Can social media increase government responsiveness? A case study of Seoul, Korea

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ABSTRACT

Despite the expectation that social media use in the public sector contributes to enhancing government responsiveness to citizens, few empirical studies exist on whether social media use actually leads to more responsive public administration in practice and how social media are used by governments to build citizen-centric governance. The purpose of this study is to examine what roles are played by mayors and public officials in social media networks to increase government responsiveness. Thus, we adopt social network analysis (SNA) to the Twitter network of public services as well as carry out a case study on interactions among the mayor, local government, and citizens via Twitter in Seoul, Korea. The research findings show that the mayor of Seoul plays the most important role as a bridging hub in the Twitter network. Specifically, the mayor serves as a bridge between different clusters of citizens and public officials as well as a hub for the most connected users in the network. The mayor's role as a bridging hub in the Twitter network contributes to enhancing government responsiveness by making possible to overcome the disconnection between citizens and the local government, and information asymmetry among the mayor, public officials, and citizens.

1. Introduction

Despite the expectation that using social media in the public sector contributes to enhancing public values including government responsiveness, it remains controversial whether social media use actually leads to such effects in practice. Advocates point out that social media use is expected to extend deliberative and participatory democracy as the arena for sharing public opinion (Mergel, 2012; Norris, 2001; Althaus & Tewksbury, 2000), to trigger social transformation that transcends its socializing purpose (Johnson & Perlmutter, 2010), and to contribute to the expansion of social movements (Mansour, 2012; Ndavula & Mberia, 2012). However, critics argue that actual evidence proving that citizens' sharing of political opinions has increased because of social media use has not yet been found (Kang, 2012; Lee & Kim, 2012), and the political effects of social media use are expected to be no more than temporary and rare even if they actually appear (Sobaci & Karkin, 2013; Lee, 2012).

This controversy on the effects of social media use in the public sector persists for the following reasons. First, a theoretical and analytical framework for analyzing the impacts of social media usage in the public sector, especially on how social media use contributes to enlarging beneficial effects such as an increase in responsiveness and to solving problems such as information asymmetry resulting from the principal-agent relationship in the government, has not been clearly defined. Second, an empirical analysis of the mechanisms through which social media contribute to achieving the beneficial effect to citizens does not seem to be sufficient. That is, more empirical analysis is needed on the following issues. What mechanisms in the social media network produce the success of increasing responsiveness? What roles are taken by political leaders and public officials in social media networks to achieve the beneficial effect to citizens? How can we achieve synergy between old media and social media in the public sector?

In this vein, this study aims to examine what roles are played by mayors and public officials in social media networks to increase government responsiveness. To achieve this goal, the authors of this study reconsider the concept of responsiveness and draw the roles of political leaders in the social media network to enhance government responsiveness based on social network theory. For empirical analysis, the authors adopt social network analysis (SNA) to the Twitter network of public services as well as carry out a case study on interactions among the mayor, local government, and citizens via Twitter in Seoul, South Korea (hereafter, Korea).

The remainder of this paper is structured as follows. Section 2 presents a literature review on the benefits and challenges of social media use in the public sector, and reconsiders the concept and the barriers of government responsiveness based on social network theory.

Section 3 discusses the research design, which comprises the research question, data collection, and method of measurement. Sections 4 and 5 present the research findings produced with SNA and a discussion of the findings. Section 6 provides a summary of the research findings, practical and theoretical implications, and future research agenda.

2. Literature review and theoretical background

2.1. Debates on social media use in the public sector

Recent literature on the relationship between social media use in the public sector and its beneficial effects to citizens sheds light on new opportunities for galvanizing worldwide efforts to promote democracy, thereby providing smart solutions to public problems (Criado et al., 2013; Meijer & Thaens, 2013; Mossberger et al., 2013; Mergel, 2012). Then, how can social media contribute to expanding the beneficial effects to citizens in the public sector? Theoretical and empirical explorations on social media's promise as a tool for expanding beneficial effects to citizens can be categorized into two facets: transparency and accountability to control functionaries' deviation from their duties; and participation and deliberation to encourage citizens' engagement in policy process and the public sphere.

First, social media have the potential to improve citizens' access to government information and thereby decrease information asymmetry between government functionaries and citizens. This increase in social media-driven transparency paves the way to control functionaries' corruption and departure from their political, legal, and ethical duties in a broader sense, which contributes to greater accountability in general (Stamati et al., 2015; Bonsón et al., 2012; Bertot et al., 2010; Jaeger & Bertot, 2010; Brito, 2008). Governments around the world have begun using various social media, such as blogs, Wikis, social networking, and microblogs, in an effort to disclose the policy process such as bidding and contracting to the public, to facilitate citizens' monitoring of functionaries' activities, to build channels for functionaries to disseminate information to citizens, and to allow citizens to monitor their interactions with functionaries (Bertot et al., 2012). These worldwide government efforts are expected to prime social media's expanded role as a catalyst for expanding beneficial effects in the public sector.

