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Improving Congressional Websites

Kevin M. Esterling, David M.J. Lazer, and Michael A. Neblo[1]

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EXECUTIVE SUMMARY

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This summer, the Obama administration and congressional Democrats are hitting the road hoping to convince voters of their legislative accomplishments over the past two years, accomplishments that include, in their view, health care reform, economic stimulus averting financial disaster, stemming job losses, and financial reform (see Michael Sheer, "White House Searching for a Way to Reconnect with Voters over Economy," *The Washington Post*, July 14, 2010). The citizens with whom the Democrats would like to connect remain frustrated, however, with the seemingly stalled economic recovery and slow job growth. As is usually the case, this frustration has fostered something of an anti-incumbent mood in the electorate,[2] making the Democrats' election year pitch an unusually hard case to make (see Dana Milbank, "Are Democrats Painting Themselves as the Lesser of the Evils?" *The Washington Post*, July 14, 2010, page A2).

Of course, this need to communicate messages to constituents is nothing new, and all legislators, whether of the majority or minority party, on or off the election cycle, feel it is important to communicate effectively with their constituents. While the motivation to do so might be rooted in politicians' self-interested search for re-election, political philosophers remind us of the importance of these sorts of explanations for accountability and democratic legitimacy. In either view, effective communication is of central importance to democratic representation.

Kevin M. Esterling is an associate professor within the Department of Political Science at the University of California - Riverside.

David Lazer is an associate professor within the Department of Political Science and the College of Computer and Information Science at Northeastern University.

Michael Neblo is an assistant professor of political science at the Ohio State University.

Members of Congress have long practiced the art of communicating with constituents in face-to-face settings (Fenno 1978), and with print and broadcast news reporters (Arnold, 2004; Lipinski, 2004). With the growth of the Internet, website technologies enable new and different forms of legislator-constituent communication. And indeed – at least in principle – these new technologies can enhance the quality and amount of communication within legislative representation, beyond what has traditionally been available in face-to-face interactions and in the print and broadcast media. For example, when members of Congress place information about themselves, their accomplishments and voting records on their website, any interested constituent will have ready access to that information, at low cost and effort, and can direct their attention to whatever content is of most interest to them.

Indeed, members' web presence has improved dramatically over the past two decades, starting with a handful of gopher sites in the early 1990s to the present day official webpages for every member (see, www.house.gov and www.senate.gov). But as Jane Fountain notes (2001, 88), in today's "virtual state," new communication technology must be *enacted* by government officials, as would be true for any other aspect of institutional design. Politicians often don't have a technical background to know the capabilities of new technology or sufficient knowledge to evaluate the risks and benefits (Ferber, Foltz, and Publiese, 2005, 144; Owen et al. 1999, 27). As a result, the quality of the designs of congressional websites has tended to lag behind those in industry, entertainment and e-commerce (Burden and Hysom, 2007). As is generally true in other governmental settings, communication technology has developed at a faster pace than legislative offices can accommodate, which often use only very limited range of the functionality of their IT hardware and software (Dawes et al. 1999, 21).

In 2004, we received funding from the National Science Foundation (IIS #0429452) to study the processes that drive legislative adoptions of website technologies. This study involved extensive coding and analysis of data from every House and Senate website, for two different years (2006 and 2007), and extensive interviews with the webmaster in 99 different offices. In this paper, we summarize our findings and arrive at the conclusion that effective institutional mechanisms that drive technology adoption in Congress simply do not exist.

Despite the practical and normative importance of communication for representatives and for representation, website design often appears to be at most a secondary priority, best practice standards do not appear to drive existing design practices, and there appears to be few attempts to learn about best practices within the institution, either top-down from the leadership or in a decentralized way through social networks. As a result, the institution itself seems to be stuck in a suboptimal equilibrium with respect to communication technology. Given the unrealized potential for this technology to enhance legislator-constituent communication, and given the importance of this communication for the health of our democracy, the extent to which legislators fail to better exploit these technologies reflects a failure of our democratic institutions themselves.

Internet Technology and Representation

The interactive capabilities of the Internet, and the web technologies that have developed to exploit these capabilities, create tremendous opportunities to enhance mass communication in the democratic process beyond hard-copy and broadcast communication. Legislative websites can serve as a one-stop portal for constituents to discover how the member portrays themselves and their accomplishments, and to discover the explanations the legislator uses to justify their actions. Unlike traditional mass communication, websites are inherently interactive since users have control over what content they see at low search costs (Stromer-Galley 2000, 118). Legislators also are making more extensive use of social media, or Web 2.0 applications. These new technologies can enable person-to-person interaction, and have the potential to create a new public sphere for rational argumentation (Bohman 2004, 49; Wilhelm 2000, 42).

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This new technology is certainly no democratic panacea. The member and her staff have full control over the "message" communicated on the website. Likewise, citizens have control over what they choose to see, and so may use the website only to reinforce the existing biases they already hold about their members and about politics (Sunstein 2001). Web 2.0 applications sometimes seem to foster shallow and uncivil exchanges. And the persistence of the digital divide may enhance informational inequalities across strata of our society.

