideas (Tur-Viñes et al., 2018).

More specifically, Ahmad (2010) evaluates the usefulness of Twitter as a medium for journalism activities and presents numerous pieces of research that explicitly discuss the effectiveness of Twitter as a news source. Furthermore, some investigate the usage of Twitter as a news medium (Hermida, 2010) and Twitter as a news source (Moon & Hadley, 2014). Moon and Hadley (2014), for example, employ content analysis to examine how news organisations use Twitter as a news source based on information availability and the perspective of gatekeepers, and the results reveal that journalists consider Twitter as a new channel for collecting information. According to these studies, there has been a dramatic shift in the relationship between media organisations and Twitter as a supporter of journalism operations.

Other studies that specifically describe the use of Twitter as a medium for supporting interaction can be found in various contexts, including how Twitter increases listener engagement (Bonini & Sellas, 2014) and its benefits for conventional radio in disseminating information (Stark & Weichselbaum, 2013), how Facebook and Twitter function as a support for interaction with the audience for regional radio broadcasting (Ferguson & Greer, 2011), and efforts to compare the benefits of Twitter as a new media with traditional media to meet public information needs (Ferguson & Greer, 2011; Hermida, 2010).

Although each has its distinctive characteristics, all of these studies indicate major dynamics regarding Twitter as a new media. According to Bonini and Sellas (2014), Twitter is becoming one of the most popular social media platforms and is increasingly being used by radio broadcasters as a medium to communicate with their audience and even to develop a listener community. This is due to Twitter’s nature as a social networking site (SNS) platform, which is described as a service where users can (1) construct their interests openly or semi-publicly in a specific system, (2) articulate several other users with whom they share a connection, and (3) and traverse their list of connections and those made by others within the system (Boyd & Ellison, 2007).

One of the most essential components of social networks, with these qualities, is the reciprocity of information sharing between users (Frison & Eggermont, 2017). Links in the networks might be formal or emergent. According to Littlejohn and Foss (2008), a formal network can be found in a structured setting and is commonly built and managed by an organisation, while an emerging network is distinguished by the establishment of ties on an informal basis through ‘frequent, everyday contact between members’, which may contribute to the fluidity of user reality in which they can simply move from one system to another. As a microblogging platform that allows users to publish and share short messages with a network of followers, Twitter has become one of the most popular services, especially in Indonesia (Kemp, 2023). It combines the features of blogging, the immediacy, the relationships of SNS, and the ease with which it can be integrated with mobile phones. Twitter enables users to exchange and consume thousands of information, and its adaptable and real-time nature creates a dynamic environment for content sharing (Bonini & Sellas, 2014).

As a new medium, the real-time nature of Twitter also indicates the characteristics of interactivity. Therefore, the principle of interactivity has significance for the various adjustments made by the radio to support its interactivity. Interactivity is one of the key concepts of new media (Fakhruroji, 2017, 2021; Gane & Beer, 2008). One study that specifically discusses radio interactivity using the internet is shown by Easton (2005). He divides interactivity into two interactivity models: vertical and horizontal. Vertical interactivity is commonly demonstrated between users or visitors with account administrators or radio stations, while horizontal interactivity is the interactivity formed between fellow users. Practically, McMillan (2006) identified three forms of interactivity in the context of social media, namely user-to-user interactivity, user-to-system interactivity, and user-to-document interactivity. First, user-to-user interactivity, namely, interactivity between users, which can generally be manifested in interpersonal contexts, namely, between individuals as in daily conversations; symbolic interaction, a kind of interaction that arises through the symbols; social interaction, which is manifested in the form of social interaction, and interaction as feedback, which is showing interactivity as a manifestation of feedback that extends the interaction.

Second, user-to-system interactivity, which covers the relationship of humans as users with computers and on-line technologies, such as how they click, create, and use hyperlinks or share information. In this context, a system is defined as a piece of technological equipment, both hardware and software, through which an individual can directly interact by using a computer interface (McMillan, 2006). As a result, this style of interaction focusses on user engagement with various elements on computers, websites, or social media platforms.

