Development of a joint official microblog platform to improve interactive communication with the public under a centralized system

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ABSTRACT

Social media bring both challenges and opportunities to crisis management. This paper summarizes the difficulties in crisis communication under a centralized jurisdiction system by looking into online collective behaviors in mainland China. The paper then introduces the development of an official microblog and proposes a joint official microblog platform to improve interactive communication in a centralized system. The functional design of this platform is introduced in detail and the future improvement of the platform is discussed.

Keywords

Crisis communication, social media, interactive, centralized system, official microblog.

INTRODUCTION

The rise of social media has drastically changed the landscape of crisis management in recent years. When people talk about social media, the terms 'user generated', 'social networking', 'Internet', 'big data' and so on usually come to mind. Compared to traditional media, social media have two defining features: encouraging broader participation (creation) and faster information exchange. These new features bring both opportunities and challenges to crisis management. On the positive side, social media have become a valuable source to access and collect disaster relevant information when dealing with disasters. Social networking service providers such as Facebook and Twitter, provide great platforms to improve collective intelligence, interactive dialogue and joint actions among individuals, communities and organizations. There are also potential downsides such as lack of control and negative influence on public relations (Utz, Schultz and Glocka, 2013). In some cases, social media increase the risk of pandemic fears, rages or rumors, which may make the situation worse. For instance, when a train crash accident occurred in China in 2011 (Ma, Yuan, Zhang and Liu, 2012), skeptical microblog users stated that government was trying to cover up evidence rather than make full effort on rescue. Social media drove unconfirmed messages into fast speed dissemination and caused collective outrage and distrust. The following public relations problem made the situation worse and caused great difficulties for emergency response. The tremendous effect of social media highlights the necessity to adapt communication skills and strategies to a new media environment.

The influence of social media on crisis communication has drawn much academic attention. Much work has been done to explore how social media can contribute to situation awareness and information sharing during

crises (Yates and Paquette, 2011; Yin, Lampert, Cameron, Robinson and Power, 2012), how social media influence and promote crisis communication in framing the crises, addressing emotions and deploying communication strategies (Freberg, Palencar and Veil, 2013; Schultz et al, 2011), and what are good practices to incorporate social media into crisis communication (Veil, Buehner, and Palenchar, 2011). Various models have been developed to analyze social media such as microblog, blogosphere, and other social network sites in order to gain insights into people's needs and to support decision-making (Liu, Austin and Jin, 2011; Freberg, Saling, Vidoloff and Eosco, 2013). These studies stress the fact that social media present a decentralized media environment and encourage interactive communication between crisis managers and the public. In face of a large volume of information and diverse opinions on social media, crisis managers are often struggle with how to provide trustworthy and expected messages to the public (Hughes and Palen, 2012). It is difficult to filter useful and accurate information under great time pressure, and even more challenging to access audiences' needs, questions, and their attitudes towards response. These issues put forward higher requirements for crisis communication systems and related coordination mechanisms.

Crisis communication systems are usually designed to match with jurisdiction structure and emergency plans. The systems are needed to support flexible information flow and connect the decision-making elements of crisis response. Hale (1997) proposed a layered crisis communication architecture (CCA) and portioned communication functions into a set of layers: connectivity, data validation, filtering, values, organizational memory and group process. The first three layers are for message processing. The values layer is for message interpretation and evaluation. And the last two layers are for accessing experiences and moving forward to group process. These functions cover the key elements of crisis communication and have different characteristics under different organizational structures. It has been a long-time argument on whether a decentralized or centralized structure is the optimal way to organize communication. Challenges can vary under two organizational structures. However, in terms of the increasing requirement for interaction on social media, a centralized structure may face more difficulties in organizing effective communication. The information flow in a centralized system relies on vertical transmission from level to level, which makes it difficult to guarantee response efficiency, let alone deal with tremendous distributed tasks. Although it is unrealistic to make big changes on jurisdiction structure, we can make some adjustments on organizational pattern to improve crisis communication under a centralized system.

