

The Spread and Interruption of Internet Rumors in the Microblog Environment

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Abstract: In the Web3.0 era, people can easily publish or transmit information on the network, which makes rumors spread widely on the network. The network has become a serious disaster area for the generation and dissemination of rumors. Effective control ways of rumor are of great practical significance for building a harmonious society. This paper discusses in detail the propagation mechanism and governance recommendations of internet rumors in the microblog environment. The research shows that the diversity psychology of microblog users, the characteristics of microblog information transmission and repost are the main factors of rumors spreading on a large scale, and the countermeasures for the management of internet rumors in the microblog environment are put forward

Keywords: Internet rumor, microblog, dissemination mechanism of internet rumor, control of rumor.

1. INTRODUCTION

Internet rumors include both the general characteristics of rumors and many unique features of new media environments, such as explosive, anonymous and fuzzy[1]. The content of the internet rumors in most cases is associated with the events of the public attention, and closely connected with People's Daily life, if not handled properly may result in mass panic, reduced the government's credibility and other serious consequences[2]. Such as "KFC chicken have six wings", rumors like this often come up in recent years which brought multiple losses for enterprise such as reputation and economic, also make the masses deep suspicions and fears about food safety, although enterprise all adopt the legal rights and held an emergency conference to clarify after rumors happened, but he impact of corporate reputation is immeasurable in short term.

In reality, 59 percent of fake news originated from microblog. Microblog has the characteristics of high transmission efficiency, timely and free speech [3]. Therefore, microblog has become an information channel for more and more denizens to express their opinions and ideas. However, due to the fact that microblog has no strict verification of users' information, the

threshold of information release is very low, which makes microblog a major disaster area for produce and spread of rumors.

Therefore, this paper selects the Sina microblog as the research environment, the most representative online social media in China, explores the dissemination mechanism of internet rumors in the microblog environment, and researches from three aspects: source governance, universal supervision and technical response in section 4. In section 5, we put forward corresponding suggestions and hope to do a little bit of power to govern internet rumors in the microblog environment and purify the network environment.

2. BACKGROUND KNOWLEDGE

2.1 The definition of microblog

Microblog is a channel for information sharing, dissemination, and acquisition based on user relationships [4]-[5]. It has the characteristics of dissemination of mesh transmission, content originality and information fragmentation. Any person who has an account can use it anytime, anywhere. Users can establish personal interest communities through various clients, update status at any time, and achieve instant sharing. Only by adding attention and becoming a fan of the others and users can receive the others' information anytime, anywhere. Adding attention does not require the verification of the others, and the threshold for establishing a friendship is low. Once you become a follower, you also achieve information sharing.

2.2 The definition of rumors

Rumors are transmitted among the crowd, especially about one's private life or official decisions; this news may be true or may not be true [6]. "Rumors" are messages that are transmitted in a group by means of communication or similar methods. It is an important form of social communication. Their communication plays a role in society. Rumor is a kind of news or report that lacks the real message as the basis for widespread dissemination in society. Its purpose is to attract the public's eyes for their own interests.

2.3 The definition and research of internet rumors

The overtime of the Internet has facilitated the dissemination of rumors and has made rumors free from the limitations of low timeliness of dissemination and lengthy dissemination processes. The real-time and interactive nature of the Internet's dissemination makes the spread and feedback of rumors happen in real time. Internet rumors are based on the large-scale collective cooperation of denizens and have the function of social evaluation [7]. They can objectively play the role of information security valves and social warning devices [8]. The spread of Internet rumors will undermine the normal social order, interfere with the normal operation of society and the daily life of residents, and will endanger the stability and development of the entire society.

In summary, compared with other types of social media, Microblog is most widely used in people's daily life in China. Therefore, the role played in the spread of rumors is also the most obvious. However, the current exploration involving microblog rumors is still rare. And for the governance of internet rumors in public events, the traditional management method is based on

interception and the effect is poor. In this paper, we hope to explore the dissemination mechanism of network rumors in the microblog environment, and propose related governance suggestions for the network environment.

3. THE DISSEMINATION MECHANISM OF INTERNET RUMORS

Why is an incident confirmed to be a rumor repeated in a few years? Why did a rumor change time, places, and characters, it still can cause discussion and fear among denizens. Are the rumors too stubborn and ruthless, or related to the psychology of denizens? Through the observation and literature reference for many different areas of rumors spread events. We decide to explore the entire process of the generation, dissemination and disappearance of internet rumors from the following aspects.

3.1 The microblog users' psychology and behavior

3.1.1 Information publishers like to attract people's attention

The news media on Sina microblog platform may post inaccurate messages for the purpose of “catching eyeballs”, “increasing clicks” and so on. Or it may be that ordinary microblog users engage in some gimmicks to take advantage of the public’s concerns, in order to increase their fans. Adding vinegar or ripping them up creates a real atmosphere that convinced denizens that such phenomenon often occurs.

3.1.2 Information receivers' self-acceptance and retransmission

With the attitude of doubting the letter, and the information is closely related to their own lives, and their professional knowledge is not sufficient enough to distinguish the true and false ones, denizens repost the rumor information out of concerned their own or caring for others, and this reposting behavior can be infinitely cycled. When a user publishes information on microblog, whether or not the user is concerned by other users, his published topical information can be seen not only by his/her own friends, but also by any user on microblog. Anyone who is interested in this information can repost it at any time. A three-dimensional, non-ceilinged network propagation model was formed. The scope of information dissemination became larger and larger and eventually reached the outbreak of rumors until the rumors were successfully blocked or clarified.

