"Connecting to Congress": The use of Twitter by Members of Congress

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Key message

How do political elites, such as the Members of the U.S. Congress, decide to use innovative forms of Information and Communication Technologies, such as social media applications? Communication between elected officials is guided by outdated rules and regulations that are focusing on paper mailings. The apparent lack of formal guidance and outdated rules are not reflecting the changing online landscape and the requirements on Members of Congress to interact with their constituents where they prefer to receive their information. New forms of highly interactive online communication tools, such as the microblogging service Twitter are challenging the existing information paradigm. First year of tweets posted by Members of Congress in combination with qualitative interviews with congressional offices show that the Members are mainly using Twitter to complement their existing push communication style and automatically distribute vetted content via Twitter, using the Microblogging service as an additional communication channel for their individual appearances and issues. The awareness network among tweeting Members specifically shows that the potential for interactive conversations are not harnessed. Finally, Twitter's potential as an innovative mode for future democratizing interactions is discussed.

1 The role of Members of Congress in the U.S. American System

The U.S. federal government is comprised of three branches: Besides the executive and judicial branch, the legislative branch includes the House of Representatives and the Senate. Among other tasks Congress is responsible for rule and law making to properly execute power.

The House of Representatives consists of 435 voting members. Each Member of Congress represents a congressional district and serves a 2-year term. In addition two senators, for a total of 100 senators, represent each state in the House. The representatives are voting on behalf of the citizens in their local district, work on committees to prepare legislation and stay in close contact with their constituents. The communication needs focus on interactions with professional associations, meeting with visitors from the district on Capitol Hill and generally responding to inquiries from citizens.

2 Communicating with the public using new technologies

Members of Congress in the U.S. government are known for their conservative use of new information and communication technologies in general, and specifically using advanced Internet technologies to represent themselves online or to communicate with their constituents (Esterling, Lazer, & Neblo, 2012). They use their websites mostly as a static, non-interactive information tool to push information out and remove the information after a 10-day press release period to be able to control the current message. Members of Congress are therefore oftentimes criticized for their slow adoption and time lag of perceived response time. Nevertheless, Members – or their staff on behalf of the representative – have rules in place to respond to inquiries within 24 hours. Most of the times they are responding with a direct phone call to avoid leaving a digital trace of a response.

With the advent of social networking services the question is now why and how are Members adapting to highly interactive and innovative forms of online communication, and specifically how do they use fast-pace services such as the micro-blogging service Twitter to reach out to and interact with their constituents online.

Technology adoption in Congress is lagging behind the general use of technology in other types of organizations. In the mid-1990 s, Members of Congress slowly started to use email in addition to paper-based letters that they sent out to their district. Nevertheless, they kept the standard letter format and emails still include the traditional paper-based letter heads as the following graphic shows:

Figure 1: Old-style letter heads used in Email communication with constituents (Schreiber, 2012)
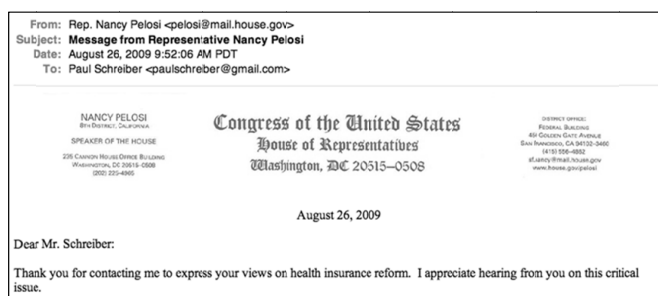
Official websites as a means of online representation for individual Members of Congress did not start until the early 2000 s. Generally, the degree of innovativeness, such as the number of interactive elements to reach the member or for the public to interact with the website, are widely differing among Members. Some Members are highly innovative, as the exam-

ple of Mike Honda shows who represents the 15th congressional district, California, who crowdsourced the design of his website online and asked his constituents to decide about the type and position of the interactive elements (see: http://honda.house.gov/). Remarkably, Honda's district includes Silicon Valley, the core of America's high-tech industry. Other websites are clearly "hand-made" by non-professional staffers and still provide very rudimentary services, mainly plain text, no interactive elements, or 80s-style animated comic gifs.

