Local engagement online: Municipal Facebook pages as hubs of interaction

Azi Lev-On *, Nili Steinfeld

School of Communication, Ariel University, Israel

ARTICLE INFO

ABSTRACT

The article presents the results of a comprehensive study of the scope and character of the activities of the Israeli municipalities on Facebook.[1] The study maps the Facebook presence of Israeli municipalities and checks for correlations between Facebook presence, municipality size, and the geographic and socio-demographic characteristics of the municipalities. We then measure several engagement indices of municipal activities on Facebook (number of fans, average likes, comments, and shares of posts) and check for correlations of these engagement indices with municipality size and geographic and social demographic characteristics of the municipalities. The article concludes with a review of several indices of municipality Facebook page activity, including scope of content uploaded by the page and by fans, content formats (statuses, images, and videos) and their reception.

Published by Elsevier Inc.

1. Literature review

Do social media facilitate communications between local governments and their constituencies? What characterizes the content and dynamics of the online discussions between citizens and local governments that take place on social media platforms? While many studies analyze online citizen engagement in politics at the national level and on websites of government agencies, MPs, and political parties, very few studies have explored online interactions at the local level between citizens and municipalities (Medaglia, 2012). Still, nowhere does the promise of interactivity and responsiveness online seem more viable than in the municipal arena. Arguably, studying the interaction between residents and local governments on Facebook at the municipal level is important for the following reasons (Bertot, Jaeger, & Grimes, 2012; Deakin, 2010; Shkabatur, 2010):

First, decisions made at the municipal level have a direct impact on the daily lives of residents. Issues such as kindergarten and school enrolment, public transportation, welfare, and zoning regulations are decided at the local rather than national level, and municipal

Facebook pages, whose content remains accessible to all may function as attractive arenas for residents to ask and respond to questions and discuss these issues.

Second, not only is the number of relevant citizens significantly smaller at the local than the national level, but municipal elections and the division of seats in municipal councils are frequently decided by a small number of votes. Hence, a post that captures residents' attention (especially prior to elections) can potentially promote significant change. Thus, municipal Facebook pages have the potential to encapsulate incentives and opportunities to generate discussions and mobilize residents, and support deep and vibrant engagement at the local level.

Third, studies demonstrate that municipal website usage is correlated with trust in local authorities (Tolbert & Mossberger, 2006) and with the scope of interaction between citizens and local governments (Feeney, Welch, & Haller, 2011; Garrett & Jensen, 2011). The more people use municipal websites, the more they communicate with local authorities and trust them, even more so than at the national level. Thus, municipal Facebook activities can generate beneficial results for the municipality.

Still, decision makers may have reservations about establishing a municipal Facebook page since negative content, critical comments, and improper language that might appear on the page are seen by large publics. Indeed, studies demonstrate that decision makers often

view the use of interactive platforms in general and Facebook in particular as problematic and they tend to limit their use of interactive platforms in order to avoid creating platforms for problematic issues and opposition (Feeney et al., 2011; Lev-On, 2011; Moon, 2002; Mossberger, 2013; Norris & Reddick, 2013; Stromer-Galley, 2000).

To summarize, municipal Facebook pages represent significant potential to improve communications between citizens and authorities, yet introduce obstacles that may prevent the authorities from making optimal usage of these social media tools. This is why the study of Facebook usage by municipalities, and mapping the landscape of municipal Facebook usage are of significant value for students of communication and public administration.

Few studies have explored the characteristics of municipal e-government and even fewer studies have studied the relatively recent phenomenon of municipal Facebook usage. Below are some important insights from these studies.

1.1. Scope of diffusion and usage

The scope and complexity of municipal Facebook usage shows steady, incremental improvement (Deakin, 2010; Mossberger, 2013; Oliveira & Welch, 2013) and Facebook is becoming an essential medium for communication between municipalities and citizens in Europe and the US (Bonsón, Torres, Royo, & Flores, 2012; Norris & Reddick, 2013).

Still, the scope of diffusion of e-government and specifically social media arenas initiated by local authorities is not uniform: Local authorities have adopted e-government and social media at different times and have been using them on different scales and levels of sophistication (Bonsón et al., 2012; Norris & Reddick, 2013).

1.2. Correlates with e-government adoption of Facebook

The most important predictor of diffusion of e-government (and specifically Facebook usage) has been found to be municipality size, which influences not only media adoption but also the scope of usage. Municipal websites and Facebook pages of large cities attract significantly more activity than those of small cities (Ahn, 2011; Borge, Colombo, & Welp, 2009; Garrett & Jensen, 2011; Haug, 2008; Holden, Norris, & Fletcher, 2003; Moon, 2002; Norris & Reddick, 2013; Wohlers, 2009).

