

Chapter 63

Profiling the Users of High Influence on Social Media in the Context of Public Events

Lu An

Center for Studies of Information Resources, Wuhan University, China & School of Information Management, Wuhan University, China

Junyang Hu

School of Information Management, Wuhan University, China

Manting Xu

School of Information Management, Wuhan University, China

Gang Li

Center for Studies of Information Resources, Wuhan University, China

Chuanming Yu

Zhongnan University of Economics and Law, China

ABSTRACT

The highly influential users on social media platforms may lead the public opinion about public events and have positive or negative effects on the later evolution of events. Identifying highly influential users on social media is of great significance for the management of public opinion in the context of public events. In this study, the highly influential users of social media are divided into three types (i.e., topic initiator, opinion leader, and opinion reverser). A method of profiling highly influential users is proposed based on topic consistency and emotional support. The event of “Jiankui He Editing the Infants’ Genes” was investigated. The three types of users were identified, and their opinion differences and dynamic evolution were revealed. The comprehensive profiles of highly influential users were constructed. The findings can help emergency management departments master the focus of attention and emotional attitudes of the key users and provide the method and data support for opinion management and decision-making of public events.

DOI: 10.4018/978-1-6684-6307-9.ch063

INTRODUCTION

Public events often trigger a lot of reports and online discussions. Many users express their opinions on social media (Sharma & Lbansal, 2015). High influential users play an important role in guiding the online public opinion of events and can be divided into three types. The first type of users frequently expresses their opinions on an event. The posts that they generate often receive a lot of likes, retweets and comments and are marked as “popular posts” by Sina Weibo, a well-known microblogging platform in China. The “popular posts” is a function of the Sina Weibo platform. The platform calculates the heat value of each microblog post on the topic, and sorts the posts according to the heat value. “Popular posts” are those at the top of the list, which can be obtained directly from the platform (Sina Weibo, 2014). In this study, this type of users is called “topic initiators”.

The second type of users obtains much attention from netizens, thus forming a high influence and leading the public opinion, namely the “opinion leaders”. The posts published by the “topic initiators” often trigger a lot of discussion, but their views may not necessarily be approved. However, the posts by “opinion leaders” are more likely to be supported by others (Bamakan et al., 2019). Opinion leaders are identified based on the topic initiators. According to the spiral of silence theory, the formation of public opinion is a spiral process in which one side is more and more vocal while the other side is more and more silent (Noelle-Neumann, 1974). With the passage of time, some netizens do not agree with the “mainstream opinion” and dare to express their different opinions. Then the “silent majority” may respond positively, and their new opinions may gain more support. Users who express the new opinion “reverse” the mainstream opinion on the event, and are also high influential users. This type of users is named as “opinion reverser”.

The three types of high influential microblog users shape the public opinion in different manners, i.e., to attract, lead or reverse the attention of the public. To identify and profile the three types of high influential users can help the event management departments understand the evolution patterns of the public opinion and discover the key nodes in the social network. It is also of significance to reveal the relationship between the users’ basic attributes and their influence and whether users’ behaviors are associated with their support. Thus, the research questions of this study are (1) to divide the high influential microblog users into three roles, i.e., topic initiators, opinion leaders and opinion reversers and to propose their identification methods; (2) to profile the three kinds of high influential users; and (3) to reveal the correlations among the users’ basic attributes and microblog attributes. As the event of Dr. Jiankui He editing infants’ genes aroused a tsunami of public opinion, this study took the event as the investigated case.

The opinion initiators launch salient topics and the opinion leaders promote the consistency of public opinion, which facilitates the formation of the spiral of silence. The opinion reversers break the consistent opinion and bring about anti-spiral of silence. The contribution of this study is to propose the quantitative methods of identifying the key nodes in the process of the spiral of silence and anti-spiral of silence. The research findings can help the emergency management departments guide the public opinion in a timely manner.

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/profiling-the-users-of-high-influence-on-social-media-in-the-context-of-public-events/308659

Related Content

Human(oid): Virtual Social Media Influencers

Paula Rodrigues, Ana Sousa, Ana Pinto Borges, Ana Brochado and Isabel Barbosa (2023). *Influencer Marketing Applications Within the Metaverse* (pp. 1-12).

www.irma-international.org/chapter/humanoid/323899

Peer-to-Peer Service Quality in Virtual Communities

Aku Valtakoski, Juhana Peltonen and Mikko O. J. Laine (2011). *International Journal of Virtual Communities and Social Networking* (pp. 13-22).

www.irma-international.org/article/peer-peer-service-quality-virtual/60538

Citizen Engagement and Social Media: The Case of Mexican Presidential Candidacies

Rodrigo Sandoval-Almazan and Juan Carlos Montes de Oca Lopez (2019). *International Journal of E-Politics* (pp. 24-43).

www.irma-international.org/article/citizen-engagement-and-social-media/251891

Second Life for Assessing Postgraduate Learning: Student Perspectives

Elaine Huber and Yvette Blount (2016). *Social Media and Networking: Concepts, Methodologies, Tools, and Applications* (pp. 739-767).

www.irma-international.org/chapter/second-life-for-assessing-postgraduate-learning/130394

How Social Media Offers Opportunities for Growth in the Traditional Media Industry: The Case of Travel Journalism

Andrew Duffy (2017). *Analyzing the Strategic Role of Social Networking in Firm Growth and Productivity* (pp. 172-187).

www.irma-international.org/chapter/how-social-media-offers-opportunities-for-growth-in-the-traditional-media-industry/161849