Socially Awkward: Social Media Usage in County-Level Government

Research-in-Progress

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This study proposes to investigate the presence and use of social media, and impact of citizens’ demographic factors on social media use and demand in county governments. Despite its transformative potential, e-government growth has been sluggish. Social media is transforming the nature of interaction between individuals and organizations, but its presence and use has been lackluster in local governments as revealed by this pilot study. Understanding if, how, and to what end are governments harnessing social media will help make e-government a citizen-driven, democratic, transparent, and trustworthy platform. County governments in particular are challenged by their size and resource availability in addition to a heterogeneous service area (both urban and rural) and varying population density. These limitations prevent attaining a critical mass of users necessary for online success. By exploring social media’s role in e-government and citizen participation, this study will provide a comparison between county and municipal governments and address the gap in county e-government research to further address the efficacy of meeting citizen’s needs by social media in local government.

Keywords (Required)
E-government, county-level government, social media, citizen participation, demography

Introduction

E-government is a global phenomenon of critical and strategic importance (Oyedele & Koong, 2005). E-government is the use of Information and Communication Technology (ICT) in the public sector as a means to deliver government services (Marchionini, Samet, & Brandt, 2003), but also includes improved service quality, integrated service, and market development (Grant & Chau, 2004). Common components of e-government identified from literature include the technology, the stakeholders, and the outcomes (Chiang & Liao, 2009; Morgeson & Mithas, 2009; Roy, 2006; Teo, Srivastava, & Jiang, 2008; Grönlund & Horan, 2004).

The successful interaction of these three components are considered to have far-reaching transformative potential: providing two-way transitive services, being a one-stop shop for all government services, empowering citizens by increased participation and public discourse, and reducing corruption by increasing transparency and citizen trust in government (Teo et al. 2008; Macintosh, 2004; Grönlund & Horan, 2004; Ho, 2002). Despite the transformative potential and the available technologies, governments seem unable to move past the most basic e-government functions (Bonsón, et al., 2012; Norris & Reddic, 2013). As Cumbie and Kar (2014) revealed, even at local level, e-government sites are non-existent or are non-inclusive, which means, citizens do not have the ability to participate in the decision-making process. Social media has emerged as a potential technology to advance the development of e-government and bridge the divide of interaction between citizen and government.

Social media as a vehicle for user-generated content published online, micro-blogging (e.g., status updates and tweets), establishing public and private communication and sharing networks, and extended to
mobile computing to incorporate location-based services allows users to have both a high degree of connectivity and access to selective information and to generate and share multimedia content in near real-time. These qualities of social media seem like a natural fit with e-government goals of information provision, collaboration, and participation. Social media is seen as a vehicle to increase effectiveness and legitimacy by communicating with internal and external stakeholders (Mijer & Thaens, 2013). Researchers have noticed this and explored the adoption and use of social media in government (e.g., Hong, 2013, Mijer & Thaens, 2013; Mossberger, Wu, Crawford, 2013; Oliveira & Welch, 2013; Reddick & Norris, 2013; Bertot, Jaeger, & Hansen, 2012; Bonson, Torres, Royo, Flores, 2012). However, despite ICT advancements and social media usage growth, the success of e-government is influenced by citizens' socio-economic conditions, such as income, race/ethnicity, education, and behavioral issues (i.e. lack of interest or trust in electronic services) influence their accessibility to e-government, thereby resulting in the failure/success of e-government (Lofstedt 2005; Akman et al. 2005). Social media’s usage is also affected by citizens’ age, gender, and race among other demographic factors (Duggan and Brenner 2013).

Local government is an important part of the overall government landscape with a higher degree of contact between government and citizen and greater likelihood of citizen participation. As Fan (2011) asserted, local government is connected and responsive. Despite the importance, local governments generally face problems of size and geographical constraints. Governments that service larger population areas have more resources, a larger customer-base. Developing an online transactional service, such as automobile registration renewal is more attainable if the costs of developing and administering the service are divided over 1 million citizens versus 10,000. The Internet helps overcome geographical barriers, allowing businesses to reach new customer markets. The same rule does not translate to local government. If a citizen’s county of residence does not have online capability to automobile registration renewal, the citizens cannot simply search for and use an online service from another county.