Third, user-to-documents interactivity is developed between users and the documents they gain on the media they access. For example, when someone receives news or information on social media, he/she can immediately perceive, respond to, and like it (McMillan, 2006). In the social media context, user-to-document interactivity can be shown in how someone understands and provides messages or comments on information/news that occurs on social media or other online platforms.
However, it should be noted that radio is one of the forms of mass communication that relies on interactivity. Concerning the concept of interactivity, radio has long been viewed as a medium capable of accommodating community aspirations, for example, through community radio (Fraser & Restrepo-Estrada, 2002; Jeffres & Hur, 1981), playing songs based on listeners’ requests (Wall, 2004), and even being the only media people rely on in an emergency (Moody, 2009; Romo-Murphy, James & Adams, 2011). Some of these characteristics are assumed to be an effort to develop a connection with its listeners (Ferguson & Greer, 2011). As a result, the use of social media by several radio broadcasts may be a rational move, not only as a technological adjustment but also as an effort to maintain the connection with listeners who are now also followers of the radio social media accounts. With its emphasis on interactivity, radios will find it simpler to build interactivity with the people who are its listeners.

3. Methodology

This study utilizes a case study methodology to explore the context of social media usage, specifically Twitter, as a facilitator of listener engagement in PRFM Radio broadcasts in Bandung City, Indonesia. According to Yin (1994), a case study is an approach to comprehend reality by examining a particular instance as a representative example. Therefore, PRFM Radio's Twitter account serves as a singular lens to investigate the broader reality of interactivity fostered by radio when integrated with social media, especially in relation to Twitter's usage and its effects on listener engagement.

The study involved three key informants: the editorial team of PRFM Radio, comprising one editor-in-chief and two online editors. These individuals were selected intentionally based on a set of criteria.

Data collection comprised observation, in-depth interviews, and document analysis. Observations involved scrutinizing PRFM Radio’s broadcast processes and interactions on the @PRFMnews Twitter account during October 2021, performed manually utilizing Twitter’s features such as posts, shares, likes, comments, etc. Additionally, comprehensive interviews were conducted with the chief editor and two online editors, who were deemed knowledgeable sources regarding the strategies and techniques employed to promote interactivity in informational broadcasts via Twitter. The interviews sought to understand how Twitter supports interaction in PRFM Radio broadcasts, especially those concerning public services and information dissemination in the greater Bandung area, as well as the implications for listener interactivity at the user, system, and document levels. For instance, we examined how enhanced listener participation manifests through interactions on Twitter accounts. All interviews were carried out in Bahasa Indonesia and occurred separately on multiple occasions. To preserve ethical standards, informants’ identities were anonymized.

During the document analysis phase, the research team analyzed the @PRFMnews account's content, categorized the various interaction types observed throughout October 2021, and mapped the contexts of interaction into user-to-user, user-to-system, and user-to-document categories. This was undertaken to elucidate the interactivity facilitated by PRFM's engagement with new media as a traditional radio news outlet, potentially illuminating shifts in listener engagement patterns. All categorization and mapping were conducted manually, with the data being presented in tables and graphically visualized using Microsoft Excel 2016 to ensure clarity and readability. Subsequently, the data underwent verification via triangulation, inviting informants to review the findings for accuracy.

4. Results and Discussion

4.1 “You Are Our Reporters”: Twitter and Radio Listeners’ Engagement

PRFM Radio, which is owned by the Pikiran Rakyat Group, West Java’s largest media conglomerate, has been broadcasting since November 8, 2009. The station chose the format as a citizen journalism-based news radio with thousands of registered listeners who actively express information at any time through various channels, which is bolstered by their presence on many social media platforms, particularly Twitter, with the tagline “You are our Reporters.” Furthermore, PRFM Radio benefits from proximity to local and national-scale sources, allowing PRFM to present balanced, confirmed, and verified information. Broadcast radio has indirectly provided an overview of the context of interactivity, one of the general characteristics of radio that relies on listener engagement through citizen journalism.

