

Socia Media Communication: Mechanisms, Influences, Problems and Strategies

Jiahao Chang^{1,*}

¹ Zhongguang Tianze Media College, Haikou School of Economics, Haikou, China

*Corresponding author: jiahao@ldy.edu.rs

Abstract:

With the increasing popularity and influence of social media, it plays an important role in information dissemination, the formation of social public opinion, cultural communication and commercial marketing. Therefore, this paper focuses on research of social media communication. Specifically, this research focuses on the mechanism, influence, problems and countermeasures of social media communication. The results show that the communication mechanism of social media includes network structure and node influence, algorithm recommendation and information transmission path, emotional resonance and so on. Its influence is reflected in the rapid formation of social public opinion, the acceleration of cultural communication and the change of commercial marketing. Existing problems include challenges in information authenticity and credibility, privacy protection and data security threats, and difficulties in online public opinion guidance and governance. The response strategy involves establishing a strict information review mechanism, strengthening information screening and filtering, improving the public information literacy, providing transparent privacy Settings, strengthening the data protection mechanism, and establishing a rapid response mechanism. This study helps to promote the healthy development of social media, improve the quality of information dissemination, protect user privacy and data security, and maintain the healthy and orderly development of online public opinion.

Keywords: Information dissemination; information authenticity; privacy protection; data security.

1. Introduction

The influence of social media communication is extensive, which not only affects the formation and

evolution of social public opinion, but also has a profound impact on cultural communication and commercial marketing. Social media, as a channel for the public to express their opinions, promotes the

spread of different voices, but it may also lead to information bubbles and echo chamber effect. In terms of cultural communication, social media provides a new platform and way to promote cultural exchange and integration, but it also brings about the problems of cultural homogenization and misinformation dissemination. In terms of business marketing, social media provides a channel for enterprises to directly reach the target user groups, so research on social media communication is extremely important.

This study makes an in-depth analysis on the mechanism, influence, existing problems and potential countermeasures of social media communication, trying to provide necessary reference for the development of related theories of social media communication.

2. Mechanisms

2.1 Network Structure and Node Influence

Social media communication network presents a complex multi-level structure, including users, content, relationships and other dimensions. In this network, each user is a node, connecting with other nodes by publishing, forwarding, commenting, and other behaviors. Among them, some users with high influence and activity become key nodes in the network, and their words and deeds can often arouse extensive attention and discussion, so as to promote the rapid dissemination of information [1].

The network structure refers to the fact that the network structure of social media platforms is usually presented as complex networks, which contain a large number of nodes and edges [2]. This network structure tends to be scale-free, meaning that a few nodes have a large number of connections, while most nodes have only a small number of connections. This structure facilitates the rapid propagation of information, as highly connected nodes can quickly transmit information to other nodes.

Node influence refers to certain particularly important points that play a significant role during the dissemination of information. These points might be influential to individuals, celebrities, or users who are particularly active on social platforms. The posts they make or the content they share typically attract a lot of attention, allowing the information to spread further and faster, thus affecting the scope and speed of information dissemination.

2.2 Algorithm Recommendation and Information Transmission Path

Social media platforms use some super smart computer programs to select, sequence, and recommend a vast array of messages, making it more enjoyable for users and en-

couraging them to engage more. These programs not only decide what messages you see but also how quickly and widely messages spread. These programs are constantly learning, getting smarter and smarter, so that social media can understand you better and deliver the messages you want to see right in front of you. This is called effective information dissemination [3].

Imagine that when opening a social media app, a series of content quickly flashes on the screen, from sharing friends' lives to the latest developments in news events to entertainment gossip. These content does not appear randomly but are carefully selected by complex algorithms to ensure they fit their personal interests and preferences. By analyzing users browsing history, thumb up and comment behaviors, and even search records, the algorithm constantly learns from personal preferences to provide more accurate information matching.

This precise matching greatly promotes the effective dissemination of information. Instead of simply flowing from the publisher to the recipient, information is optimized to quickly find the user groups most likely to be interesting. This not only accelerates the speed of information dissemination, but also improves the efficiency of information dissemination, so that hot topics and important news can quickly spread among users.

2.3 Emotional Resonance and Group Polarization

In social media communication, emotional resonance is one of the important factors driving the diffusion of information [4]. Users who find content that resonates with them are more likely to forward and share it. In addition, social media is also prone to group polarization, that is, users with similar views have more extreme views under mutual communication and influence. This phenomenon partly intensifies social differences and conflicts and challenges the healthy development of social media communication.

