Emerging Trends in the Use and Adoption of E-participation Around the World

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ABSTRACT
This panel showcases analyses of emerging trends of e-participation—use of information communication technologies (ICTs) and social media for political participation. E-participation has gained popularity in many countries, and some cases have shown that e-participation has actually brought significant changes in societies.

In this panel, we address two issues: (1) the impacts of e-participation on society, and (2) the role of information science in understanding this phenomenon. We will focus on introducing emerging trends in e-participation and their impact on individuals and societies in South Korea, the United States, and Honduras. Further, we introduce methods for efficiently analyzing e-participation data, and discuss challenges involved in implementing these methodologies. Because this is intended to be an interactive panel, the audience will be encouraged to engage in discussions and contributing their own experiences and ideas related to current trends in e-participation in various countries.

SPONSORSHIP: SIG III, SIG IEP

Keywords  
e-participation, virtual communication, deliberation, collective action, text analysis, topic modeling, civic innovation

INTRODUCTION
In a time when opportunities for expressing opinions online are abundant, it is not surprising that both private and public organizations have tried to harness the power of web analytics of political comments on social media in order to make use of this data to formulate context-relevant assumptions about public opinion. Based on this trend and facilitated by Web 2.0 capabilities, citizens around the world have expressed and shared their political opinions and attempted to mobilize support for causes. The use of ICTs to improve citizen participation in democratic government is called e-participation (Dijk, 2012; Macintosh, 2004; OECD, 2003).

E-participation enables enhanced participation from wider audiences for democratic debate and deliberation (Petrík, 2009; Sanford & Rose, 2007). The study of e-participation is relevant because it is gaining popularity, and some of its impact on public opinion formation, election campaigns, and policy changes are immediate and visible (Robbin & Buente, 2008). In addition, e-participation constitutes a structural change in civic engagement (Mossberger, Tolbert, & McNeal, 2008; Coleman & Blumler, 2009).

This panel showcases analyses of emerging trends in the adoption of ICTs and utilization of social media for political communication in South Korea, the United States, and Honduras, each with contrasting levels of adoption and support of e-participation. Kropczynski’s presentation will show how, in democratic countries, these innovations are considered new ways for governments to get much needed feedback as plans develop and establish a new way for citizens to express their concerns. Lee will discuss the challenges faced by citizens in a technologically well established but politically less stable country while engaging with civic technologies particularly during election campaigns. In addition, Espinoza Vasquez will discuss how in countries where e-participation platforms are not readily available or underutilized, established social media platforms create a backchannel to current events, and allow for public dialogue.

As e-participation has become more popular, effective methodologies to analyze plentiful e-participation data need to be explored. E-participation activities produce large quantities of data, which include behavioral data as well as written text. Using techniques from market basket analysis and social network analysis, Dumas’ presentations will look
at patterns of mobilization of online “communities” in e-participation data. In addition, as enormous amounts of text in multiple civic platforms proliferate, researchers need automatic approaches for text analysis. Hagen’s presentation will focus on topic modeling approaches to automatically extract emergent topics from e-participation platforms.

Given the fast-changing adoption and uses of ICTs around the world for innovation and engagement, the panel will provide multiple perspectives from various countries and useful insights regarding the adoption of civic technologies. So, in this panel, we will explore methodologies to capture the growing amount of e-participation data, and evaluate the promises and pitfalls of automatic computational approaches. Attendees will engage in discussions about how e-participation transforms social structures and changes the civic activity of individuals, and the various ways in which information science research can make a contribution.

PROMOTION
This panel will be promoted through ASIS&T SIG III, SIG SI, SIG IEP Listservs, Facebook pages and Twitter accounts.

PANEL SECTIONS
Jisu Lee, South Korean Citizens’ Virtual Communication and Participation during Election Campaigns
Lee will present the contextual significance of South Korean citizens’ political use of Twitter during the 2012 General and Presidential elections as it was the first time that citizens and politicians could legally employ social media platforms for the political communication and participation during election campaigns. This will include (1) how South Korean citizens engaged with expanded information access and exchange, political deliberation, and public opinion formation in the virtual public sphere of Twitter, (2) how they participated in the selective information seeking and sharing behaviors and construct the segregated boundaries according to their political orientations, and (3) how certain influential users (e.g., opinion leaders, government agents, election campaign staffs, etc.) may easily manipulate the virtual political communication venue during the election campaigns. She employs both quantitative and qualitative methods of social network analysis and content analysis of tweets, as well as semi-structured interviews with influential users. This section of the panel will offer useful insights by focusing on cases from a technologically well established but politically less stable non-Western country.