Radio, which first appeared in the nineteenth century, played an essential role in the history of independence in many countries, including Indonesia (previously East Indies) (Scales, 2010; Mrazek, 1997). During Dutch colonialism, radio broadcasting in Indonesia began in 1925 in Batavia (now Jakarta) under the name Bataviase radio broadcast Vereniging (BRV) and quickly spread to other parts of the country. When Indonesia declared independence on 17 August 1945, radio broadcasts were still under Japanese control. Until the end of 1966, Radio Republik Indonesia (RRI) was Indonesia’s sole government-controlled and owned radio station. However, in response to sociocultural and technological advancements, various radio broadcasts have emerged that are managed by the private sector and are governed by Government Regulation No. 55 of 1970 governing Non-Governmental Broadcasting Radio. Private and individual radio transmissions were gathered in 1974 in a forum known as the Persatuan Radio Siaran Swasta Niaga Indonesia (PRSSNI, Private Commercial Broadcasting Radio Association) as part of its expansion (Ardianto & Erdinyaa, 2004).
This historical fact shows that radio was a popular medium during Indonesia's independence. Even in the next stage of evolution, radio continues to play an essential role as a medium of education and entertainment, with interactive nuances such as listening to songs via telephone lines, SMS, or listener cards. As a result, interactivity has become one of the defining features of radio broadcasts, particularly in Indonesia.

The context of radio interactivity with listeners changed with the advancement of information and communication technology, which resulted in the birth of various social media platforms, namely, by making social media a supporter of radio interactivity in building engagement with listeners (Ahmad, 2010; Ferguson & Greer, 2011). Similarly, PRFM Radio began using Twitter in June 2010 to increase listener interaction. Until this study, the @PRFMnews account had 267.8 thousand followers, 3,190 accounts followed, 698.1 tweets posted, and 12.7 thousand likes (see Figure 1).

The decision to utilise Twitter as a supporter of interaction is essentially an inseparable series from the previous context, in which radio used SMS or telephone services to gain listener participation. One of the factors that influence the decision of Radio PRFM to use this platform is the growth and popularity of social media platforms such as Facebook and Twitter. This is expressed in the following interview,

‘... Social media has evolved into a platform for PRFM netizens, and therefore, the usage of social media is a kind of adaptation to the advancement of new technologies. In other words, the more channels available to the community, the higher the connection we expect to establish the engagement ’... (Interview).

However, it is crucial to highlight that the engagement created by the Twitter platform does not mean that the gatekeeping process is abandoned. The ‘gatekeeper’ element in this context is run by the administrator, also known as the radio editor. They are responsible for filtering and managing messages before they are broadcast to radio listeners. Furthermore, this editor is entrusted with developing standards and codes of ethics for broadcasters or administrators who serve as hosts while engaging with listeners. Some of the ethics applied in interacting with listeners at Radio PRFM include (1) using semi-formal language, (2) not discrediting certain products, individuals, characters, races, and ethnicities, and (3) not offending or discrediting other radio.

In the context of PRFM Radio, this engagement was built by prioritising the information reported on Twitter by listeners, the majority of them in the Greater Bandung and West Java areas. This can be seen in the expression:

“What is close to listeners and followers is what we often bring up as news material. That is, we do not apply a specific strategy. This step turned out to be quite effective because more listeners in Greater Bandung are tweeting about public issues around them. So, the main key is that we are consistent in terms of public services and facilities. We don’t produce too much national news, but we do more public facilities, such as damaged roads, traffic information, weather information, etc., which we think are the closest and most needed... ”(Interview).

The above description demonstrates that, as a news radio station, PRFM Radio’s focus is on the community’s experience with public services and facilities. Managers believe that this step will significantly increase listener engagement. Thus, as expressed below, most of the information presented through PRFM Radio originated from tweets of listeners who are also followers of @PRFMnews.