While it is true that new technology will never serve as a democratic cure-all, on normative grounds it is hard to think of rationales for why such an important new mode of communication should not be exploited, since doing so can only add to the amount of information available to the public (Bimber 2003, 17), and would reduce the informational advantages of organized interests "inside the beltway" (Chadwick, 2006, 20; Dawes et al., 1999, 9; Garson 2004, 2), especially as the Internet further penetrates society. Web-based communication helps to complement other information portals, and helps citizens to discover members' explanations for their actions in a way that is unmediated by others, which can only enhance accountability (Alvarez 1997; Arnold 2004, 12; Fenno, 1978; Shane 2004, 77).

No Institutional Mechanisms for Technology Adoption

While web-based communication technology has a strong potential to enhance our democracy, this potential does not automatically translate into practice. And a deftness with emerging technologies is not typically among the attributes that a person needs to possess to be elected to Congress. The story conveyed by one staffer is on point. The Member, having heard good things about his website from a constituent, flipped on the television, and asked the staffer in charge of the website what channel to turn to see his homepage. In such an institutional setting, it perhaps should not be much of a surprise that our research could discover no institutional mechanism that regularly fostered best-practice website designs.

Our research employed multiple methods. In the summer of 2006, we conducted extensive interviews with the staffers who had primary responsibility for the official website for 99 different offices in the House of Representatives (to read more, see, Lazer et al., 2010, http://tert.ucr.edu/public/Iceberg%20010510_final.pdf). The interviews were designed to discover the internal management practices regarding website design and management. These 99 offices was representative of the full cross section of all 440 offices with the main exception that the offices we interviewed happened to have better than average websites. To the extent our sample reflected the best websites, our study is biased toward finding effective mechanisms for technology adoption and use.

In addition to the interviews, our study coded all websites in both the House and Senate, in the summers of 2006 and 2007 (for more information about this statistical study, see, Burden and Hysom 2007; Esterling et al. 2010, http://tert.ucr.edu/public/webquality9.pdf; and Esterling et al. 2010, http://tert.ucr.edu/public/APSA2009diffusion.pdf), and again in 2009 (http://pmpu.org/2010/04/21/mouse-award-winners/).[3] In this portion of the study, after training to ensure high standards for intercoder and overtime reliability, we had coders record the presence and absence of about 100 operational criteria for each website, for each year. We developed these criteria in collaboration with the Congressional Management Foundation (CMF), which had previously identified a set of best practices for legislative websites, by conducting focus groups of citizens, interviews and surveys with office staff and with citizens, and by conducing web industry research (see Burden and Hysom, 2007; Johnson, 2004). CMF also oversaw the coder recruitment, training, and work.

The items in our data measured the quality of legislative website designs along three dimensions:

- **Issue information**: These items included several subjective ratings of the quality of the issue content, the presence of vote rationales, and the timeliness of information (see, Druckman et al., 2009)
- **Constituency services**: These included items such as casework FAQs, the presence of links to agencies, internship and grant information, and information about district resources (see, Adler et al., 1998)
- **Technology**: These items indicated the presence of video, audio, blog, podcast, RSS feed, and a series of subjective usability ratings (Druckman et al., 2007)

We have used both the quantitative codings and the qualitative interviews to discover the institutional mechanisms for web-technology adoption within Congress. After piecing it all together, the picture emerges of an institution that lacks such a mechanism, and one that often views website communication as an afterthought. Our study yielded the following insights:

Little motivation among incumbent members to foster best practices. Using the 2006 data, we could very accurately predict the qualities of returning incumbents' websites

for 2007. Incumbents, that is, appear to be locked into their website designs, an institutional stasis that political scientists call "path dependence" (Pierson 2004). In addition, we observe that those who score high on the quality dimensions in 2006 tend to regress toward the mean in 2007. This shows that those who have high quality websites do not regularly serve as standard setters within the institution. In addition, scoring high on one of the quality dimensions (issues, constituents or technology) does not strongly predict that the member will score high on others, within or across years. This finding suggests that incumbents do not incorporate internal feedback, where say scoring high on technology in one year leads to having higher-issue quality the next. All in all, current incumbents do not appear to serve as strong or dynamic standard-setters, and those who do are very much the exception to the rule. Instead, most members who seem to make a strong effort to improve their website one year often regress to the mean the next year.

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Incoming freshmen tend to be followers, not leaders. While it is perhaps understandable that current incumbents are not at the vanguard of technology adoption, freshmen who set up their website from scratch might be a different story. A pessimist might expect freshmen to simply cut and paste from the previous incumbent's website, to reduce start up costs and since presumably the previous incumbent's site is already tailored to local district concerns. We found no evidence for this cut and paste approach, however. Instead, the design of freshmen websites was statistically independent of their predecessors' website along all three of the quality dimensions. This is true even when just considering those cases where one might especially expect the websites to be similar, when the previous incumbent was from the same party, retired, or ran for higher office.