Diffusion of innovative practices of online representation and interaction is clearly driven by outside vendors, but not necessarily by one specific thought leader among the offices (Lazer, Mergel, Ziniel, Esterling, & Neblo, 2011): Over time, a convergence of online practices is observable. Members are using a handful of IT vendors on the Hill who are reusing online templates over and over again, changing only color, content and sometimes the positions of interactive elements.

Previous research has shown that Members of Congress are not making optimal use of the potential of new forms of digital technologies. As Esterling et al. show, incumbents show considerable path dependence in their Web site technology adoptions, while the sites of the freshmen are largely independent of the Web designs of their corresponding predecessors (Esterling, Lazer, & Neblo, 2011; Esterling et al., 2012). Representatives are learning political practices from each other, but are not learning and enhancing their own website practices to adhere to the changing technology landscape.

The use of advanced and interactive social networking services, such as blogs, YouTube channels, and Facebook pages to communicate with constituents started in the late 2000s (2009/2010) with a 5-10 year time lag in comparison to other types of organizations.

The potential effects of using highly interactive social networking elements to supplement the campaign brochure style of their current websites can provide Members of Congress with the following opportunities:

(1) The tools can enhance the ability of Members of Congress to fulfill their representational duties by providing greater opportunities for communication between the Member and individual constituents;

(2) They have the potential to support the fundamental democratic role of spreading information about public policy and government operations; and

(3) They provide Members with the ability to easily communicate information traditionally sent to the district or state only, also to non-constituents and thereby broadening the reach beyond the local district.

2.1 Restrictions and challenges for the use of innovative ICTs

All types of communication between Members of Congress and the public are regulated by the "Franking rules". The rules were designed in 1789 to provide guidance on how physical mailings have to be designed, printed, and mailed at the taxpayers' expenses. As an example, the signature or stamp with the Member's name is placed at the position where a stamp

would go on the envelope and can then be send for free to the constituents (U.S. Senate Select Committee on Ethics, 2012).

However, the existing rules are regulating paper mail only, and were not extended to include the changing technology landscape, such as email or Internet use and therefore made it difficult for staff members to decide how to apply the rules to newer forms of electronic communication by Members of Congress (Lazer et al., 2011).

It was not until 2008, when the Senate updated the Franking rules to allow Members of Congress to post content on and from third party websites on their own website (Miller, 2008). At this point, offices were allowed to use their own YouTube videos or videos of third parties, such as TV stations, posted online to integrate into their own websites (Yehle, 2008). It took another year, until summer 2009, when Members of Congress started to use the micro-blogging service Twitter.com to reach out to the public in an even more innovative way with very little prior experience or comparable initiatives in other corners of the federal government.

2.2 Microblogging using Twitter.com

Twitter is a form of microblogging that allows users to write short online text updates. The service is used for 140-character-long updates that can point a user to other rich media content on a government organization's website. The service is often used to interact with the public. Public-sector applications include, for example, the active distribution of mission-relevant information, information searches, emergency alerts, and public diplomacy efforts. A more indirect, almost passive, way to use Twitter includes the participation or observing of ongoing issue conversations for government organizations to understand how public policy issues are currently being discussed online (Mergel, 2012).

Similar to users on Facebook and other social media platforms, Twitter users set up personal accounts and follow the updates of other users. The asymmetric follower model means that contact requests do not have to be confirmed; the result is that users may have a high number of followers compared to the numbers of accounts they themselves are following.

The core of the service is the news feed that automatically displays updates from those whom an account holder actively chooses to follow, as the screenshot in figure 1 shows. Many users combine Twitter updates with other social media accounts and automatically post updates to their news feed from Facebook, blogs, or other content-sharing sites, such as Flickr or YouTube. The rich-media sharing function allows Twitter updates to extend the character limit of 140 words; and pictures, links to websites, or videos can be embedded in a Twitter update, so that readers are directed to longer versions and texts outside of Twitter, for example on a government agency's website.