This study offers a perspective on improving interactive communication between crisis managers and the public under a centralized communication system. The paper starts with a study on people's online collective behavior in mainland China, which is known for its strictly hierarchical jurisdiction system, and summarizes the exposed difficulties in crisis communication with the rise of social media. The following discusses how to improve interactive communication by developing a joint official microblog platform. The functional design of this platform is introduced in detail. Lastly, the paper discusses future improvement of the joint official microblog platform.

ONLINE COLLECTIVE BEHAVIOR AND CRISIS COMMUNICATION

As mentioned earlier, social media greatly broaden public participation in many aspects. Previously, the general public played roles as audiences and information receivers in a centralized jurisdiction system. It is difficult to make direct conversation with authorities or high-level communicators. Now social media make it possible for general public to release information, express opinions, share feelings, and even ask for response from communicators. This brings a new threat that the power of social media might be misused or overused and leads to crises. For instance, in mainland China, undesirable collective behavior on social media (recognized as online collective behavior in China) have frequently occurred since microblog became popular.

Qiu, Lin, Chiu and Liu (2014) defined online collective behavior as "the responses of a collection of Internet users to a specific social event to bring the development of the event into accord with their expectations". Not all online collective behaviors lead to negative influence, but for crisis managers, any uncontrollable situation is dangerous. Many online collective behaviors are triggered by public relations problems. Here's an example, in June 2013, a video released several urban management officers (or "Chengguan" in Chinese) engaged in violence when performing their duty. The video was rapidly circulated on Sina weibo (most popular microblog in mainland China) and stirred outrage among citizens. The urban management office made statement that the officers involved were not formal registered staff. This response was criticized for shifting responsibility and led to widespread complaint around the country.

¹ The video can be found in a news release clip, available at http://finance.people.com.cn/n/2013/0614/c66323-21837168.html, accessed on March 11, 2014.

A research group in Renmin University of China developed a set of indicators to frame online collective behavior-related crises. In their latest report², the number of similar events in mainland China almost doubled in the past four years with the rise of social media. Over 50% of events were related to law enforcement and societal security. People use social media to report corruption, violence and misconduct cases, and they have low confidence in authority's justice and transparency in dealing with such crises. The trust gap between authority and the public enlarges in social media times and brings more challenge for crisis communication. There are many reasons behind this. Firstly, authorities (often as primary crisis manager) at different levels have various information systems to monitor social media. Overlapping work leads to conflicts on critical information identification and work coordination. Secondly, authorities usually communicate with the public via media report or press conference rather than directly participating in people's conversation on social media. This often leads to slow response and doubt on media manipulation. Thirdly, authorities at local level or relatively low level find it difficult to make interactive communication with the public since they have limited right to make decision. This study develops a joint official microblog platform to address the above issues.

DEVELOPMENT OF OFFICIAL MICROBLOG IN CHINA

Official microblog in mainland China refers to accounts registered and managed by an authority organization such as government and party administration, legal enforcement, or state-owned media and agency. Authority microblogs come out in the beginning of 2010 and increase rapidly during the following two years. By the end of 2012, the number of official microblog registered on Sina weibo and Tecent weibo (top two microblog platforms) respectively increases to 60,000 and 70,000. The purpose of official microblog is to support information release both in normal and crisis situation. Official microblog provides a fast and interactive platform for crisis managers to release information and speak to the public directly. It not only reduces the risk of information misinterpretation but also improves the efficiency of communication. Crisis managers find it helpful to identify people's needs from the comments and messages that followed up on the posts of official microblogs so that their issues can be addressed in time. Also, crisis managers can express concerns and sympathy to the victim at the earliest time, as well as making explanations and apologies for their ineffective and late responses.

Here is a successful case that "Ya'an earthquake relief", a Sina weibo account represented Chengdu military command, communicated to the public with crisis responses at front line in Ya'an earthquake in Sichuan Province in April 2012. The account was created four hours after the earthquake and released an aerial photo of affected area three hours later. The information of transportation, weather, rescue and supply at affected area was updated every few minutes, which not only broadened public participation but also facilitated the communication between crisis responders and the public. Another example is "Shanghai information release", an official microblog registered on Tecent weibo. It is one of the most successful official microblogs that plays an important role in communicating with citizens in Shanghai and the whole country. "Shanghai information release" is managed by Information Office of Shanghai government and has more than 5 million followers till January 2014. The microblog posts regular administrative information every day and opens an interview column to collect people's comment and feedback. Its active interaction with the public gains reputation for Shanghai government and brings a new start of trust in crisis communication.