Second, social media have great promise to significantly lower the barriers to citizens' participation in and deliberation of publicly critical issues and to function as channels for providing smart solutions (generated by collective intelligence) to difficult public problems (Hansson et al., 2015; Zavattaro et al., 2015; Ellison & Hardey, 2014; Panagiotopoulos et al., 2014; Vincente & Novo, 2014; Warren et al., 2014; Shirky, 2011). Recent large-scale political demonstrations and movements initiated by citizens' far-reaching social media interactions, such as the 'Arab Spring' and 'Occupy Wall Street', clearly demonstrate that social media enable citizens to organize voluntary participation in collective action (Margetts et al., 2015). Furthermore, it is expected that social media, armed with the potential to facilitate widespread "many-to-many" interactivity, will enhance the ability and feasibility of "citizen coproduction" under which functionaries regard citizens as partners rather than customers in providing public services. It is also expected that social media will empower citizens to expand their role in dealing with public problems, thus providing an attractive policy option to governments around the world suffering from difficulties such as persistent budget deficits (Linders, 2012).

Despite the expectation that social media will contribute to enlarging beneficial effects in the public sector, the empirical literature suggests such a contribution is likely to be limited to a country-specific or government-specific phenomenon. In their study on the Twitter use of Turkish mayors, Sobaci and Karkin (2013) demonstrated that a majority of Turkish mayors use social media to share news and to send personal messages rather than to provide better public services and to promote public participation. Eom et al. (2014) similarly showed that

most South Korean local governors use social media to advertise their own activities and to send news rather than to interact with citizens or to improve the quality of public services. In a broader sense, the same information and communication technologies (ICT) can generate widely different results across countries or governments because of each country's or each government's numerous socio-technical determinants (Bertot et al., 2010; Gil-Garcia & Pardo, 2005), which is the case with social media.

Even though the aforementioned literature attracted the attention of public administration scholars and practitioners about the potential and challenges of social media as a tool to expand the beneficial effects in the public sector, the authors believe that government responsiveness, compared to the two other facets of beneficial effects noted above, has not been sufficiently dealt with in both theoretical and empirical social media explorations on the beneficial effects to citizens in the public sector.

First, previous literature on the relationship between social media use and its beneficial effects does not seem to be based on the concept of beneficial effects when reconsidering the characteristics of digital era governance (Dunleavy et al., 2006). Even though the internet-driven changes and the outstanding characteristics of social media require the revision or reconsideration of the concepts of beneficial effects for research and practices in the public sector, it seems to be difficult to find such a conceptual refinement of beneficial effects including responsiveness both in academia and practitioners.[1] It is believed that it is timely and worthwhile to explore the potentials and challenges of social media as a tool for enhancing government responsiveness considering the fact that for many public administration scholars and practitioners, responsiveness has been regarded as a means to immediately provide public services to meet citizens' changing demands and needs, and is a distinct core beneficial effect to citizens (Hughes, 2012; Peters, 1996; Osborne & Gaebler, 1992).

Second, most of the literature seems to suffer from the lack of empirical evidence of the impact of social media on the expansion of beneficial effects in the public sector (Sobaci & Karkin, 2013). Specifically, research on the mechanisms of social media use for increasing government responsiveness doesn't seem to be sufficient. We do not yet clearly understand specific relationship between social media and government responsiveness: Why some governments succeed in increasing responsiveness with social media use, while others fail even where the contexts are similar? What mechanisms in the social media network produce the success of increasing responsiveness and what mechanisms lead to mal-functioning of public administration? This weakness can be a cause of not producing policy implications valuable to governments around the world. Therefore, it is also timely and worthwhile to conduct empirical research on the mechanism through which social media use in the public sector ends up expanding the beneficial effects including government responsiveness (Margetts et al., 2015).

Considering both contributions and weaknesses, which the literature on social media use and its beneficial effects to citizens have spawned, the authors reconsider responsiveness and draw the roles of political leaders in the social media network to enhance government responsiveness based on social network theory. Methodologically, the authors adopt SNA to the Twitter network of public services as well as carry out a case study on the interactions among the mayor, local government, and citizens via Twitter in Seoul, Korea in order to strengthen the empirical base of this study.

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[1] One example of reconsideration of the conceptual refinement in the context of digital era governance is "computer-mediated transparency" argued by Grimmelikhuijsen and Welch (2012). The "computer–mediated transparency" concept is developed considering the adoption of ICT and the Internet in the public sector and its results of the changes of citizens' expectations of access to the government information provision via e-government.