2.3 Drivers for the use of Twitter

Traditionally, formal press releases, memos, or other news are added by a web manager or public affairs director to a Mem-

ber's website. While there are a few mechanisms, such as mailing lists to direct the messages to the right audiences, most of the online traffic is anonymous. Beyond hits on the website, there is relatively little insight available into the web audience.

Social media channels like Twitter, on the other hand, allow for the reuse of messages, for redistribution of official content in a snowballing mechanism through each user's network and through a diverse set of social media platforms. Once a message is posted, it can potentially reach unlimited numbers of citizens. Messages can automatically be reposted to other social media channels, such as Facebook. Moreover, interactions can easily occur in a bi-directional, reciprocated manner. Twitter is therefore opening possibilities for interactive exchanges that traditional websites currently do not allow.

Among the overall top trending topics of 2010 were two in which the U.S. government was heavily involved: the BP Gulf oil spill and the Haiti earthquake. In 2011, the top 10 trending topics worldwide included the Japan earthquake and tsunami, the Libyan conflict, Egyptian protests, or Bin Laden updates.

In the past three years, Twitter has grown significantly to over 500 million registered accounts in early 2012. News organizations, corporations, and more recently, government agencies adopted this trend. Most Members of Congress now maintain at least one Twitter account — some even manage multiple accounts, based on their operational needs and their diverse audiences.

The use of social media platforms and specifically Twitter has expanded significantly in the last two years (Blanchard, 2012; Congressional Management Foundation, 2012; Lux Wigand, 2011). Goldbeck et al. showed in their study of the 200 most recent tweets collected in February 2009, that Members of Congress are using Twitter primarily to disperse information, especially links to news articles about themselves and to their own blog posts or reports of their daily activities (2010). The Congressional Research Service studied a 61 days time period of the 111th Congress and found that the frequency of tweets while Congress is in session is higher than during recess (2010). Gulati and Williams determined in their study that party affiliation and available campaign resources determine early adoption of Twitter: Republican Members of Congress are more likely to adopt Twitter as a new form to communicate with constituents than Democrats (2010).

On April 14, 2010, the Library of Congress announced that it had acquired the entire Twitter archive—a step forward in reducing some of the hesitation social media directors, especially in the federal government, were facing (Library of Congress, 2010). Up to that point, it was unclear how to keep public records of Twitter messages—or any messages created on social networking services. The Library of Congress' collaboration with the microblogging site Twitter.com now creates a lifetime archive of all Twitter updates ever sent, but it does not necessarily relieve government agencies of the responsibility to archive their own records. It does, however,

help users to access their data, given that Twitter only displays the last two weeks of updates on its website.

Twitter has the potential for "fast-and-furious" bi-directional exchanges with individual constituents in real time. Moreover, the publicness of the tool allows access to the conversations because all exchanges are publicly observable even by non-constituents and collapse many different online audiences into one news stream (Grudz, Wellman, & Takehteyey, 2011; Marwick & boyd, 2011; The Economist, 2010). Online exchanges allow Members of Congress to gauge the "temperature" among their constituents and to understand their sentiments towards a specific policy issue (Thelwall, Buckley, & Paltoglou, 2011).

Why should a Member of Congress jump on the Twitter bandwagon? Who is the audience? It is generally not the "American public;" instead, each Member has very specific constituents in his or her local district and choosing the right tool should therefore follow the preferences of the local audience.

3 Methodology

The focus of this article is on Members of Congress and their innovative use of a new information and communication technology. Twitter.com challenges governments existing information paradigm. The traditional press release paradigm includes a meticulous process through which public affairs officers, press secretaries, or web managers have to go before the final approved and vetted short updates are officially released to the press and the Members' websites (Lazer et al., 2011). For most Members of Congress adopting a third party platform such as Twitter or any other social media application hosted outside of the congressional ICT infrastructure therefore constitutes a departure from the existing routines of communication with the public, professional groups, or the press.