“We rarely update directly or go into the field. But instead, we get news from Twitter users. But, of course, before we retweet or share through the radio, we validate by waiting for similar reports from other users. After this confirmation, we called the authorities, for example, the local government or the police closest to the reported location... (Interview).

The above explanation exemplifies how the process carried out by the editor of PRFM Radio before it was used as news content corresponds to the pattern of citizen journalism. Furthermore, the PRFM Radio editor’s treatment of listener posts who are followers of the @PRFMnews account demonstrates how Twitter has evolved
into a supporting media in promoting listener engagement with radio. Furthermore, this interaction occurs not just between listeners and radio editors but also among listeners as listeners frequently wait for the information posted by fellow listeners.

4.2 Tweets and Replies: User-To-User Interactivity

This type of engagement includes exchanges not just between listeners who are also Twitter users but also between visitors and the administrator of the @PRFMnews account. This type of interaction is a type of interpersonal contact mediated through new media, specifically the Twitter platform. McMillan (2006) refers to this user-to-user relationship as human-to-human interactions. Interactivity in this category is defined by the conversation between users or between users and the administrator of the @PRFM account. Messages posted by users will be responded to by others, which can mainly be seen in the tweet and reply feature.

This kind of participation may be seen when the @PRFMnews account broadcasts traffic information about Greater Bandung that is related to a follower’s tweet rather than the coverage of the PRFM Radio crew. When a user tweets about a traffic situation, he/she alerts other users in the same area that there has been a traffic accident, advising them to be cautious, and informing them of the possibility of traffic delays caused by the accident. Users typically conclude their tweets by attaching a photo or video of traffic surrounding the spot. When PRFM received this tweet, they confirmed and verified it before broadcasting it on the radio, and it was also shared with all listeners and users/followers via the @PRFMnews account.

This type of tweet typically receives immediate reactions from other users, as evidenced by the reply feature. Additionally, the PRFM Radio administrator administrator responds by clicking on a news link on the PRFM Radio website, to which the user responds by clicking on the link. Following that, some comments from fellow users were more dialogic, both among fellow users and users with the @PRFMnews administrator, even though this form of dialogical engagement is not like a chatroom conversation.

The type of two-way conversation or more on the @PRFMnews account is sufficient to represent the type of interactive communication with the user-to-user category, as proven by dialogues between fellow users and users and the @PRFMnews administrator. More specifically, chats between fellow users typically take the form of exchanges in which both parties exchange messages with one another, which, if addressed to a specific user, are carried out using the reply tool or by ‘mentioning’ the person’s account. This condition is in line with the views of McMillan (2006) that user-to-user interaction is indicated by communicating in a way that is interrelated with messages that relate to each other.

The content discussed by users on the @PRFMnews account is frequently informative, light, and conversational, as if they were speaking directly, though the process of responding to each other often occurs asynchronously. However, the interaction context between fellow users is smaller than that between visitors and the @PRFMnews administrator. There is a propensity for messages from these users to be left solely to answer or respond to messages left by the administrator. The fact that this user has control demonstrates how Twitter’s interactive features have helped visitors’ desire to converse.

**Graph 1: User-to-user interactivity on @PRFMnews (October 2021).**

As shown in Graph 1, the number of tweets was less than the responses throughout October 2021. User interactions with the @PRFMnews administrators are largely in the form of user replies or comments on posts or tweets posted by administrators. The messages uploaded by the administrator are messages covering public information in the Greater Bandung area, which are subsequently commented on by other users. Other variables that promote the establishment of this interactivity include the use of local or plain language that is easy to comprehend, as well as the promotion of discourse with common values and standards.

“In this interaction, we use language that is adapted to the person asking the question; some of them also use Sundanese (the local language used mainly by West Java residents—authors). But we also pay attention to the content, so we stay focused… basically, we use more semi-formal language…” (Interview).