Local e-government usually means municipalities or city agencies or departments; conspicuously absent are studies of county governments. While not conclusive, literature searches for county-level e-government and/or social media usage were not fruitful (Note: Reddick & Norris, 2013, include both cities and counties). This is despite the fact that county governments have the same attributes that make municipal governments important: proximity to citizens and direct impact on their lives. Counties are distinguished from municipalities and government agencies by having a more heterogeneous service area; cities are smaller with dense populations, counties may include both urban and rural areas and offer both distinct governmental services and ones that overlap with other jurisdictions. The characteristics of counties, e.g. more dispersed populations, may make social media a tool to ameliorate the problem of connecting with citizens. On the other hand, the challenges of effectively using social media may exacerbate other problems, such as increasing the digital divide among social media adopters and non-adopters.

Taking together these three things - e-governments’ untapped transformative potential, the transformative power of social media and uptick of e-government social media research, and the paucity of county-level research - this in-progress study addresses the use of social media in U.S. county governments and hypothesizes that the citizens’ demographic factors influences social media use. The specific questions addressed are:

1. How widespread is the use of social media technologies in county-level governments?

2. What demographic factors determine the use of social media in county government?

At this point a pilot analysis of social media presence and usage at county governments was completed and a parsimonious method was established to measure use and presence among a larger sample of county governments. Furthermore, an initial list of hypotheses of demographic factors with both social media presence and social media use are presented and projected to be complete by May 2014. The implications of this research include providing a basis of comparison between types of local governments; are counties and municipalities substantially different in their approaches to social media? Additionally do the county population demographics determine the presence and usage of social media, indicating that governments are responsive to citizen needs and demands?
Research Background

As Halachmi and Holzer (2010) described, that there is no one-size-fits-all e-government solution. The technological component of e-government includes the Internet, web-based applications, new and virtual information technology (IT) platforms and applications, and mobile computing, but the preponderance of e-government research focuses on a government agency’s official website (e.g., Morgeson & Mithas, 2009; Sung, Liu, Liao, Liu & Yuan, 2009; Tan & Benbasat, 2009; Teo, Srivastava, & Jiang, 2008; Rao, Chai, Herath, & Park, 2006; Wang, Bretschneider & Gant, 2005), the website being the primary channel of e-service delivery. The general conclusion of past research is that the e-government initiatives are mostly online, but fall short of their conceptualized goals (Norris & Reddick, 2012; Fan 2011; Scott, 2006; Moon, 2002).

As the ICT environment changes, governments are embracing social media as part of their e-government strategies. Research of social media in government finds the same patterns for social media as e-government in general: social media is present, can and have produced positive outcomes (Mijer & Thaens; 2013), but are largely in an early and experimental stage of development (Bonsón, Torres, Royo, & Flores, 2012).

Social Media Presence

Among large cities social media adoption has drastically risen from 2009 to 2011; Facebook from 13% to 87% and Twitter from 25% to 87% of 75 analyzed cities (Mossberger, Wu, & Crawford, 2013). Separately and similarly, a survey of 1,326 local (city and county) governments with populations of 10,000 of greater indicated a social media adoption rate of 67.5% (Reddick & Norris, 2013) while Oliveira and Welch (2013) show 88% usage among 791 of city managers or departmental directors. These past findings are based on survey responses or contextual analyses of e-government home pages looking for evidence of a social media artifact, that is, a link to a common social media platform. The mentioned social media platforms, services, and/or products are: Facebook, Twitter, YouTube, LinkedIn, Govloop, Skype, Flikr, Instant Messaging, MySPace, and GoogleDocs.

Social Media Usage

While social media presence appears commonplace research also found that “[h]aving a social media icon on a webpage does not demonstrate usage” (Oliveira & Welch, 2013, p. 403). Analysis of social media content of local governments in the European Union found that dialogue between government and citizen was in its infancy and social media is still experimental and non-responsive to citizen demand (Bonsón, Torres, Royo, & Flores, 2012). Likewise in the U.S., Reddick and Norris (2013) found social media to be primarily a one-way communication channel which is the “push” tactic identified by Mergel (2013):. This strategy is when social media is at the departmental level used for broadcasting with little interaction resources or social media policy. Yet while at an early stage, social media in government has value, for instance, in times of crises as a valuable notification tool (Kavanaugh, et. al., 2012) or to increase visibility of elected officials (Hong, 2013).