Previous waves of online interactions, such as emails and congressional websites have shown that Congress is an especially slow adopter of innovative technologies. Each office constitutes and individual organizational unit with its own mission and audience. Even though all offices are combined within the larger organization of Congress, they are divided by party lines, and their focus is inherently on the local political landscape in their own congressional district within a specific state (Salisbury & Shepsle, 1981).

Innovations in these independent subunits are therefore driven by local and not necessarily joint national priorities and budgets. Local dependencies vary by district and rural districts show different levels of broadband diffusion, internet access or social media literacy.

Qualitative and quantitative data collection and analysis
In collaboration with the Congressional Management Foundation, a representative sample of 25 Members of Congress was drawn to include social media innovators, slow adopters, and laggards who will most likely never use Twitter. Among the 25, 20 can be characterized as early adopters of social

media application in Congress, two offices just started to use Twitter, and three Members did have a website, but had not adopted social media applications. The Congressional Management Foundation (CMF.org), a small nonprofit organization helping Members of Congress to manage their offices effectively, provided initial support in the recruitment of interview partners. While the sample selection clearly oversamples on the side of innovators and early adopters, non-adopters provided important insights to understand the reasons why congressional offices might not adopt Twitter.

Semi-structured interviews were conducted with 25 communication or new media directors of the preselected congressional offices. The interviews lasted about 45-90 minutes, were recorded with the permission of the interview partners, and transcribed verbatim. Each interview was hand-coded line-by-line in an iterative processes going back and forth between the data and the existing literature using the qualitative data analysis software QSR NVivo9 (2011). Using a grounded-theory approach main themes were extracted from the data (Glaser & Strauss, 1967).

Parallel to the qualitative data collection efforts, each respondent's website was coded for the type and quantity of traditional and interactive online components. The data was complemented with findings from the interviews to gain an understanding of the number and quality of channels Members of Congress use to interact with their constituents.

The quantitative data collection included multiple sources: All tweets Members of Congress have sent in their first year of Twitter use were downloaded. The final database included 16,397 tweets sent by all existing 144 congressional Twitter handles between their first day of use as early as late 2008 until the December 31, 2009. Each tweet was then hand-coded and sorted into emerging categories. The author coded tweets with the support of two graduate students and compared the extent of overlaps in a shared set of tweets. Differences in coding were discussed and in a second round of coding confidence in the codes increased, so that intercoder reliability was increased (Kurasaki, 2000).

The major categories that emerged include professional vs. private content of tweets, individual issues Members are promoting, and Members' public appearances. Each account was coded based on the number of followers and number of accounts followed by the Member, and the number of tweets sent.

In addition to the quantitative coding of each tweet, the @-mentions in each tweet were captured. This means that every time a tweet included another Twitter handle, the name was extracted and a 2-mode network diagram was created (Wasserman & Faust, 1994). The resulting mxn matrix was then converted into a symmetric nxn matrix which includes the Twitter handles from Members of Congress and all their corresponding communication partners. Twitter mentions were not symmetrized in order to conserve the directions of the conversations. In a second step, all those Twitter handles from outside of Congress were omitted for the purposes of this

specific analysis to focus only Member-to-Member interactions. The Member-by-Member matrix is used as an indicator to analyze if and how Members are using Twitter as an interactive tool to discuss policy issues. The network representation was analyzed and visualized using the social network analytical software Ucinet and Netdraw (Borgatti, Everett, & Freeman, 2002). Each node was color coded using a Member's party affiliation.

The main research questions guiding the multiple data analyses steps are to understand why and how are Members of Congress using the microblogging service Twitter. What are the perceived benefits for early adopters? What are the main challenges they are experiencing and how are they administering the accounts and updates? For those offices actively using Twitter, what is the main content Members are sharing and do they actively engage in online interactions?

4 Findings

Each website of the participating interview partners was coded to understand the extent to which they promote the use of different forms of online media and products. In addition, the interview partners reported the use of ICT and interaction practices that are not publicly observable directly on their website, such as Tele-Townhalls or individual phone calls.