Furthermore, this interaction between users and administrators demonstrates a kind of emotional closeness, since they use the greeting ‘kang’ (which means ‘brother’ in the local language) among fellow users when reacting directly to particular messages. The use of styles of verbal language demonstrates the existence of rhetorical tactics.
It also tries to develop a connection with users, specifically by using the geographical proximity principle. Easton (2005) evaluates the use of local language and discourse and elevates common ideals and societal values, which will increase user participation.

A remarkable feature is that greater participation appears in the @PRFMnews account, which was not generated from users’ posts on the timeline page but rather from users’ comments or responses to tweets or administrators’ posts. This response or comment may then pique the interest of other people, prompting them to comment once more. Commenting on each other’s responses has resulted in a brief conversation with fellow users. Furthermore, this account demonstrates a pattern in which user-generated user-generated messages are primarily intended to answer or respond to administrators’ posts.

This data suggests that administrators play a significant role in establishing and fostering contact among users through engaging topics and discourses to urge users to interact. Furthermore, the administrator’s role is vital in building two-way communication with a more personal style of speech, such as selecting a relevant topic and using the local language or using first-person greetings to encourage users to continue responding. One method is to ask users questions about traffic information in their location, which results in an immediate response from several users. While Easton (2005) argues that interactivity on social media is generally rooted in business and institutional factors, politics or company ideology, and the technology used by each radio, the @PRFMnews account is different. Interactivity is not only rooted in these factors, but also related to the administrator’s role in building communication that can further encourage the participation of users.

4.3 URL Clicks and Media Views: User-To-System Interactivity

As a social network, Twitter’s interactivity occurs systematically and automatically in some elements, one of which is the timeline feature, which is identical to social networks. This timeline feature allows users to observe any interactions and describe the account activities. Several forms of information can be detected through the timeline of the @PRFMnews account: First, tweets with community reports in the form of text, photographs, or videos. Second, the message contains information on traffic, weather, lost information, services, and public facilities in Greater Bandung. Third, communications about information that is being discussed by PRFM Radio. Fourth, the statement is mentioned in the news published on prfmnews.id, the official PRFM Radio website.

In practise, this timeline provides a detailed summary of the interactivity of an account. It allows users to see updates or comments made by each user and administrator in the form of tweets, prompting every other user to respond or comment. In general, the timeline of the @PRFMnews account displays tweets posted by the administrator, as well as tweets that are automatically added when a user ‘mentions’ the @PRFMnews account. The communications posted by visitors, on the other hand, are still dominated by messages of administrator updates. This fact demonstrates that each user has the option to interact with the facilities on the timeline page. They are free to leave messages, like or browse more posts on tweets posted by others. In general, the context of user-to-system interaction can be expressed in two ways: how users perform URL clicks and media views, both of which are tied to hyperlinks provided by the @PRFM timeline. Due to the limited character of a tweet, content on Twitter typically uses hypertextual links that connect people to more extensive information.

In other words, user-to-system interactivity, in this instance, refers to the relationship formed between the user and the hyperlink provided on the @PRFMnews timeline. For example, to view the profile of the @PRFMnews account, users can click the profile, which will take them to a profile page that includes the account owner’s address/location, contacts, and a website link associated with @PRFMnews that can be visited further. Meanwhile, the utilisation of hyperlinks in the majority of tweets posted by administrators demonstrates the context of interactivity related to news information on the @PRFMnews. By including a hyperlink to a tweet on this timeline, visitors who are followers will be able to see the link directly on their timeline page, so visitors no longer need to enter the @PRFMnews profile, although this does not apply to users who are not followers of @PRFMnews.

Graph 2: User-to-system interactivity on @PRFMnews (October 2021).
As a result, hyperlinks become one of the tools that encourage users to interact with the system by clicking on a hyperlink that takes them to the included information. However, some tweets can be in the form of text, photographs, audio, or even video. As a result, the number of users who view activity on this type of tweet demonstrates this kind of interaction. Visual content on the @PRFMnews account is typically offered as an illustration that reinforces the information presented, either from users or the @PRFMnews administrator.

