Opening the black box: Developing strategies to use social media in government

Sergio Picazo-Vela [a], Marilu Fernandez-Haddad [b], Luis F. Luna-Reyes [c],*

[a] *Universidad de las Americas Puebla, Business Department, Ex – Hda, Sta. Catarina Martir, Cholula 72810, Mexico*
[b] *Universidad de las Americas Puebla, Marketing Department, Ex - Hda. Sta. Catarina Martir, Cholula 72810, Mexico*
[c] *University at Albany, Department of Public Administration and Policy, Milne Hall 206, 135 Western Avenue, Albany, NY 12222, United States*

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ABSTRACT

Governments have widely adopted social media as tools to communicate and engage with citizens or as tools for service delivery. Current research suggests that social media adoption in government has been mainly market driven and that the various adoption strategies have resulted from a combination of trial and error, imitation, and both informal and formal knowledge exchanges. Given the nature of the adoption process and the nature of social media, the use of social media in government involves high levels of risk and uncertainty, and the main barriers of adoption lay in the organizational and institutional arrangements of government organizations. Nevertheless, little or no research has looked for the ways in which government organizations design strategies or use social media. In this paper, we open the black box to look at the process of adoption and implementation of social media in a government-lead social marketing program to promote healthy habits among young people living in urban areas, the *Puebla Sana* (Healthy Puebla) program. The case suggests that commercial social media, such as Facebook, Youtube, or Twitter, are instances of sociomaterial systems, and to take advantage of their features, government organizations need to collaborate with multiple individual and organizational actors in the co-creation of a message to accomplish their goals.

1. Introduction

Social media, such as Facebook, Twitter, or Youtube, constitute what has been called the 5th wave of Information and Communication Technologies (ICT) (Mergel, 2012). Similar to their technological predecessors, this new wave of technologies has been widely adopted by governments because of their potential to transform government operations, especially in terms of creating networks and increasing citizen participation (Kim, 2013; Lev-On & Steinfeld, 2015; Mergel, 2013a; Mergel & Bretschneider, 2013; Mossberger, Wu, & Crawford, 2013; Reddick & Norris, 2013). In spite of the high hopes for increasing public participation and innovation, empirical evidence in government suggests that social media contributes –like other previous ICT—to a gradual process of transformation inside governments, serving as an additional channel to "push" information to citizens without increasing participation (Bonsón, Royo, & Ratkai, 2015; Mossberger et al., 2013; Reddick & Norris, 2013; Zavattaro, French, & Mohanty, 2015; Zheng & Zheng, 2014).

On the other hand, empirical evidence from the private sector, particularly from the media industry, suggests that social media can actually transform radically the landscape of the entire industry (Mergel, 2013b). In the case of government, however, there is a high level of uncertainty in the adoption process because of the lack ICT control over technology changes (main social media are third-party managed) as well as in the public-driven information interests (Mergel, 2013b). These characteristics of social media conflict with current organizational routines – particularly communication practices—and institutional frameworks (Mergel, Schweik, & Fountain, 2009). In fact, such organizational and institutional factors constitute the main hurdles for social media adoption. Thus, there is a call for understanding interactions among technology, institutions, and organizations to open the black box of social media use in government to better understand not only adoption, but also strategic approaches and concrete applications of social media (Criado, Sandoval-Almazan, & Gil-Garcia, 2013; Mergel, 2013b). However, most research has focused on understanding interactions among users of social media (Robertson, Douglas, Maruyama, & Semaan, 2013; Sandoval-Almazan & Ramon Gil-Garcia, 2014; Tobias, 2011), on main stages or determinants of social media adoption (Bonsón, Torres, Royo, & Flores, 2012; Kavanaugh et al., 2012; Mergel, 2013b; Mergel & Bretschneider, 2013; Nah & Saxton, 2013), and more recently, on understanding the engaging effect of different types of

* Corresponding author.
  E-mail addresses: sergiopicazo@yahoo.com.mx (S. Picazo-Vela),
marilu.fernandez@udlap.mx (M. Fernandez-Haddad), lluna-reyes@albany.edu
(L.F. Luna-Reyes).

individual government messages sent through social media (Bonsón et al., 2015; Lev-On & Steinfeld, 2015; Zavattaro et al., 2015). In this way, our contribution is to fill this gap in the literature by describing in more detail a specific application of social media as well as providing some theoretical insights in the process of developing social media strategies in government.

In this paper, we describe a case in the State of Puebla, Mexico, in which the State government used social media as a component of a social marketing strategy to promote good health habits among citizens called *Puebla Sana* (Healthy Puebla). People of the Ministry of Health created a strategy that evolved to better accommodate to the characteristics of each social network, changing some organizational characteristics and creating new networks. In other words, the initial strategy was modified as a result of the influence of various stakeholders involved in the project, other actors in social media, as well as the specific features of each social media platform that each stakeholder group has adopted (Cordella & Hesse, 2015). The case illustrates the sociomateriality (Kallinikos, Aaltonen, & Marton, 2013; Orlikowski & Scott, 2008) of social media and helps us explain ways in which technical characteristics interact with the social, organizational, and institutional environments as a whole. Moreover, recognizing these shifting assemblages of social and technical aspects embedded in social media results in a series of practical implications for public managers.