The interviews show that Members of Congress use a wide variety of tools and mechanisms to publish their content, including traditional media mechanisms and a variety of social media platforms. The mix and match of ICTs reported by the interview partners is shown in the following table 1:

Table 1: Mix and match of online communication tools used in Congress

Traditional media tools	Social media tools
Website	Website incl. social media tools
Press releases	– Photosharing (Photobucket, Flickr, etc.)
Mailings	– Twitter
Emails	– Facebook
E-Newsletters	Blogs & RSS feeds
TV (CSPAN, national news networks, district/local channels)	YouTube Channel with official TV coverage, unofficial footage and other types of online videosharing services, such as Vimeo
Radio	
Phone	Podcasts
– Individual phone calls	Internet town-hall meetings
– (In person) town halls	
– Tele-town halls	
(Group) visits in Washington	

4.1 Use of Twitter

Members of Congress have set up 144 Twitter handles at the time of the data collection. This constitutes ~ 32% of the total number of 441 Members.[1] During the first year of Twitter use in Congress, Members or their press secretaries have created

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[1] This number has significantly increased especially in 2012, but those Twitter handles were not included in the data collection. Data collection has been restricted by Twitter and automatic data collection is restricted by the Twitter API. It does not allow researchers to easily download data anymore and requires an application process with the company that is rarely accepted.

16,397 tweets. The MOCs number of Twitter followers varies widely: On average, MOCs have ~ 2.3 total followers. In the sample collected for the first year of tweets, 97 Members of the Republican Party and only 45 Democrats in Congress have set up Twitter accounts to interact with the public.

Reasons for using Twitter

The use of Twitter is generally seen as challenging. The absence of clear guidance for the appropriate use of social networking services has left many offices in the dark, as the following statement shows: "[There is] *No policy that tells me I should (not) do this.*" As a result not all offices have used their Twitter account – even though the majority has set up the @handle to secure the name for future purposes.

Those offices that have set up accounts use Twitter for a variety of reasons. The most prominent response points to the necessity to be able to contact constituents on all available online channels and be present where constituents are interacting with each other. As one office puts it, Members of Congress need to *"Reach people where they are"*. While not all constituents are reachable on Twitter, it became clear in the interviews that the majority of Members who are using Twitter, understand that a part of their constituents are reachable through this medium who are otherwise not involved in democratic processes. The following statement highlights the necessity to reach those voters who are otherwise not reachable or are not willing to interact with their representative using traditional means: *"It's a nice way to get your message out to a different crowd. [...] and Twitter is a nice way to reach out, so we wanted to add that link onto our website there."*

4.2 Administrative routines in the Washington offices of Members of Congress

Similar to other forms of interactions, Members of Congress are most of the time not involved in the direct exchanges with their constituents on Twitter. Instead, a lot of the communication efforts are distributed among the staff members in the Washington office and in the district's office. Especially when it comes to routine tasks, such as updating the website with a press release or a video of a TV appearance, the office staff has set up routines to distribute the updates through all available channels, including Twitter, as the following response shows: *"It's really a collaborative effort. So he'll be out and about in the district, and he'll say: 'Have [staffer's name] Twitter about this.' So really, I'm the one that is in control of the Twitter. He just tells me some different things that might be interesting to put on there."* This implies that most Members are not actively tweeting by themselves, instead they are deferring the task to their staff members and as a result to the question one staffer politely responds: *"He's "involved" with it."*

Other offices do not create content tailored for the use of Twitter updates at all: *"We have automatic blog and Twitter updates."* As a result, content curated and vetted for general publication through all other ICT channels is simply auto-

mated and pushed out through social networking sites as an add-on. Important mechanisms that are making Twitter an interactive tool to reach specific subgroups and participate in quick online conversations are not utilized – leaving Twitter as just one of the push channels to educate the public.