Emotional resonance is a psychological and emotional connection that people develop when they see content similar to their emotional state. Resonance enhances individuals' identification with specific topics and promotes the spread of information. Group polarization occurs when people with similar views gather on social media, leading to the reinforcement and extremism of opinions, especially evident in political and social discussions. Social media algorithms push content of interest, creating echo chambers, which exacerbates this phenomenon. Therefore, understanding the mechanisms of emotional resonance and group polarization on social media is important for the health-promoting information environment and public dis-

cussion. On social media platforms, emotional resonance and group polarization not only affect the formation of individuals' opinions, but also have a profound impact on the trend of public opinion in the whole society. As a psychological mechanism, emotional resonance can quickly stimulate the public's attention to a certain event or issue and promote the rapid dissemination of information. However, this resonance may also be manipulated and exploited to stir up emotions, create antagonism, and even trigger cyberviolence.

3. Impact

3.1 Public Opinion

As an important channel for the public to express their opinions and emotions, social media has an important influence on the formation and evolution of public opinion [5]. By paying attention to hot events and participating in topic discussion, users can quickly form a consensus or disagreement on a certain event, thus affecting the trend of public opinion. On social media, everyone can be the publisher and reviewer of the information, and this decentralized way of communication gives different voices a chance to be heard. For example, an ordinary user's opinion on a social issue published on Twitter and TikTok may get a lot of forwarding and discussion because of its unique perspective or emotional expression, thus shaping the public's view on the issue to a certain extent.

Moreover, the algorithmic recommendation systems on social media can make certain information particularly popular. As a result, some viewpoints or emotions become particularly prominent in public discussions. These algorithms will recommend content based on what you usually like and do, so you are more likely to see information that aligns with thoughts, which in turn makes opinions more resolute. However, this can also lead to information bubbles and the echo chamber effect, exacerbating societal divisions, as different groups may only see information that aligns with their views, ignoring other dissenting voices.

Finally, much of the information on social media is not carefully checked and verified, which easily allows incorrect information and rumors to spread, misleading public opinion. On social media, everyone wants to post things quickly and attract more traffic, and some irresponsible people post unverified news that often captures everyone's attention. This phenomenon not only reduces the credibility of information but can also lead to serious consequences for individuals, groups, and even countries.

3.2 Cultural Communication

Social media provides a brand-new platform and way for cultural communication. Through short videos, live broadcasts, graphics and other forms, users can easily access and share various cultural content. This cross-regional and cross-cultural mode of communication promotes cultural exchange and integration and enriches people's cultural life. At the same time, social media has also accelerated the commercialization and marketization of cultural products, injecting new vitality into the development of the cultural industry. And people can easily contact and understand the lifestyle, art forms and values of other cultural backgrounds.

However, this rapid spread also presents some challenges, such as the problem of cultural homogenization. With the wide spread of global popular culture, some local cultural characteristics and traditions may gradually be marginalized or even disappear. Moreover, the spread of misinformation and bias is also problems that cannot be ignored. On social media, unverified rumors and biased views can spread quickly, causing negative effects on society. Therefore, how to maintain the diversity and authenticity of culture while enjoying the convenience of cultural communication brought by social media is a problem that needs to be considered and solved together by everyone. This requires not only social media platforms to strengthen content review and management, but also requires users to improve their media literacy, learn to distinguish the authenticity of information, and respect and appreciate the uniqueness of different cultures [6].

3.3 Commercial Marketing

Social media has become an important front of corporate marketing [7]. Through social media platforms, enterprises can more directly reach target user groups, understand their needs and preferences, and then develop more accurate marketing strategies. In addition, social media also provides enterprises with low-cost and efficient promotion channels, making smes also have the opportunity to stand out in the fierce market competition. For example, some with cargo anchor, little Yang elder brother he from a short video creators its unique creative ability, and all kinds of wacky, funny video catch you step by step to catch the attention of the audiences traffic, from a small anchor into now billions of fans, again from a short video creators into now the biggest with cargo anchor, are achieved through social media.

Media communication has many roles in commercial marketing. It can not only enhance brand awareness and market influence, but also establish the emotional connection between the brand and consumers through interaction and

communication with consumers, so as to stand out in the fiercely competitive market.

4. Challenges and Strategies

4.1 Authenticity and Credibility of Information

In today's era of rampant information, everyone is exposed to huge amounts of data and information every day. However, the authenticity and credibility of this information are often questionable. False news, misleading content and unverified rumors emerge endlessly, bringing great challenges to individuals and society. To meet this challenge, there is a need to take a series of practical strategies [8].

Firstly, it is particularly important to establish a strict information verification system. That is to say, before information is sent out, it must go through several checkpoints to ensure that each piece of information is thoroughly checked and clearly verified. The inspection team should be composed of knowledgeable and experienced experts who can look at information from different perspectives, thus increasing the credibility of the information.

Secondly, some high-tech methods can be used to help screen and filter out fake news, thus ensuring that the information is true. For example, technologies such as artificial intelligence and machine learning can assist us in analyzing a large amount of information, identifying content that may be false or misleading, and then separating it from the authentic information. In this way, the information obtained is more reliable and trustworthy.

Third, to make information highly credible, the key is to make the source of information transparent! When sending information, it's essential to clearly label the source of the information, encourage the creation of original content, and when referencing others' information, make it clear and traceable. This way, users can easily find the origin of the information and verify whether it is true or not. Transparency in the source of information not only greatly enhances the credibility of the person who publishes the information, but also allows users to judge the truth of the information themselves.