FRAMEWORK DESIGN FOR A JOINT OFFICIAL MICROBLOG PLATFORM

Networked crisis communication not only needs to consider crisis situation and response strategies, but also should allow for organizational network dynamics and various participants' behaviors (Schultz, Utz, and Glocka, 2012). Although there are an increasing number of official microblogs in mainland China, they are not well organized to deal with organizational network dynamics and solve limitations of a centralized management structure. This paper proposes a framework design for a joint official microblog platform to support quick response and interactive communication with the public. A detailed overview of the platform is presented in Figure 1.

The platform involves official microblogs at three jurisdiction levels: national level, regional level and local level. Official microblogs at different levels have different focuses on information release and communication implementation. The role of official microblogs at local level is to make direct communication with the public, including provide event information, report investigation and case process, answer people's questions, and respond to people's appeals, etc. Crisis managers who are responsible for managing official microblogs should

² A report of public opinion analysis of hot social events in 2012 (in Chinese), written by Guoming Yu

National-level official microblogs National crisis management office Regular administrative information release, crisis warnings Regional-level official microblogs Law Primary Other Dep Other Dept. enforcement responsible Police office Dept. data processing reports, audience requirements, solutions, decisions Primary responsible Dept event questions information investigation case Law progre Police **Public** enforcement office Dept appeals questions related info Other related

be sensitive to public reactions and initiatives to start a conversation with the public.

Figure 1. Overview of joint official microblog platform

Local-level Official Microblogs

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Official microblogs at regional level generally have more followers than those at local level. So they should make efforts to release trustworthy information and improving authorities' image. Thus, the management of official microblogs at regional level needs to take into account data collection and analysis, audience requirements study and decision making support. Information from popular news sites, social media sites and other valuable sources should be collected and analyzed in order to gain insights into audience requirements. Regional-level official microblogs strives to find out (1) how people perceive a crisis, (2) how they react to the crisis, (3) what expectations they have on crisis managers, and (4) how they intend to behave towards the response of crisis managers. In practice, regional-level official microblogs are often used to publish important announcements or decisions. In order to solve the limitation of a centralized management structure, the platform weakens the function of national-level official microblogs. The main task of national-level official microblogs is to release regular administrative information and crisis warnings.

FUTURE IMPROVEMENT FOR JOINT OFFCIAL MICROBLOG PLATFORM

Official microblog is still on the way to promote crisis communication in a new media environment. The proposed platform has a large room for improvement. Firstly, official microblogs are only active in public security department (e.g. police, urban management office), transportation department (e.g. railway and metro department), propaganda department and petition-related department. More official agencies should be involved especially those undertake the responsibility of implementing command and control operations. Secondly, existing regional-level official microblogs are not well-organized for coordination and cooperation. Systematic networking and collaborative rules are needed to guide joint work among official microblogs. Thirdly, more effort should be made to improve the response network of official microblogs, such as to understand (1) hot topics in each region in China, (2) topic shifting during response, and (3) the best intervention time.

CONCLUSION

Social media provide tremendous challenges for crisis communication under centralized jurisdiction structure. By looking into increasing online collective behaviors occurred in mainland China, we find that traditional top-down communication in a centralized system exposed great difficulties for crisis mangers to make interactive communication with the public, especially for those at local level. Also, the overlapping effort on social media monitoring at different jurisdiction level leads to a mess on sharing responsibilities and making effective communication with the public. In order to address these issues, this paper develops a joint official microblog platform. This paper introduces the framework design of the platform and the function of official microblogs at national level, regional level and local level respectively. The platform weakens the function of national-level official microblogs and enhances the use of local-level microblogs to realize quick and active interaction between crisis managers and the public. The perspective of platform design can be applied to other countries with a centralized jurisdiction system. Based on the framework design, this paper further discusses future improvement of the joint official microblog platform.

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