Thus, unlike returning incumbents, freshmen do not appear to be locked into a website design when they start their term. Freshmen create a website from scratch and so plausibly might consult best practice standard when doing so. Thus one might hold out hope that freshmen will score higher on the quality dimensions, and have more of the coded items present, than incumbents. Instead, we find that the distribution of freshmen websites, both in terms of the quality scores on the three dimensions and in terms of the specific items present on the website, is exactly identical to that of returning incumbents. So while freshmen are not locked into a particular design based on their predecessor's site, they do appear to be locked into the normative environment defined by the institution (DiMaggio and Powell, 1983), in this case, the existing definition of what constitutes an acceptable, if not exceptional, legislative website among the current incumbents. Thus, neither freshmen nor incumbents appear to engage in dynamic transformative practices for website design.

Learning within and among offices is very limited. The interviews showed very clearly that staff put very little thought or effort into learning from constituents what they want to see on websites. Congressional offices very rarely consult with constituents on the optimal design of a website, or even what content or features constituents would like to see on the website. This may be expected since it does require considerable work to do constituent surveys or focus groups constructively.

But offices do not even use the data they have at hand regarding constituent interest in the website, such as analyzing which portions of the website are most and least visited. Given this, it is perhaps no surprise that we found that the qualities of websites are virtually unrelated to the characteristics of members' districts.

Neither do most offices consult with staff in other offices on website design. A small minority of offices we interviewed reported that they accessed and viewed other members' websites, but very few staff reported consulting about internal practices in person with other offices, such as failed experiments or useful website management processes. To the extent such conversations were held, they largely focused on finding recommendations for a private website design vendor. When such conversations are held, they are largely restricted to offices within the member's own state delegation and party.

Congress as an institution fails to harness any collective process for adopting web technology innovations or for learning about and using best practices.

Party/institution provide limited resources. To some extent, the leadership from each party help to drive website development and improvement. Democratic staff reported that Speaker Pelosi's office assessed every Democratic website in 2006, offering recommendations on form and content, similar to an effort undertaken previously in Newt Gingrich's speakership. Parties do have strong incentives to improve the quality of rank-and-file websites (Cox and McCubbins, 1993). This effort tends to homogenize issue content along party lines, however. The House itself provides resources for members to develop websites through the office of House Information Resources (HIR), under the direction of the Committee on House Administration, but this support is limited to providing basic website templates, webhosting, and some routine website consulting. In our interviews, only 15 percent of offices reported using the HIR templates for their own design; most offices view these templates as limited and constraining. In addition, managing a website through HIR involves high transaction costs. Many offices use outside vendors that specialize in legislative website design instead. These vendors, however, typically do not have strong incentives to drive improvements in designs, and also might tend to homogenize websites.

Summary and Recommendations

Overall it appears that there is no established mechanism within the institution driving new technology adoption. Congress as an institution fails to harness any collective process for adopting web technology innovations or for learning about and using best practices. Largely, our interviews suggest the perception among staff that such internal learning would not be a productive effort in any case, as they assume that most other staff likewise have little knowledge of or expertise with website design.

This project does offer one possible ray of hope. In both years that we coded data from the websites, CMF used the data to issue reports regarding website designs (see Burden and Hysom, 2007), and to recognize the best scoring websites with "Gold Mouse Awards." While it may be true that many members of Congress do not have a

strong "geeky" intrinsic interest in web technology, it turns out they are quite competitive with each other. Many staff in our interviews reported that their member had a strong interest to improve the website to receive a CMF mouse award (indeed often not recognizing that our project was the one that generated the data for the evaluations). The Gold Mouse awards and reports do create a competitive environment among congressional offices, and over the years CMF has put tremendous effort to define and promote institutional standards for website best practices.

Given the normative importance of communication in a democracy, and the way technologies can enhance this communication, CMF's efforts appear to be helping Congress move out of its suboptimal equilibrium for website design practice. Since 70 percent of Americans currently are regular Internet users, the suboptimal design does not effective serve citizens of the twenty first century, and we would do well as a society to promote efforts like those of CMF to promote best practice standards.

The Center for Technology Innovation
The Brookings Institution
1775 Massachusetts Ave., NW
Washington, DC 20036
Tel: 202.797.6090
Fax: 202.797.6144
http://www.brookings.edu/techinnovation

Editor
Christine Jacobs

Production & Layout
John S Seo

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Endnotes

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[2] In a recent Washington Post-ABC news poll, while only 43 percent felt that President Obama is making the right decisions for the country's future, even fewer thought Congressional Democrats (32 percent) or Republicans (26 percent) were making the right decisions (*The Washington Post*, July 13, 2010, page A1). By comparison, in a recent California Field Poll, only 22 percent approved of Governor Schwarzenegger's job performance, and only 16 percent approved of the state legislature's performance (*San Francisco Chronicle*, July 14, 2010, C1)

[3] This paper only considers the House 2006 and 2007 data.

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