Non-adopters, those offices included in this study who have not started to use Twitter, are highly reluctant and skeptical of the usefulness of online conversations via Twitter. Some offices are thinking about the future use of Twitter: *"We haven't dove into the Twitter world yet. [...] It's something we have talked about and just haven't gone forward with yet."* Other offices are making a conscious decision and are arguing that according to their research, their own district is not tech-savvy enough to use Twitter or their constituents are not interested in participating in online conversations, as the following statement shows: *"Like Twitter for example, was something that we've decided, doesn't have particular usefulness in our district. [...] Twitter is useful in a certain context, [...] for official purposes, it doesn't seem to be something that would be utilized by our member."*

4.3 Content of tweets

Members of Congress use their Twitter accounts mainly for professional purposes (~ 41% of all tweets were coded as professional), and only 3% of the updates Members tweeted focused on personal issues, such as family members, personal taste in a specific sports team, etc. Most of the professional tweets focus on issues a Member is passionate about, chairs or participates in committees. A prominent topic in all tweets – independent from other policy issues Members of Congress' are usually tweeting about – is the health care reform with ~15% of all tweets.

Besides policy issues tweets also reveal the target audience of MoCs tweets: The second most tweeted content points Twitter followers to the Member's appearance in his or district, clearly targeting the local constituency and not Washington's media audience. In more than 27% of all tweets MoCs shared locations of public appearances, TV interviews, and online media with coverage about the Member's appearance in the district.

Overall, Twitter is largely used to facilitate one-way transmission of information from Members' offices to the public. MoC use Twitter to convey information about their official actions, media appearances, or policy positions, and in a one-directional push tactic. Only 3.7% of all tweets counted and analyzed were direct replies to others, indicating at least a response to a question or statement. The remaining 10% of tweets were not directly identifiable as either professional or private and did not fit into the other issue codes.

### 4.4 Bidirectional conversations to create awareness for issues

A subset of messages were extracted that are mentioning other MOCs Twitter handles. This subset was coded every time a tweet included an @mentions in the 12-months of Twitter

messages posted by MOCs. Those are messages that are either directly addressing other Members or passively attacking a Member from the opposite party. The result is an attention network that reduces the total number of 144 congressional Twitter handles to only 39 MOCs who are willing to veer away from their rather static push tactic that only focused on their own promotion, to a potentially conversational approach with other Members.

Of the 39 Members included in the resulting attention network, only 16 are directly included in @-replies. Most prominently, the GOP leader on the republican side receives responses to his tweets. Remarkably, there are however no loops in the network. This means that even though Members are responding or retweeting messages from each other, they do not actively keep a conversation going or are willing to publicly start longer back-and-forth conversations.

The following network diagram shows the attention network among Members of Congress who are responding to each other's tweets. Nodes colored in blue represent Members of the democratic party, and nodes colored in red represent republican membership. The arrows indicate the direction of the tweet: as an example @timryan mentioned @RepSteveIsrael, but @RepSteveIsreal did not respond. This is the practice for almost all tweets collected in this attention network and Twitter was therefore used in the collected dataset and timeframe only for one-directional or one-way conversations.

Figure 2: Attention network among Members of Congress
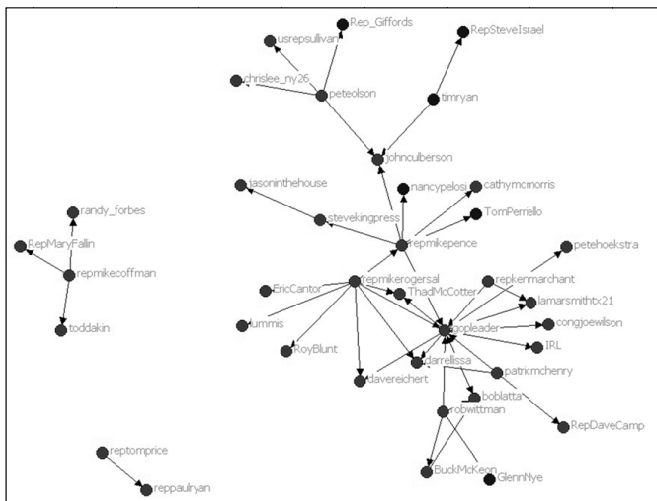
5 Discussion

Why and how do political elites such as the Members of Congress use innovative ICTs that are challenging their bureaucratic and learned communication routines? In an apparent "vacuum" of rules and confronted with rising pressure from their constituents many Members of Congress have started to experiment with Twitter to extend their existing reach and interact with audiences that are otherwise not part of political interactions. The findings have shown that even those highly innovative Members who are characterized as

early adopters see more constraints than opportunities in the use of Twitter. Instead of embracing the media richness potential of Twitter as an interactive mode of communication the potential is largely ignored and Members are mostly using the tool as a "me-machine", pushing out information about themselves (Naaman, Boase, & Lai, 2010).