Research Design

At this research is not yet completed, this section describes the completed pilot analysis of a small sample of county governments for social media presence (SMP) and social media usage (SMU). The pilot analysis builds on previous research techniques to evaluate social media usage in government, searching for a link to a social media service from an official government home page (Mossberger, Wu, & Crawford, 2013); yet is somewhat exploratory by looking at additional characteristics. The pilot analysis resulted in identifying the criteria to measure SMP and SMU in a larger sample of county e-government. The section concludes by outlining the next steps to take, applying the SMP and SMU criteria to a larger sample of county government and the regression models to test the relationships between these two dependent variables and demographic data of the citizen stakeholders.
Random Sampling

To empirically address the research questions pertaining to the presence and use of social media in terms of information freshness in county government, an initial random sample of the U.S. counties were selected for further analysis. The sampling procedure began by procuring a list of all 3,147 U.S. counties downloaded from Census.gov into spreadsheet software. Using the random function of the software a random number between 0 and 1 was generated and assigned to each county. (The values were copied and pasted as a NUMBER data type to prevent re-calculation of the random function). The list of counties and their assigned random number was sorted from least to greatest and the top 2% \( (n = 62) \) of the sample were used as in the initial, proof-of-concept analysis. The randomly ordered list was retained for subsequent use to increase the sample size.

Website Discoverability

The names of each of the 62 counties were then individually entered into the Google search engine, for example, the first search term was “Itasca County, MN.” From the results of the search query the page rank was noted from the search results and if an official county government page was not immediately apparent, additional search efforts were made by checking with the state’s website for list of county websites and/or looking for a link from other pages in the search results. Of the 62 randomly sampled counties, ten were found to be undiscoverable with no readily available county government website. Of those found, 44 were first in page rank, four were second, three were third, and one was fourth.

<table>
<thead>
<tr>
<th>Caldwell Parish, LA</th>
<th>Claiborne County, MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donley County, TX</td>
<td>Perry County, IL</td>
</tr>
<tr>
<td>Pike County, OH</td>
<td>Dillingham Census Area, AK</td>
</tr>
<tr>
<td>Ouachita Parish, LA</td>
<td>Schuyler County, MO</td>
</tr>
<tr>
<td>Randolph County, AR</td>
<td>Martin County, IN</td>
</tr>
</tbody>
</table>

Exhibit 1. Sampled Counties without a Discoverable Website

Social Media Presence: Artifact on the Home Page

Noting an e-government’s home page as the logical entry point to the website and a gateway to social media, the home page was examined for presence of social media artifacts including text, logos, links, or other indicators of social media presence. Of the 52 discoverable county government websites, 36 had no discernible social media artifact and 16 did indicate presence of social media.

Of the sixteen home pages demonstrating an apparent social media presence the number and kind of social media artifacts were noted. Deferring to Usability.gov’s Research Based Web-Design & Usability Guidelines (United States, 2006) on the attributes of a usable home page, other recorded characteristics of the entry point to social media were the location on the page of the social media artifact(s), primarily above or below “the fold” meaning was scrolling required to view the artifact or was it in the upper 600 pixels of the page; the presence of text description of the entry point versus just a logo or picture link; and if the “target” of the social media link was the same (page loads in current tab/window) or new (social media page opens in new tab/window).

The results indicated the presence of eight different types of social media in use were as follows, from most popular, with the number in parenthesis indicating the frequency of occurrence on the home pages: Facebook (12), Twitter (8), Real Simple Syndication (3), a “share” bar (pictured in Exhibit 2) (2), Flikr (2), +myConnection (2), YouTube (2), Vimeo (1). Table one relates which social media artifacts were present per county.

Other points of interest concerning the social media artifact was the location or locations on the home page. Eleven of the 16 counties had artifacts appearing “above the fold” of the home page: seven in the top menu/navigation bar, two with a dedicated page-spanning top menu bar, one in the main content of
the page, and one on a columnar right-side navigation bar. Of the sixteen sites, three had social media artifacts appearing in multiple sections of the home page.

Eight of the county home pages with social media entry points included a textual description of the social media. At the minimum the common logo per social media site was labeled (e.g. the “FB” logo labelled as “Facebook”) while others included a basic instruction such as “Follow Us on Facebook.” A caveat is that two sites linked to a social media page which was more verbose in terms of including a “Social Media Policy;” however, the link to this from the home page was not labelled accordingly.