Catherine Dumas, e-Participation: Exploring Citizen’s Contributions to the Policy Making Process through e-petitioning
The potential of ICTs to provide ways for the public to become more actively involved in government, particularly the policy development process, has been increasingly recognized by government leaders. One example of this is the Open Government Partnership (OGP) initiative launched in July 2011, through which the Obama Administration and leaders of seven other countries created “a global effort to encourage transparent, effective, and accountable governance” (The Open Government Partnership, 2013). Presently, the OGP has more than 60 members from nations all over the world. Obama’s first National Action Plan for the OGP was released in September 2011, featuring an innovative tool for citizen engagement. In an effort to “promote public participation in government” and to give “all Americans a way to engage their government on the issue that matters to them” (https://petitions.whitehouse.gov/), the first web-enabled petitioning system for the US federal government, We the People (WtP), was launched. This internet-based tool enables users to petition the Obama Administration and solicit support for policy suggestions.

E-petitioning sites present one avenue for public expression and e-participation that is unmediated. Any individual can propose and disseminate a petition that may be successful without mediation by a political party, the media or interest groups. These e-petitions provide a useful source of insight on what the public is thinking about. The value of this is not yet understood and needs to be explored.

In this section of the panel, Dumas will discuss her current research which explores e-petitioning co-signing behavior looking for patterns that are indicative of the political mobilization of online “communities” in the case of WtP. This internet-based tool enables users to petition the Obama Administration and solicit support for policy suggestions. Using WtP data, she looks at different case studies involving e-petitioning behavior and the “focusing events” that trigger the signing activity. She will also discuss how this e-petition information is diffused from the petition site through social media, specifically Twitter.

Jess Kropczynski, Civic Tech Platforms in the US
Civic tech is an emerging field of interest to investors, practitioners, and researchers, interested in using technology as a catalyst for civic engagement in the development of public good. Civic technology platforms have played a more active role in engaging citizens since the White House issue an Open Government Directive in 2009 requiring federal agencies to take immediate actions towards transparency, participation, and collaboration. While the use of these platforms have increased, our terminology to describe this design space is limited. This section of the panel will present an assessment of features used in civic applications, platforms supporting government bodies, and other software enabling the goals of civic tech in the US. The method for this assessment is a systematically identify properties of various platforms through content analysis. The frequencies of design features and structures will be compared to these features to their relative success in terms of the number of engaged users.
visiting each site on a regular basis. By combining theoretical knowledge about the nature of these platforms with a general taxonomy based on this assessment, motivations for using civic technology are explored.

**Fatima Espinoza Vasquez, Civil Society Laying the Ground for e-participation**

In this panel Ms. Espinoza Vasquez will describe and characterize Honduran civil society’s efforts to create institutionalized spaces for political participation in the context of the 2009 coup d’état. She conducted a qualitative case study, and analyzed interviews, blogs, and social media.

She found that some sectors of the Honduran civil society joined forces through a protest movement called National Front of Popular Resistance (NFPR). They faced a political landscape with no institutionalized citizen participation, no political dialog, no civic technologies, rampant repression, high media control and censorship. Nevertheless the NFPR engaged in civic innovation practices, they created mobilizing networks of civil society organizations that shared human, organizational and ICT resources. They adopted social media as an alternative channel for political communication, deliberation, and information dissemination. These groups also altered technologies, and used them in novel ways to overcome repression.

Ultimately, the NFPR has become a decentralized and highly engaged network of community organizations that is well-versed in use of ICTs as tools for citizen participation. They challenged and changed the way Hondurans regard citizen participation and laid the foundation for later e-participation initiatives, like the “Indignados” movement of 2015.

