The Diffusion of Social Media Among State Governments in Mexico

Rodrigo Sandoval-Almazan, Autonomous University of the State of Mexico, Toluca, Mexico
David Valle-Cruz, Autonomous University of the State of Mexico, Toluca, Mexico
Andrea L. Kavanaugh, Virginia Tech, Blacksburg, VA, USA

ABSTRACT

Most of the research about how state governments use social media focuses on services, comparative perspectives or assessment of e-governments. The authors’ focus is on the adoption of social media by state governments in Mexico. Many state governments may be slow to adopt social media due to a lack of guidance on where their efforts may lead. The purpose of this research is to provide some insight into the factors affecting adoption of social media by state governments in Mexico. Guided by diffusion of innovation theory, the authors analyzed data from Twitter and Facebook accounts of all 32 Mexican state governments from 2010 to 2015. According to diffusion theory, the results find that only one state government in the sample is classified as an innovator, four state governments are early adopters, eleven are early majority, eleven are late majority, and five are laggards. The use of social media by state governments in Mexico is in its infancy, and there is a significant difference in the use of social media among the different states.

KEYWORDS

Diffusion of Innovation Theory, E-Government, Facebook, State Governments, Social Media, Twitter

1. INTRODUCTION

The adoption and use of social media by state governments in Mexico is in its very earliest stages. Different states around Mexico have static web pages (portals), only informative, and sometimes not working. Despite this, all the state governments in México have developed portals for service delivery, information dissemination, and implementation of different mechanisms to interact with citizens. Particularly social media is used by all state governments in Mexico to improve interaction with citizens, but the use and adoption of these kind of technologies have different behaviors for each government.

Social media is important in state governments because they improve government to citizen interaction (G2C); it is a mechanism for dissemination of government activities and information, and it represents an efficient communication channel between government and citizens. Social media is also a tool for citizens to make complaints or petitions to their governments, and it is useful for governments to know citizens’ perception (Valle-Cruz, Sandoval-Almazán, & Gil-Garcia, 2016, p. 1).

In general, there are few empirical studies related to the diffusion of technological innovations in governments (Anderson, Lewis, & Dedehayir, 2015). There are, nonetheless,
several studies on which to build. The purpose of this paper is to explain social media adoption by state governments in Mexico as a starting point for future research. For this reason, the paper focuses in the state governments’ classification based on the diffusion of innovation theory (Rogers, 2003). In this manner, we interpreted the use of social media, specifically Twitter and Facebook – by Mexican state governments. The contribution of this paper is to classify governments’ adoption of social media (as mechanism for citizens’ interaction), based on the diffusion of innovation theory (Roger, 2003).

This paper provides findings from an analysis of the Twitter and Facebook accounts of all thirty-two state governments in Mexico during a five-year period from 2010 to 2015. Based on the Roger’s classification (2003) only one state government, Nuevo Leon, can be considered an innovator, four more are considered early adopters. The remaining 27 state governments break down into early majority (11), late majority (11) and laggards (5).

By social media, we mean social network sites (SNS) such as Facebook or MySpace, and blogs or micro-blogs, such as Twitter, and image-sharing sites or apps such as Flickr, YouTube, Instagram or WhatsApp. Some state governments also accommodate public use of Web 2.0 tools (O’Reilly, 2007) on their sites or platforms, such as, tagging, commenting, likes, recommending, or similar types of user-generated content.

This paper is organized in five sections, including the introduction. The second section presents the theoretical framework and review of prior research related to social media used by state and state governments, and different studies related to diffusion of innovation. The third section describes the methods we used to collect and analyze social media from all 32 Mexican state governments. In the fourth section, we present our findings. Finally, we discuss some of the limitations of innovation diffusion theory for social media, and present some directions for future research in the fifth section.

2. THEORETICAL FRAMEWORK AND PRIOR RESEARCH

This section is divided into two subsections. The first subsection describes the classification of adopters based on diffusion of innovation theory. The second stage describes different studies related to innovation diffusion, social media and government.

2.1. Diffusion of Innovation Theory

Diffusion of innovation theory seeks to explain the adoption and spread of new ideas, products or services across different communication channels over time and in a particular social system (Bakshy, Karrer, & Adamic, 2009; Dodds & Watts, 2004; Rogers, 2003; Toole, Cha, & González, 2012; Valente, 1996). Diffusion is the process by which an innovation is adopted and gains acceptance by members of a certain community. Factors that interact to influence the diffusion process are the innovation itself, how information about innovation is communicated, time, and the nature of social system to which the innovation is being introduced (Folorunso, Vincent, Adekoya, & Ogunde, 2010: p 362). According to Reich (2016):

...Agents, who are all using some old technology, choose whether or not to adopt the new one. We consider technologies with complementarities, so the usefulness of the new technology depends on who else is using it ... the usefulness of a communication technology is dependent on an individual’s friends, family and other contacts using it. Agents choose to adopt the new technology only when a high enough proportion of their social contacts also adopt it. Agents can choose to adopt or not independently. They may also take joint decisions with others to adopt the new technology together. Once some agents adopt the technology, their contacts may adopt it, then their contacts may adopt it too, and so on... (p. 8)