The “target” of the social media entry points were recorded as the same page for 12 of the 16 pages, meaning that a social media site link loaded in the current window/tab and required use of the browser’s navigation controls to return to the home page. Generally, links that bring a user to an outside online resource need to be explicitly labelled as such and should open in a new browser window or tab. Opening in the same window/tab convey’s a false sense of continuity between what is the official county web site and what is a third-party or external resource. Additionally this is a barrier for users to return to the original site. Of the twelve that opened in the same window, 2 actually opened “pop up” sections of the page and thus are not problematic, while three others opened in the same window but to a designated page on the county’s website with further information about their use of social media. This indication of “same” or “new” is therefore somewhat misleading, as some may open in the same window but not violate common usability practices.

<table>
<thead>
<tr>
<th>County</th>
<th>Social Media Service*</th>
<th>Link “Above Fold”</th>
<th>Link with Text</th>
<th>Target in a new window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augusta County, VA</td>
<td>fb, tw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beaver County, UT</td>
<td>fb, tw, rss</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Burnett County, WI</td>
<td>myC</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Carver County, MN</td>
<td>fb, yt, tw, vim, in</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Clay County, MO</td>
<td>fb, tw, yt, flickr</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cleburne County, AL</td>
<td>fb</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Delaware County, PA</td>
<td>fb, tw</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Franklin County, MA</td>
<td>fb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence County, AR</td>
<td>fb, rss</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Itasca County, MN</td>
<td>fb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muskegon County, MI</td>
<td>tw</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Nassau County, FL</td>
<td>fb, tw, share</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Palm Beach County, FL</td>
<td>fb, tw</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Santa Cruz County, CA</td>
<td>share, tw</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Shawano County, WI</td>
<td>fb</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>St. Louis County, MN</td>
<td>rss</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

*fb = Facebook, tw = Twitter, myC = +myConnection, rss = Real Simple Syndication, yt = YouTube, vim = Vimeo, in = LinkedIn, flickr = Flikr, share = social sharing toolbar

**Table 1. Social Media Presence in 2% of U.S. County Governments**

**Social Media Usage**
Following the initial examination at the social media artifact on the sixteen county home pages (social media presence) is further examination into the social media being used by extracting key data points. Focusing on the big two social media platforms of Facebook and Twitter that were most frequently present in the sampled county government home pages, data were collected for each on the network size (number of followers), content (number of posts), and the freshness of information (most recent post). In collecting these data problems arose with half the the sixteen counties with a social media artifact present and only ten could be retained for subsequent analysis.

Four social media entry points from county home pages were not for the county governments but for individual departments: sheriffs, emergency management, and economic development. These were excluded from analysis since they are not representative of the county and were not indicated as being departmental social media sites and thus are misleading. Another site linked to a social media page had 94 different parings of department and social media platforms, from individual parks and library branches, but no overarching county site. Another two that were not included after further investigation revealed that the social media platform in use, +myConnection, required registration and login credentials and was thus non-public but a niche social media site. One of those also directed links for Facebook and Twitter to a social media page that indicated neither were currently available but were “Coming Soon” without an indication of when; however, it was retained for its inclusion of RSS feeds. Two more were not included for their social media entry point directed to a non-public Facebook page that required login credentials. Two others were considered from removal from analysis since they directed not to the counties Twitter page, but to Twitter’s home page; however, they were retained for analysis since they were located with further search via Google’s search engine.

From the 2% random sample of 62 counties, the available final analysis of social media usage has dwindled to merely ten counties (two included despite inaccurate social media links): seven instances of Twitter, five of Facebook, and eight across other various platforms. Seven counties used the Twitter social media platform, as summarized in Table 2 while five counties utilized Facebook, Table 3.

<table>
<thead>
<tr>
<th>County</th>
<th>Last Update</th>
<th>Posts</th>
<th>Followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nassau County, FL</td>
<td>1 hour ago</td>
<td>989</td>
<td>218</td>
</tr>
<tr>
<td>Delaware County, PA</td>
<td>4 hours ago</td>
<td>410</td>
<td>490</td>
</tr>
<tr>
<td>Clay County, MO</td>
<td>5 hours ago</td>
<td>767</td>
<td>1,356</td>
</tr>
<tr>
<td>Santa Cruz County, CA</td>
<td>August 25, 2011</td>
<td>53</td>
<td>2,111</td>
</tr>
<tr>
<td>Carver County, MN</td>
<td>Feb 11, 2014</td>
<td>113</td>
<td>169</td>
</tr>
<tr>
<td>Augusta County, VA</td>
<td>11 hours ago</td>
<td>825</td>
<td>180</td>
</tr>
<tr>
<td>Muskegon County, MI</td>
<td>Feb 18, 2014</td>
<td>493</td>
<td>812</td>
</tr>
</tbody>
</table>