3.1.3 Information transmitters reprocessing information

A rumor event, through the use and imitation of criminals, changes the time, place and characters, fabricates and publishes new rumors, making it a type of rumors. This cross-regional, cross-population, cross-temporal, and cross-domain replication is an important reason why rumors have continued to be banned.

3.2 The characteristics of microblog

Microblog information has several major properties such as anonymity, explosiveness, fragmentation, and subjectivity. The first is that there is no threshold for microblog registration, and there is no need for real-name authentication. Only one mobile phone or one computer and network support can complete the microblog registration and then speak up freely. The second is that the microblog information has personal subjectivity. Microblog gives users the platform

of free speech, sharing new things anytime and anywhere. The information is written by users themselves, with their own ideas, and it is difficult for others to know whether it is true or false. Therefore, it is easy to make rumors. The third is the rapid spread of microblog information. Any piece of information, as long as one click, it will spread rapidly in a short period of time.

4. SUGGESTIONS FOR BLOCKING AND MANAGING INTERNET RUMORS

4.1 Increase the governance of the source of the message

The news media is a public information display platform and an important tool for public opinion supervision. As an important channel for public access to information, the status of the news media in information dissemination is very important. This requires the news media to have a strong sense of social responsibility and to use an objective perspective to examine the issue and truthfully report the truth. In some cases, there are often reports that are eye-catching but not real because of the self-interest of clicks and visits. The people working in the news media filed should pay attention to the authenticity of the incident, to careful wording and an objective attitude, instead of relying on the influence of their own platform to fabricate and guide false public opinions, causing panic among the masses and causing mistrust in the industry.

4.2 Use personal professional skills to jointly resist the spread of rumors

The early outbreak of rumors is the best time to management. The timely transmission of real information can play a role in the dissemination of rumors. In the face of rumors, people should be kept calm. When personal knowledge is insufficient to make judgments on the authenticity of such incidents, they should wait for feedback from experts or the official media. They should not listen to biased beliefs. On the one hand, they cause self-panic. On the other hand, it will increase the confidence of literary media. To clarify rumors or stop the spread of rumors in the microblog environment, there must be an official rumored platform to issue a statement and increase the credibility. Here are two effective ways to clarify internet rumors in microblog.

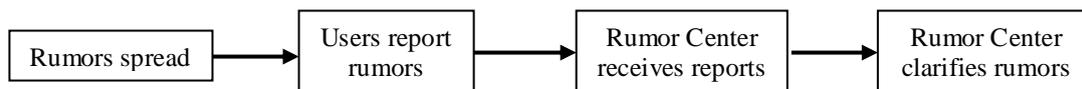


Fig. 1 Way 1 to clarify rumors

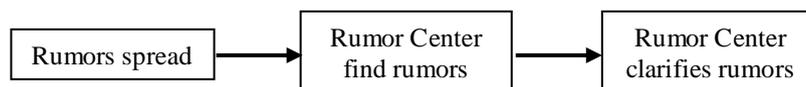


Fig. 2 Way 2 to clarify rumors

4.3 Establish a technical blocking mechanism to interrupt rumors spread

With the application of technical means such as data analysis and data mining, combined with references, we believe that this type of technology can be used to monitor and analyze rumor

data, and to some extent enhance the initiative to respond to internet rumor from the technical aspect [9]-[11]. In the early stages of the rumor release, a set of rumors to be confirmed was established through the exposing of denizens and the monitoring of suspicious users. On the one hand, through the paired analysis of rumors in the database and rumors to be confirmed, in order to explore rumors repeated at intervals [12]. On the other hand, for those rumors that no similar matching content can be found in the rumors database, experts in related fields can be consulted to use professional knowledge to identify the suspected rumors and determine whether the information is real.

During the middle period of the rumor release, the comment information on suspected rumors is analyzed through natural language processing techniques, and through the social network analysis technology to explore the spread of suspected rumors, determine whether the information is a rumor, and promptly give a proof to clarify and resolve the dangers and public fears caused by such rumors [13]-[15].

In the later stage of the rumor release, information data that can be identified as rumors are added to the rumor database and updated in real time; those who report the information and those who can clarify such rumors in the comments are invited to join experts appropriately. That can seek the help of professionals when such problems recur.

5. CONCLUSION AND DISCUSSION

As a social network media, Sine microblog should have been a platform for users to express emotions and communicate with each other. However, it is also a medium for all kinds of information transmission. Because of its anonymity, explosiveness, and fragmentation, Sine microblog has also become a breeding ground for rumors. We studied the internet rumors in Sine microblog environment in this paper, and we found that there are three aspects of the internet rumors generation mechanism: First, the microblog users are divided into three categories, information publishers, senders and recipients. The publisher's psychology of dreaming to be noticed, the sender plays a role in promoting the dissemination and the recipient's self-digestion and re-dissemination. The second is that the microblog information itself that is short and accelerated the dissemination. For the dissemination mechanism of internet rumors in microblog, this paper proposes a certain degree of governance measures. First, the media guides the correct direction of public opinion, while microblog users should be self-discipline, enhance the ability to distinguish the false information. The second is that microblog operators strengthen their management and make full use of the rumored platform to promptly identify and remove untrue information. The third is to strengthen technical research and investment, develop related mechanisms to block rumors to avoid the spread of rumors.

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