In addition, improving the public's information literacy is a long-term strategy to cope with the challenge of information authenticity. Through education and training, the public's ability to distinguish between information can be enhanced. Educating the public on how to think critically, how to verify information from multiple sources, and how to identify potential bias and misleading is an effective way to reduce the risk of blind acceptance of information.

4.2 Privacy Protection and Data Security

In today's digital age, social media platforms have become an indispensable part of Peoples Daily life. However, as the number of users has soared, privacy protection and data security issues have become increasingly prominent, becoming a major challenge that social media companies must face. These challenges not only threaten the security of user's personal information, but they may also have a serious impact on the company's reputation and business.

Therefore, in terms of user privacy Settings, social media platforms should provide more transparent and easier to understand privacy options, allowing users to easily manage their privacy information, including who can see their posts and who can contact them. At the same time, by strengthening the anonymity of data, reduce the direct exposure of personal information, thus reducing the possibility of data abuse. In response to data leakage or other security incidents, it is crucial to establish a rapid response mechanism, and once security issues are found, the platform should take immediate action to minimize the damage to the [9].

Social media faces the challenges of privacy protection and data security when collecting and processing user data. In order to protect users' legitimate rights and interests and privacy security, social media platforms should establish a sound data protection mechanism and technical means to strengthen data encryption and storage security. At the same time, users should also enhance their awareness of self-protection, and reasonably set up their privacy rights and sharing scope.

4.3 Guidance and Governance of Network Public Opinion

First of all, social media platforms need to strengthen the content review mechanism, to ensure that the information released is true and reliable, and to avoid the spread of false news and harmful information. Secondly, the platform should establish a rapid response mechanism to timely dispel rumors and clarify online rumors and false information. In addition, social media companies should work with government agencies, professional organizations, and user groups to build a healthy online environment.

For online public opinion guidance, social media platforms should encourage active and healthy discussions, and also effectively manage online violence and hate speech. Through algorithm optimization, reduce the dissemination of extreme content and improve the visibility of positive information. At the same time, the platform can use big data analysis to understand user needs and provide more personalized content recommendation [10].

In terms of governance, relevant laws and regulations need to be improved to clarify the responsibilities and obligations of social media platforms, while protecting users' privacy and freedom of speech. In addition, strengthening international cooperation to jointly combat transnational cybercrime and the dissemination of bad information is also an indispensable part of the response strategy.

5. Conclusion

The mechanism of social media communication involves network structure and node influence, algorithm recommendation and information transmission path, emotional resonance and group polarization, etc. The complexity of network structure and the existence of key nodes can significantly affect the speed and scope of information propagation. Emotional resonance promotes information diffusion, while group polarization may aggravate social divergence. Social media has a profound impact on social public opinion, cultural communication and commercial marketing, but it also faces challenges such as information authenticity, privacy protection and online public opinion guidance. Coping strategies include establishing a strict information review mechanism, strengthening information screening by technical means, improving public information literacy, making transparent information sources, strengthening privacy Settings and data security, and working with all parties to build a healthy network environment.

References

- [1] Zheng Yongguang, Yue Kun, Yin Zidu, et al. Efficient key user selection method in large-scale social networks. *Computer Applications*, 2017, 37 (11): 6.
- [2] Xiang Debao, Li Xinrui. Research on the structure, influence and function of global China-related journalists in the era of social media. *Journalists*, 2023 (7): 22-31.
- [3] Hinko, John. Methods and cases of effective dissemination of social media marketing information. Press of Electronics Industry, 2013.
- [4] Fu son. Friendship in social media: similarity mechanism and emotional communication logic. *Journal of Fujian Normal University (Philosophy and Social Sciences Edition)*, 2024, (02)
- [5] Fu Hong, Ren Xiaogang. The influence of microblog communication on the diffusion of public opinion. *News Front*, 2013 (4): 3.
- [6] Wan Xianmei. Research on user media Literacy in the Era of "We Media". Publishing Wide Angle, 2016 (6): 3.
- [7] Zhang Hui. Research on tourism brand communication based on social media marketing-- Take the "hospitable Shandong" tourism brand as an example. Thesis for master's degree, Shandong Normal University, 2024.
- [8] Li Yuan, Liu Jian. Research on information authenticity in the Era of "We Media". *Chinese Science and Technology Journal Database (Abstract edition) Social Sciences*, 2024 (1): 0173-0176.
- [9] Zhao Huiqiong, Jiang Qiang, Zhao Wei. Security and Privacy Protection Research for Big Data Learning Analysis. *Modern Educational Technology*, 2016, 26 (3): 7.
- [10] Xiao Wentao, Xu Xiaomei. The current situation and guiding countermeasures of network public opinion in the new media Era. *Administrative Forum*, 2012, 19 (6): 6.