Neither a significant observable number of bi-directional interactions or real-time exchanges occur. Twitter is used as a push mechanism to advertise personal appearances or announce voting preferences and standpoints on political issues, such as the healthcare reform. The potential to create issue networks and online communities around specific policy issues is not used so far and Members are also not involved in so-called fast-and-furious exchanges with their constituents or other Members of Congress.

Future research needs to explore online behavior beyond the publication process of MOCs themselves. Instead it is imperative to understand to what extent new ICTs have a democratizing impact. How can Members of Congress include those online audiences that are otherwise excluded from the political deliberation processes beyond using Twitter as a mere broadcasting mechanism (Marlin-Bennett, 2011)? To what extent do constituents feel that their representatives are truly more efficient and effective in communicating with them? Does engagement on Twitter result in higher trust in government operations and information constituents receive from their representatives? Tools such as Twitter or Facebook therefore still need to show to what extent they can be labeled as politically transformative ICTs (Hong & Nadler, 2011).

Moreover, research similar to the new Twitter index (see election.twitter.com) is needed to understand the sentiments among voters for each district or specific policy areas. Semantic text analysis can help to understand better how constituents perceive their representative's online interactions with the public.

Implications for political consulting

Citizens increasingly use innovative and highly interactive ICTs such as Twitter.com. The tool has become a platform for the discussion of policy issues and hot button issues rise to the top. Political appointees and elected officials are oftentimes criticized for their slow adoption of social media and as shown in this article for their relatively reluctant use of all the functionalities. While Twitter was designed to be a public conversation platform, behavior of users is quickly changing and memes as well as behavioral patterns evolve and disappear after a while. Ultimately, Twitter should be used in a way an elected official feels comfortable with. Changing his or her online personalities based on the expectations of a perceived public will result in "fake" interactions that don't reflect the actual preferences of a politician or public manager.

Nevertheless, innovative forms of transferring already accepted interactions into the online sphere will help members to reach those audiences that they are otherwise not able to reach and are only receiving their news and updates on social media platforms such as Twitter or Facebook. As an example,

Barack Obama has started to use the platform to host Twitter Townhall meetings. Questions from the public were collected for a period of time using the hashtag #AskObama. The President's team then picked questions the President responded to live and ignored other questions.

It is also important for political consultants to understand that not all districts or all parts of a Member's audience are reachable on Twitter. Advice should therefore be focused on a detailed analysis of the demographics in each individual district, broadband diffusion, age groups, etc. before an elected official starts to use a platform that might end up not having an audience and will in turn be criticized.

References

Blanchard, B. (2012). Congressional use of social media platforms expands. *The Daily Texan*. Retrieved from The Daily Texan website on 2012/07/08/: www.dailytexanonline.com/university/2012/07/08/congressional-use-social-media-platforms-expands

Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). Ucinet for Windows: Software for Social Network Analysis (Version 6.39). Harvard: Analytic Technologies.

Congressional Management Foundation. (2012). SocialCongress: Perceptions and Use of Social Media on Capitol Hill. In C. M. Foundation (Ed.). Washington, D.C.: CongerssFoundation.org.

Esterling, K., Lazer, D., & Neblo, M. (2011). Representative Communication: Web Site Interactivity and Distributional Path Dependence in the U.S. Congress. *Political Communication, 28*(4), 409-439.

Esterling, K., Lazer, D., & Neblo, M. (2012). Connecting to Constituents: The Diffusion of Representation Practices among Congressional Websites. *Political Research Quarterly*. (Forthcoming)

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine Publishing.