Additional variables that predict usage are peripherality (central/peripheral municipalities; Haug, 2008; Norris & Reddick, 2013; Wohlers, 2009), structural attributes such as the functions in charge of maintaining the municipality's online presence (Carrizales, 2008; Norris & Reddick, 2013; Reddick & Norris, 2013; Wohlers, 2009), and population income and education levels (Reddick & Norris, 2013).

1.3. Character of activities

A recurrent finding in e-government studies is that municipality websites place greater weight on static contents, such as tenders and information on municipal activities, with much less emphasis on interactive contents (Haug, 2008; Mossberger, 2013; Musso, Weare, & Hale, 2000; Norris & Reddick, 2013; Scott, 2006; Torres, Pina, & Acerete, 2006). Municipalities tend to disregard the transactional potential of social media, choosing instead to post informational materials that also appear on other, more traditional, media (Graham & Avery, 2013; Lovari & Parisi, 2012; Oliveira & Welch, 2013; Perlman, 2012). The static character of municipality website communications is apparently reproduced in municipality Facebook pages, despite the inherently interactive character of Facebook.

Several studies illustrate that municipalities rather than citizens are the dominant actors in uploading content to municipal websites (Graham & Avery, 2013; Hofmann, Beverungen, Räckers, & Becker, 2013; Magnusson, Bellström, & Magnusson, 2012). Moreover, municipal Facebook pages may create an impression of organizational indifference to the problems raised by constituencies, since many of the questions posted by residents on municipal Facebook walls remain without public response (Hand & Ching, 2011; Strecker, 2011), as municipalities prefer to respond through other channels.

This is the first study in Israel and one of a few worldwide to focus on municipal-level Facebook usage and practices. The few studies exploring Internet adoption by municipalities in Israel have focused on municipality websites, and have shown that while Internet use by local governments in Israel is growing constantly, large and small municipalities differ in adoption scope and practices in several respects. The studies also suggest that local governments may lag in Internet adoption due to the profile of their residents (for example, Ultra-Orthodox or Arab populations) (Purian-Lukach, 2011; Ravitsch, 2005; Rotem, 2007). This is likely due to the conservative character of these populations, which is manifest on lower Internet penetration rates as well as more conservative usage patterns (Lev-On, 2013; Lissitsa & Lev-On, 2014).

This study is also the first to use computer-based tools to analyze interactions on municipal Facebook pages. Such analysis may offer insights on the character of the interactions involving citizens and municipal authorities focusing on, for example, agendas and framing, content that becomes popular, patterns of association and responsiveness, and more (Steinfeld & Lev-On, 2015). Using such automatic tools to study "big data" enables us to dramatically expand the scope of research while simultaneously significantly reducing the time required for data analysis (Lazer et al., 2009).

Facebook appears to be the most promising novel arena for e-contact between municipalities and their residents. Unlike municipal websites, whose access requires special effort by users, Facebook municipality pages are much more noticeable and accessible directly from Facebook, especially where Facebook usage is high. Israel has been the world leader in Facebook usage in terms of percentage of the entire population who uses Facebook (53% in 2011, right before data for this study was collected). and average amount of time these users spend on Facebook (ComScore, 2011), and ranked 15th in the World Economic Forum's Networked Readiness Index of 2013 (Bilbao-Osorio, Dutta, & Lanvin, 2013). Hence, Israel is a promising arena for our efforts to take a fresh look at recent patterns of interactions between municipalities and residents.

In Israel, state law requires every municipality to maintain a website, and close to 100% of all cities indeed have a website. The law does not require authorities to maintain a Facebook page: Facebook presence or absence and the activities that take place on the page are subject to municipality discretion. This fact adds another element to the current analysis, as it allows us to compare municipalities that maintain Facebook pages with those that do not.

2. Research questions and hypotheses

The study analyzes the scope and character of activities on municipal Facebook pages. In view of the paucity of studies on this topic, several of the research questions are presented without providing corresponding hypotheses.

RQ1 What is the scope of Facebook adoption by municipalities, and what is the relation between Facebook adoption and various municipalities' characteristics?
In view of the significant use of Facebook by the population, we hypothesize that a significant percentage of authorities maintain a Facebook page. Additionally, we hypothesize that:

H1. Facebook page adoption will be significantly lower in municipalities populated by ultra-Orthodox or Arab populations. This hypothesis follows previous studies conducted in Israel (Purian-Lukach, 2011; Ravitsch, 2005; Rotem, 2007) that found significant differences in use between the municipal websites of these compared to authorities without significant ultra-Orthodox or Arab populations. Such differences are