Similarly, to text content, users can interact with visual tweet content, where they can click on it to see the visual content. In addition, media views also seem to refer to how users interact with all the elements contained on the @PRFMnews page. In other words, the media view activities are the accumulation of user interactions with this account as a system. This is what causes the numbers of media views to be so dominant compared to other interactivity aspects, as shown in Graph 2. The higher number of URL click activity is caused by the activity of media views, which also refers to the visits of users who are not followers.

Interactivity in this pattern occurs between users and the internet system as a networking technology, where the system responds to stimuli given by the user and vice versa. As a social networking technology, Twitter enables users to interact not only with each other but also with the Internet itself, which is manifested through URL click activities when they feel interested in the information presented and also by displaying Twitter elements as media views. Both URL clicks and media views actions are facilitated by the hyperlink feature, one of the fundamental features of internet technology that connects one piece of information with another.

4.4 Retweets and Likes: User-To-Documents Interactivity

Theoretically, the interaction between documents and users is identified from the activity of users in responding to tweets on the @PRFMnews timeline posted by administrators or other users. Documents in the term user-to-document refer to news or information posted by users, both administrators and followers. In the case of @PRFMnews, information about ongoing events is usually posted by the user, so other users have the freedom to modify the information as needed. This is in line with the opinion of McMillan (2006), who explains that in user-to-document interactivity, each user can modify the content posted by other users. This applies to all users, both administrators and users who are followers, that are technically described by retweets and likes activity.

When a user retweets or likes a piece of information presented on the @PRFMnews account, then he is interacting with the document by retweeting the user’s timeline so that the spread of news becomes wider because it also includes the user’s account network. Likewise, when someone uses the likes feature on the content, it is also a form of interactivity where it is a manifestation that he approves of the information presented in the content. When a user retweets, he can modify the information according to his needs, as the view of Steuer (1992), which states that interactivity is related to the user’s ability to control and modify messages.

![Graph 3: User-to-document interactivity on @PRFMnews (October 2021).](image-url)

As can be seen in Graph 3., this type of interactivity is more dominant than user-to-user interactivity. This can mean that users prefer to re-tweet and like content rather than reply or tweet. However, on the administrator’s side, this type of interactivity has even started when a message is posted on the @PRFMnews account, namely using the PRFM Radio website as a source, then the authors edited a few sentences in the document before it was posted in the account.

In this regard, the Editor-in-Chief of PRFM Radio explained that content management on Twitter is carried out regularly to maintain intensity and stability as a news account. Therefore, they assigned two administrators who are generally responsible for responding, retweeting, or reposting various reports from users who are usually followers of @PRFMnews or citizens in general. On the user side, news or documents posted by users in this category are news related to current issues whose information is currently needed by the community, such as information on traffic jams, weather conditions, and so on. Meanwhile, the information tweeted by the administrator usually refers to the PRFM Radio website itself with some modifications.
5. Conclusions
The following points can be made based on the research. First, as demonstrated in previous studies (Ahmad, 2010; Moon & Hadley, 2014), Twitter not only serves as a source of enriching news material, but it also serves as a social networking platform that allows administrators to interact with radio listeners on a level playing field. Second, the context of user-to-user interactivity manifested itself in how users, both administrators and other users, tweet or respond to tweets posted by other users. Users engage in a brief exchange by commenting on each other's tweets and responses. However, it is important to note that interactions are not the result of user posts on the timeline page, but rather of user comments or administrator responses to tweets. This means that administrators are crucial in the development and facilitation of interactions. Relevant language styles and topics are also required to encourage user interaction.