Glassman, M. E., Strauss, J. R., & Shogan, C. J. (2010). Social Networking and Constituent Communications: Member Use of Twitter During a Two-Month Period in the 111th Congrss. In C. R. Service (Ed.), *CRS Report for Congress* (Vol. 7-5700). Washington, D.C.: Congressional Research Service.

Goldbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter Use by the U.S. Congress. *Journal of the American Society for Information Science and Technology, 61*(8), 1612–1621.

Grudz, A., Wellman, B., & Takehteyey, Y. (2011). Imagining Twitter as an Imagined Community. *American Behavioral Scientist, 55*(10), 1294–1318.

Gulati, J., & Williams, C. B. (2010). Communicating with Constituents in 140 Characters or Less: Twitter and the Diffusion of Technology Innovation in the United States Congress. Retrieved from http://ssrn.com/abstract=1628247.

Hong, S., & Nadler, D. (2011). *Does the Early Bird Move the Polls? The Use of the Social Media Tool 'Twitter' by U.S. Politicians and its Impact on Public Opinion*. Paper presented at the Dg.o'11, College Park, MD, USA.

Kurasaki, K. S. (2000). Intercoder Reliability for Validating Conclusions Drawn from Open-Ended Interview Data. *Field Methods, 12*(3), 179-194.

Lazer, D., Mergel, I., Ziniel, C., Esterling, K. M., & Neblo, M. A. (2011). The multiple institutional logics of innovation. *International Public Management Journal, 14*(3), 311-340.

Library of Congress. (2010). Twitter Donates Entire Tweet Archive to Library of Congress Retrieved 11/16/2010, from www.loc.gov/today/pr/2010/10-081.html

Lux Wigand, F. D. (2011). Tweets and retweets: Twitter takes wing in government. *Information Polity: The International Journal of Government & Democracy in the Information Age, 16*(3), 215-224.

Marlin-Bennett, R. (2011). I hear America Tweeting and Other Themes for a Virtual Polis: Rethinking Democracy in the Global InfoTech Age. *Journal of Information Technology & Politics, 8*(2), 129-145.

Marwick, A. E., & boyd, d. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society, 13*(1), 114-133.

Mergel, I. (2012). Working the Nework: A Manager's Guide for Using Twitter in the Public Sector. In I. C. f. t. B. o. Government (Ed.), *Using Technology*. Washington, D.C.

Miller, E. (2008). Congress can Tweet, Following them with Capitol Tweets Widget. Retrieved from http://sunlightfoundation.com/blog/2008/10/06/congress-can-tweet-follow-them-with-capitol-tweets-widget/

Naaman, M., Boase, J., & Lai, C.-H. (2010). *Is it really about me?: message content in social awareness streams*. Paper presented at the CSCW '10 Proceedings of the 2010 ACM conference on Computer supported cooperative work Savannah, Georgia, USA.

NVivo 9. (2011). NVivo qualitative data analysis software (Version 9). Melbourne: QSR International Pty Ltd.

Salisbury, R. H., & Shepsle, K. A. (1981). Congressional staff turnover and the ties-that-bind. *American Political Science Review, 75*(2), 381-396.

Schreiber, P. (2012). Message from Representative Nancy Pelosi, from http://paulschreiber.com/wp-content/uploads/2009/09/Screenshot-2009-08-27-at-12.06.47-AM.png

The Economist. (2010). Twitter's transmitters. *The Economist, A special report on social networking*, 5.

Thelwall, M., Buckley, K., & Paltoglou, G. (2011). Sentiment in Twitter Events. *Journal of the American Society for Information Science and Technology 62* (2), 406-418.

U.S. Senate Select Committee on Ethics. (2012). Franking, from www.ethics.senate.gov/public/index.cfm/franking

Wasserman, S., & Faust, K. (1994). *Social network analysis: methods and applications*. Cambridge: Cambridge University Press.

Yehle, E. (2008). Senate Updates Web Rules to Allow YouTube Videos. *Roll Call – The Newspaer of Capitol Hill Since 1955*, Sept. 24, 2008.

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