Table 2. County Social Media Usage, Twitter

Two counties - Carver County, MN and Clay County, MO - included links to YouTube, respectively with four videos with recent activity 9 months ago and seven videos from two years ago. Carver County, MN listed five social media platforms for the county in addition to an email/text notification subscription service and seven departments with twelve department-specific social media outlets. At the time of analysis, the Vimeo video sharing service had 136 videos (all board commissioner meetings), 3 followers, and was last updated 6 days ago. Lastly the counties professional social network site, LinkedIn, had 174 followers and was last updated 7 months ago.

Three counties - Beaver County, UT; Independence County, AR; St. Louis County, MN - provided links to the RSS feeds. Two counties had one feed while Beaver County listed 51 RSS feeds corresponding to specific county departments or notification services, e.g., icy road notifications, job postings, sheriff’s department, etc. Clay County, MO photo sharing social media site via Flikr had 4790 photos and began in
January of 2009.

<table>
<thead>
<tr>
<th>County</th>
<th>Date Established</th>
<th>Likes</th>
<th>Last Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carver County, MN</td>
<td>20 January 2010</td>
<td>224</td>
<td>11 February 2014</td>
</tr>
<tr>
<td>Clay County, MO</td>
<td>21 April 2009</td>
<td>787</td>
<td>21 February 2014</td>
</tr>
<tr>
<td>Augusta County, VA</td>
<td>14 February 2011</td>
<td>227</td>
<td>24 February 2014</td>
</tr>
<tr>
<td>Franklin County, MA</td>
<td>2 January 2014</td>
<td>149</td>
<td>21 minutes ago</td>
</tr>
<tr>
<td>Itasca County, MN</td>
<td>11 April 2013</td>
<td>648</td>
<td>21 February 2014</td>
</tr>
</tbody>
</table>

Table 3. County Social Media Usage, Facebook

Pilot Analysis Results

Of the 62 randomly sampled counties:

- Ten counties (16%) had undiscoverable websites.
- Sixteen counties (26%) had evidence of social media presence; however, six of these were not retained for analysis because the social media service was not functional, unavailable at all, or in use for the county government; the result, ten counties (10%) had functioning social media presence.
- The ten counties with SMP utilized six different social media services, the top two being FaceBook and Twitter.

Although other factors describe the quality of SMP (e.g. position on page, description, social media policy), SMP is simply the presence of a social media artifact on the home page; however, the pilot analysis revealed that this social media artifact sometimes does not direct to a functional or available county-level social media service. Resultantly, the three categories of SMP are “0 = no SMP,” “1 = an unsuccessful attempt of SMP,” and “3 = a functional SMP.”

Although other social media platforms are in use, SMU is most commonly represented by the “big two” platforms of Twitter and FaceBook. While each platform has data available to determine social network size (e.g. number of “Followers” or “Likes”) the platforms are publicly available and may be viewed by stakeholders who have not joined the network. Likewise other relevant variables such as number of posts or the date first established, while relevant to SMU, were not used in favor of using just the age of the last content update. The age of last content update is common to both platforms and is indicative if the site is in current usage. Furthermore from the results of the pilot analysis these data vary from very recent (hours old) to months and years ago. A categorical variable can capture the level of usage, the categories ranging from within the day (1), week (2), month (3), year (4), two years (5), and three years (6). The two categorical variables for SMP and SMU can now be applied in a standardized method across a larger sample of county governments.

Preliminary Conclusions & Future Research

From the random sample of 2% of the county governments in the U.S. only 8 of the 62 had a valid presence on social media. During the course pilot analysis, greatly constrained by the small sample size, a few observations are noted:

Some counties in the same state (e.g. Texas) used a standard template; Castelnovo and Simonetta(2008)
pointed to “aggregations” of Italian municipalities working together as a potential strategy to overcome small scale.

Some counties clearly exhibit a lack of “horizontal integration,” described by Layne and Lee (2001) as an sign of advanced e-government. This was present by counties with (1) multiple social media platforms per internal county departments and agencies and by (2) social media separate from government home page instead of embedded.

Of the 16 sites exhibiting a social media presence, half were problematic or could not locate the social media service, sending mixed signals to users who attempt to connect via social media but are unable.