To accomplish this objective, the paper is organized into five sections. The first section offers a brief introduction. Section 2 includes a review of the relevant literature on the ensemble/assemble and social media use in government. Section 3 includes a description of the methods used in this research. Section 4 describes the case of *Puebla Sana*, its antecedents, and its evolution. Section 5 constitutes a discussion and concluding remarks.

2. Literature review

Governments have adopted social media following a combination of market and mimetic forces (Mergel, 2012; Mergel & Bretschneider, 2013; Reddick & Norris, 2013). That is to say, governments are interested in social media partly because they are widely adopted not only by citizens, but also by other governments. Mexico, the main context for this research, is not the exception, and most state governments are using social media, such as Twitter and Facebook, to engage in conversations with citizens (Sandoval-Almazán, Gil-Garcia, Luna, Luna-Reyes, & Diaz-Murillo, 2011; Sandoval-Almazan, Nava-Rogel, & Gómez-Díaz, 2012). Most states are however using social media mostly as another channel to share information with its citizens (Sandoval-Almazan et al., 2012). To better understand the phenomenon, in this section of the paper, we include a description of social media and its use by government, as well as a brief description of theoretical approaches to understand technology-facilitated organizational change.

2.1. Social media and its use by governments

The invention of the Internet and the web facilitated the creation of new applications, such as social media, which allowed two-way interactions between organizations and individuals. Kaplan and Haenlein (2010) defined social media as "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0 and allow the creation and exchange of user-generated content" (p. 61). Organizations of all types can take advantage of social media to interact with their constituencies. In the case of governments, social media is a very important tool to keep their constituents informed and to hear their voice (Mossberger et al., 2013; Reddick & Norris, 2013; Tobias, 2011; Zheng & Zheng, 2014). However, given the market-driven nature of social media applications, they are also an important source of risk and uncertainty for government organizations, which usually have highly hierarchical communication practices (Bughin, Chui, & Manyika,

2012; Mergel, 2013b; Picazo-Vela, Gutiérrez-Martínez, & Luna-Reyes, 2012).

Governments of different countries are trying to use social media, and they have been trying to find the best approach to deploy it. Current research suggests that the adoption process started with informal experimentation by early adopters inside the government, followed by the definition of standards and protocols to use social media, which in some cases lead to institutional changes in the government (Mergel & Bretschneider, 2013). As a result, governments and research centers have created guidelines to get the most benefits and to reduce the possibility of failure of their social media initiatives (e.g., CIO Council, 2009; Government of Canada, 2011; Hrdinová, Helbig, & Peters, 2010).

The main promise of social media is increased citizen participation (Mossberger et al., 2013; Reddick & Norris, 2013). Research, on the other hand, has identified three different modes of interaction with citizens when using social media: representation (one-way pushing information), engagement (citizen pulls in a two-way conversation), and networking (multi-sided conversation) (Mergel, 2013a). Although many success stories have emerged about how social media promotes engagement and positioning of ideas, especially in political campaigns (Robertson, Douglas, Maruyama, & Chen, 2012), the results are frequently uneven, and empirical studies also suggest that the most common way of interaction is the push mode (Mossberger et al., 2013; Reddick & Norris, 2013; Zavattaro et al., 2015). Moreover, some of these empirical accounts call for qualitative studies to better understand factors of success (Reddick & Norris, 2013). Some more recent research has focused on exploring individual characteristics of social media messages and their ability to promote citizen engagement. Common results of these explorations suggest that messages, including pictures and photographs, are the most engaging or promote higher citizen response in form of "likes," "retweets," or comments (Bonsón et al., 2015; Lev-On & Steinfeld, 2015; Zavattaro et al., 2015). Although the content of the message also has an effect on citizen response, it has been found to be moderated by culture and context (Bonsón et al., 2015).

One of the possible arenas of social media use in the government is the area of social marketing, which is a discipline that was born in the 70's when the principles and practices developed to sell products and services started to be applied to sell ideas, attitudes, or behaviors (Kotler & Lee, 2008). Because of their value as preventive policy, governments have adopted social marketing programs to change attitudes and behaviors in areas such as public services (city cleaning) or public health (Fernandez-Haddad, 2011). Social media has also been recognized as a set of technologies with the potential to augment public health communication (Thackeray, Neiger, Smith, & Van Wagenen, 2012). Social marketing is well aligned with digital government as a way to offer information services to the citizens (Reddick & Norris, 2013). However, the use of social media in these departments is in the early adoption stage, and more research is needed to better understand factors of success (Thackeray et al., 2012). The main concerns in the adoption of social media as a social marketing tool are related to privacy and safety of users, which echoes more general concerns of social media use in government (Lau, Gabarrón, Fernández-Luque, & Armayones Ruiz, 2012; Mergel, 2013a).

2.2. Theoretical perspectives to social media

Information technologies have been recognized as sources of organizational change since their inception. In their classic paper, Leavitt and Whisler (1958) discussed the effects of information technologies in organizational structures, creating the first example of what has been called technological determinism (Doherty, Coombs, & Loan-Clarke, 2006).

The key assumption of technological determinism is that introducing technology will promote changes in organizational characteristics, such as performance, productivity, or even organizational structure (Doherty et al., 2006; Leavitt & Whisler, 1958). On the other hand,