Third, user-system interaction is manifested in how users interact with aspects of the Internet, since social networks have a complex method. Twitter, as a social networking technology, enables users to interact with not only other users, but also the Internet itself, as demonstrated by how someone clicks a URL to learn more about a post and by displaying Twitter elements as media views, both of which involve hyperlinks. In practise, user-to-system interaction is represented in the @PRFMnews account when users encounter tweets with specific URLs that are typically linked to external sources of information, such as the PRFM Radio website. A user interacts with a computer system that uses network technology when he or she clicks on a hyperlink.

Fourth, retweets and likes on tweets that are documents or information posted on the @PRFMnews page describe the user-to-document interaction. These two acts, in general, represent their level of control, implying that they can retweet or not. When they choose to retweet, users can edit their previous tweets. This type of interaction is demonstrated on the administrator's side by how they amend previously published information on their website by making edits to complete the posts. Meanwhile, on the user side, news or documents posted by users, both administrators and other users, can be retweeted as part of message modification and message expansion, and this, of course, represents an act of user consent to information.

However, it should be noted that this study has some limitations, both in terms of topic breadth and methodology. As stated previously, this research was conducted within the context of the @PRFMnews account, which is a news radio station with a citizen journalism model. Of course, this pattern has an impact on how to use Twitter as a medium to support interaction for radio broadcasts, raising additional questions, such as whether the pattern of using Twitter as an interaction supporter will yield similar results for entertainment radio stations. To answer some of the above questions, a more in-depth and ongoing study is required in the future on how the features of interactivity in the same context with different foci may be required to complete this study.

Acknowledgment Statement: The authors would like to thank to all participants of this study.

Conflicts of Interest: The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this study.

Author contribution statements: Agus Rusmana: Conceptualization, Methodology, Formal Analysis, Writing – Original Draft, Writing – Review & Editing, Edwin Rizal: Conceptualization, Methodology, Writing – Original Draft, Investigation, Validation, Data Curation, Resources, Ute Lies Siti Khadijah: Formal Analysis, Investigation, Validation, Writing – Review & Editing, Supervision, Rully Khairul Anwar: Methodology, Formal Analysis, Investigation, Writing – Review & Editing, Supervision, Khoiruddin Muchtar: Formal Analysis, Investigation, Validation, Data Curation, Resources, Writing – Review & Editing.

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Ethical Consideration statement: Not applicable. This study did not include human or animal studies.

Data Availability Statement: Available on demand.

Disclaimer: The views and opinions expressed in this article are those of the author(s) and contributor(s), and do not necessarily reflect the official policy or position of JICCs or editors. All liabilities for harm done to individuals or property as a result of any ideas, methods, instructions, or products mentioned in the content are expressly disclaimed.

References


### About The Authors

**Agus Rusmana** is an Associate Professor of the Department of Library and Information Science at Padjadjaran University, Indonesia. He actively teaches undergraduate, postgraduate, and doctoral degrees at the Faculty of Communication Sciences, Padjadjaran University. He has written some articles in international and national journals and co-authored books. He is also active as a speaker at national and international scientific forums. His research interests include information literacy, media and communication studies, information technology, and library studies.

**Edwin Rizal** is an Associate Professor of the Department of Library and Information Science at Padjadjaran University, Indonesia. He has written some articles in international and national journals and co-authored books. His research interests include information literacy, sustainable tourism, media and communication studies, disaster mitigation, information technology, community libraries and information technology development, and library studies.

**Ute Lies Siti Khadijah** is an Associate Professor of Library and Information at Padjadjaran University, Indonesia. Her works are commonly related to information science. Her research interests include library and information technology, manuscript digitalization, mass media, media and communication studies, local culture, and information literacy.

**Rully Kha帘ur Anwar** is a Senior Lecturer at the Library and Information Padjadjaran University, Indonesia. His research interests include library and information technology, political communication, mass media, religious studies, mass media management, and journalism studies.

**Khoiruddin Muchtar** is an Associate Professor of Communication Studies at Universitas Islam Negeri Sunan Gunung Djati, Bandung, Indonesia. His research interests include new media, media literacy, political communication, mass media, religious studies, mass media management, and journalism studies.