Taken together, Twitter and Facebook, the content was reasonable “fresh” with the last update within a day or week; however, there was evidence of individual social media platforms that were stagnant, with years since the last update. This supports the notion that social media is in the “experimental” stage with an initial flurry of activity that is not sustained. This is congruent with Mergel’s (2013) “push” stage in which agencies have initiated but do not have a clearly articulated social media policy or strategy.

The preliminary findings set the stage to collect data from a larger sample and then perform a regression analyses with socio-economic demographic data.

**Demographic Factors**

The citizen’s socio-economic conditions, such as income, race/ethnicity, education, and behavioral issues (i.e. lack of interest or trust in electronic services) influence their accessibility to e-government, thereby resulting in the failure/success of e-government (Akman, Yaziciib, Mishraa, Arifoglug 2005; Lofstedt, 2005). Though gender differences among citizens do not influence their usage of e-government, educational qualification and income of a citizen are major predictors using e-government for different purposes (Jaeger, 2003; Losh, 2003; Hqsing & Selhofer, 2002; Levy, 2002; Mellor, Par, & Hood, 2001). Because the socio-economic factors of citizens definitely determine their usage of e-government, it is pertinent to explore the extent to which these conditions also influence the success of social media in local government. Likewise population is said to be a factor in e-government, with larger areas potentially having greater need or available resources.

The association of demographic factors with e-government websites usage will likely extend to social media as well. The following two sets of hypotheses articulate the expected relationships of demographic factors with social media presence and then social media usage.

**H1.** Positive population growth is positively associated with social media presence.
**H2.** Population is positively associated with social media presence.
**H3.** Population density is positively associated with social media presence.
**H4.** Higher educational qualifications are positively associated with social media presence.
**H5.** Median household income is positively associated with social media presence.
**H6.** The ratio of citizens of 18-45 years of age to other citizens is positively associated with social media presence.

**H7.** Positive population growth is positively associated with social media usage.
**H8.** Population is positively associated with social media usage.
**H9.** Population density is positively associated with social media usage.
**H10.** Higher educational qualifications are positively associated with social media usage.
**H11.** Median household income is positively associated with social media usage.
**H12.** The ratio of citizens of 18-45 years of age to other citizens is positively associated with social media usage.

The socio-economic data available at the county level from the 2010 U.S. Census, the following variables will be extracted: total population, age groups, and educational qualification. This approach is not unlike Bonsón, Torres, Royo, and Flores’ (2012) study of social media in larger European Union municipalities.
analyzed together with national level ICT demographic information, e.g. Internet penetration.

From the 2011 American Community Survey (ACS) data, the median household income will be obtained. The total population data available at the county level from the 2000 U.S. Census will be used to compute percentage growth each study county has experienced during 2000 - 2010. The ACS data is available at census tract level. To determine median household income at the county level, the following steps will be implemented: (1) all census tracts present within a county will be determined, (2) the average, maximum and minimum median household incomes will be determined for each county. Finally, regression will be used to determine the extent impact of each socio-economic condition on usage of social media and participation with e-government.

Completion of these next steps should lead to a clearer understanding of the characteristics of citizen characteristics, e.g., demographic and socio-economic factors as they relate to the social media presence and use in county governments. If e-government is a product of citizen-demand then there would likely be a connection between these two areas; however, there are at least two factors working in the other direction. Market-driven demand, in the private sector, leads to investment and consumer spending in pursuit of profitability. Are citizens demanding government e-services willing to spend more to that end? Secondly, popular consumer e-services and social media have the advantage of mass-market appeal; a keystone of e-commerce is the ability to reach markets irrespective of geography. Local governments are geographically bound and arguably cannot attain the same scale, the same user-base, for e-government to match the level of service and quality found in the commercial marketplace.

Conclusion

While far from complete or conclusive, the initial observations of county-level use of social media leads us to think that “somethings got to give.” As innovations in ICT hardware, connectivity, and services continue to make Moore’s Law relevant and billion dollar buyouts of tech start-ups (e.g., Facebook acquiring WhatsApp for $19B), the private sector is competitive and drives innovation. Public administration (at least for government-to-citizen interactions) is still searching for the “killer app,” the event, technology, or force to drive e-government beyond its slow pace of change. Until then, the gap is increasing between local e-government and state-of-the-art consumer options. With its low adoption, non-functional attempts, and lack of a clear purpose, social media implementation in county-level government appears, at best, to be awkward.

REFERENCES


