

1-1-2013

# Regulation Room: Getting "More, Better" Civic Participation in Complex Government Policymaking

Cynthia R. Farina  
*Cornell Law School, crf7@cornell.edu*

Dmitry Epstein  
*CeRI Post-doctoral Fellow*

Josiah Heidt  
*CeRI Affiliated Researcher, Cornell Law School*

Mary J. Newhart  
*Cornell Law School, Cornell eRulemaking Initiative, mjn3@cornell.edu*

Follow this and additional works at: <http://scholarship.law.cornell.edu/ceri>

 Part of the [Administrative Law Commons](#)

---

## Recommended Citation

Farina, Cynthia R.; Epstein, Dmitry; Heidt, Josiah; and Newhart, Mary J., "Regulation Room: Getting "More, Better" Civic Participation in Complex Government Policymaking" (2013). *Cornell e-Rulemaking Initiative Publications*. Paper 16.  
<http://scholarship.law.cornell.edu/ceri/16>

This Published Papers is brought to you for free and open access by the Centers and Programs at Scholarship@Cornell Law: A Digital Repository. It has been accepted for inclusion in Cornell e-Rulemaking Initiative Publications by an authorized administrator of Scholarship@Cornell Law: A Digital Repository. For more information, please contact [jmp8@cornell.edu](mailto:jmp8@cornell.edu).

## **Regulation Room: Getting "More, Better" Civic Participation in Complex Government Policymaking**

Cynthia R. Farina, Dmitry Epstein, Josiah B. Heidt, Mary J. Newhart

### **1. Introduction**

Policies to enhance government transparency and democratic participation have experienced a revolution triggered by the advance of information and communication technologies (ICTs). In the U.S., early e-government efforts to increase citizen involvement in public policymaking aimed primarily at digitizing existing paper-based processes. Now, a second generation of e-participation efforts aspires to use Web 2.0 ICTs to alert and engage citizens, to increase access to relevant information, and to provide spaces for interactive discussion – in short, to make policymaking processes more open and citizen-centered. Broader participation, it is believed, can help ensure that governmental decisions serve the public interest.

Regulation Room is an applied, multi-disciplinary research project of CeRI (Cornell eRulemaking Initiative), which works in active partnership with federal agencies to discover how ICTs can be used most effectively to get broader, better participation in rulemaking and similar types of complex public policymaking. Since Spring 2010, RegulationRoom.org has hosted five live rulemakings. Each has taught us new lessons about the barriers to effective online public participation and the practices that can lower these barriers. Perhaps most important, it has led us to think more deeply about the principles and considerations that ought to inform open government decisions about when and how to attempt to engage a broad range of citizens in complex policymaking.

There is an assumption, particularly amongst open government enthusiasts, that if government would just make more use of emerging ICTs to provide more opportunities to participate, people would seek out these opportunities and use them effectively to provide input useful to official decisionmakers. This suggests that the challenges of achieving greater e-participation are primarily technological. Our research suggests, however, that effectively designing and deploying technology, although essential, is only one dimension of realizing broader, better civic engagement. Effective e-participation systems must be prepared to address a set of barriers that are social, psychological and/or procedural rather than technological in nature.

Our research also suggests the need for re-conceptualizing the value of broad civic participation to policymaking processes, and for recognizing that new commenters engage with policy issues differently than experienced insiders. By "insiders" we mean agency and other executive branch staff involved in writing and reviewing new regulations and other complex policies, as well as industry, trade associations and national advocacy groups who routinely follow and interact with agency policymakers through communications that include filing lengthy formal responses when public comment is requested.

Using Regulation Room as a case study, this paper addresses what capacities are required for effective civic engagement in rulemaking and similar complex public policymaking processes, and how these capacities can be nurtured and supported by an online participation system. We begin by providing an overview of U.S. rulemaking and the Obama Administration-inspired emphasis on using Web 2.0 ICTs to increase transparency and civic engagement in government decisionmaking. We next discuss barriers to effective e-participation we have identified through our efforts in Regulation Room, and the lessons we have learned in trying to lower them. We then turn to the important question of how to conceptualize and measure the value that broader civic participation can bring to a policymaking process. In this discussion, we introduce the concept of "situated knowledge" as a largely unrecognized but paten-

tially highly valuable participatory output of a well-structured system of online civic engagement.

## 2. Rulemaking and Government 2.0

Rulemaking, the process by which agencies of the federal government issue new regulations, has become one of the most important public policymaking methods in the U.S. (Kerwin, 2003). Between fiscal years 2001 and 2010, federal agencies finalized more than 38,000 rules (OMB, 2011). Between 2003 and 2010, 568 rules were defined as "major," which "among other things, has resulted or is likely to result in an annual effect on the economy of \$100 million or more" (GAO, 2013, p.3).

Strong transparency and participation rights are already part of rulemaking's formal legal structure (Strauss *et al.*, 2011). The originating agency is required to give public notice of what it is proposing, to reveal the scientific studies or other data it is using to support its decisions, and to explain its legal and policy rationales. Then, it must provide a period of time (usually 60-90 days) during which any person has the right to comment on any part of the proposal. The agency then must read all comments and consider them in its final decision. To confirm that it has done so, it must publish a written explanation that responds to criticisms, questions, and suggestions made in the comments (Lubbers, 2006).