**Loni Hagen, Automatic Topic Extraction from Electronic Participation Data for Policy Analysis**

E-participation activities produce large volumes of textual data, which contain written expressions of concerns or policy suggestions directed at the government or specific entities. For these written expressions to have impact on policy decision-making, we need efficient methods to analyze large volumes of texts. Topic modeling has emerged as a promising approach to complement traditional text analysis since it eliminates the process of manually annotating the corpus, and can reduce the cost of analysis. Hagen will report on my ongoing dissertation research, “Automatic Topic Extraction from E-petitions,” which uses techniques mainly involving natural language processing and topic modeling. She will demonstrate topics extracted using samples of electronic petitions submitted to a major public electronic petition platform in US between 2011 and 2015. The major questions that will be discussed include: (1) the extent to which these topics reflect current events and the corresponding public attention to them, (2) the utility of validation methods of topic modeling outcomes, which are unsupervised in nature, (3) the extent to which topics are interpretable and useful for policy analysis.

**THE PANELISTS**

**Jisue Lee** is a PhD candidate in the School of Information at Florida State University. Her research interests lie in how individuals interact with ever-changing technologies and engage in a variety of social collaborative information behaviors in daily life. Her recent work investigates virtual political communication, participation, deliberation, decision-making during the elections, and collective actions toward social movements via civic technologies. Her dissertation focuses on understanding South Korean citizens’ collaborative political information behaviors via Twitter during the Seoul Mayoral election on June 4, 2014. In particular, this study examines the information behaviors, social norms, types, and roles of influential opinion leaders by using the theory of Information Worlds (Jaeger & Burnett, 2010).

**Jess Kropczynski** is a faculty member in the College of Information Sciences and Technology at the Pennsylvania State University. She has worked with local and state governments to assess communication and information needs of target audiences in order to promote informed decision-making. Her recent work has been with the GeoDeliberation Project, which is a partnership with the State College Borough Government to develop an online platform to help citizens interact more directly with planners and decision-makers. In addition to this platform she has worked on the design and assessment of several mobile apps for community engagement.

**Fatima Espinoza Vasquez** is a PhD candidate at the iSchool in Syracuse University. She is interested in Distributed Collaboration, Latin America, Information and Communications Technology, Social Movements, and Political Processes. She has worked in research on Social Media and the Obama Campaign, Academic Social Media Sites for Academics, Civil Society Participation in Internet Governance, Open Innovation in Latin America and Virtual Organizations. Her dissertation focuses on how the Honduran Resistance Movement used ICTs to protest the 2009 coup d’état. She has worked in the private sector, government and non-governmental organizations.

**Catherine Dumas** is a PhD student in Informatics in the College of Engineering & Applied Sciences at the University of Albany, State University of New York, with a primary specialization in Knowledge Organization and Management and a secondary in Information in Organizational Environments. She is interested in analyzing social networks in online communities and organizations, diffusion of information through social media platforms, collective action, agenda setting theory. Her current research interests include looking at e-petitioning behavior and the mobilization of online “communities” engaging in collective action and the role citizens play in the policy making process in the US. She has been an active member
Loni Hagen is a PhD Candidate in the College of Engineering & Applied Sciences at University at Albany, State University of New York with a primary specialization in government and democratic society. She has worked diverse government administrative positions over ten years including an e-government specialist at the Headquarter of the Korean National Police Agency. She currently uses natural language processing and data mining methods for automatic topic extraction and concept identification from electronic petition data. In her dissertation work, she argues that new e-participation data should be used as a new information source for policy decision making, and focuses on measuring validity and interpretability of topic modeling outcomes.

Abebe Rorissa, Moderator

This panel session will be moderated by Dr. Abebe Rorissa. He is an Associate Professor in the Department of Information Studies, University at Albany, State University of New York. Previously, he worked in four countries as a lecturer and systems librarian for 17 years. He has consulted for academic institutions, national governments, & international organizations. He has also published extensively and served or serving on program committees & editorial boards of several international journals/publications/conferences and as a manuscript reviewer.

As a multidisciplinary scholar, his research interests include multimedia information organization and retrieval, scaling of users’ information needs/perceptions, & use/acceptance/adoption and impact of information and communication technologies. He teaches courses in research methods & statistics, information technology, & foundations of information science. His honors include University at Albany Provost’s Fellowship & winning the ASIS&T SIG Member of the Year Award.

Dr. Rorissa served ASIS&T in several leadership positions and roles: advisory board member of the Bulletin; assistant editor of the Proceedings; Chair, Chair-Elect, Immediate Past Chair, InfoShare officer, & Communications Officer of SIG III; member of the SIG Cabinet Steering Committee; guest editor of the Bulletin; and member of the Pratt Severn Best Student Research Paper Award Jury.

REFERENCES