Although the right to comment is universal, the process has historically been dominated by large corporations, trade and professional associations, and similar legally sophisticated and well-resourced entities (Kerwin, 2003). The lack of broader participation is problematic because, although many rulemakings concern only limited populations, a significant subset of proposed new regulations will directly and substantially affect individuals, small businesses, local and tribal governments and not-for-profits (Kerwin, 2003; GAO, 2013).

For nearly 20 years, rulemaking has been a target of U.S. e-government efforts to expand participation. In 2002, the E-Government Act directed that agencies provide essential rulemaking documents online and allow for electronic submission of comments (GPO, 2002). This "first generation" e-rulemaking essentially put the conventional process online, through a government-wide portal, Regulations.gov. Although Regulations.gov has created easier access to rulemaking materials and made comment submission simpler, it has not significantly broadened public awareness of, or effective engagement in, the process (Coglianese, 2006).

Since 2009, the Barack Obama Administration has mandated that agencies use Web 2.0 ICTs to increase transparency, participation, and collaboration in federal policymaking. This "Government 2.0" mandate is now inspiring a second generation of online rulemaking.

An implicit assumption of many U.S. Government 2.0 efforts is that people are naturally imbued with the capacity to engage effectively in public policymaking processes. However, this capacity does not emerge spontaneously; the cognitive and communication skills required for reasoned policy deliberation must be learned and practiced. For many U.S. citizens, the predominant learned civic participatory responses are to vote (*i.e.*, express a preference without further explanation or consideration) and/or to "vent" (*i.e.*, "to jump into the political fray and make a lot of noise," Schudson, 2000, p.16; also see Wilhelm, 2002). While these behaviors may be participatory, they have little value in rulemaking and similar complex policymaking processes that government actors perceive as requiring a substantial degree of reasoned decisionmaking, rather than simple majoritarian politics (Farina, Newhart *et al.*, 2012). Effective contribution in such processes requires that individuals be willing to consider relevant facts, seriously reflect on opposing policies and arguments, and give reasons for their preferences that "make sense" within the factual and policy landscape (Farina, Newhart *et al.* 2012). Designing civic participation systems that support citizens in developing these capabilities is one of the open government movement's greatest challenges.

## 3. Regulation Room

RegulationRoom.org is an online experimental e-participation platform, designed and op-

erated by CeRI, the cross-disciplinary Cornell eRulemaking Initiative. It is a design-based research project that, since 2010, has been exploring the use of Web 2.0 ICTs and human facilitative moderation to broaden online civic engagement in rulemaking. Wang and Hannafin (2005) characterize design-based research as a systematic but flexible methodology that uses "iterative analysis, design, development, and implementation, based on collaboration among researchers and practitioners in real-world settings, and leading to contextually-sensitive design principles and theories" (p. 6). The site provides a "live" laboratory for researchers in law, communications, computing and information science, and conflict resolution. So far, five rulemakings (see Table 1) have been completed on the site in collaboration with the U.S. Department of Transportation (USDOT) and the Consumer Financial Protection Bureau (CFPB). USDOT selected Regulation Room for its open government "flagship initiative" project, and the project received a White House Open Government Leading Practices award in 2010.

Table 1: *[Project Name]*: Basic data for five rulemakings

Rule	Days open	Visitors	Visitors who registered as users	Total comments	Users who submitted comments	Moderator responses
Texting	34	1999	54	32	18	16
APR	110	19320	1189	931	348	203
EOBR	106	8885	104	235	68	111
Accessibility	112	12631	53	103	31	60
Home Mortgage	60	12665	144	236	144	109

The Regulation Room platform is a socio-technical participation system that uses human moderators employing techniques adapted from "in the room" group facilitation. The moderation is asynchronous, performed by trained e-government clinic students under supervision of senior researchers. Two of the five rulemakings to date have involved commercial motor vehicle operators (CMVOs), about 99% of whom are small businesses: The "texting rule" proposed to ban texting while driving (USDOT, 2010a) and the "EOBR rule" proposed to require companies to purchase and use "electronic onboard recorders" to verify compliance with maximum driving time limits. (USDOT, 2011a) The third rulemaking, the "APR rule," proposed new airline passenger rights in areas including tarmac delay, flight delays and re-booking, fare advertisement, and baggage fees (USDOT, 2010b). The fourth rulemaking, the "Accessibility rule," would require that air travel websites and airport check-in kiosks be made accessible to travelers with physical and cognitive disabilities (USDOT, 2011b). The fifth rulemaking, the "Home Mortgage rule," proposed new rules for home mortgage financial providers that would require increased consumer protections inspired by the residential mortgage crisis (CFPB, 2012a; CFPB, 2012b).

#### 4. Barriers to Effective e-Participation

When discussing barriers to effective online civic engagement, e-participation literature has focused primarily on the technological and system design aspects of this process (e.g. Chen & Dimitrova, 2006; Tomkova, 2009; Towne & Herbsleb, 2011). Although Regulation Room has faced its share of such challenges and continues to evolve system design, here we focus primarily on barriers to broader effective participation that are social, psychological and/or procedural (rather than technological) in nature. The research on, and especially the practice of, e-participation has underemphasized systemic thinking about the existence of

such barriers and possible ways to remediate them (e.g., Al-Dalou & Abu-Shanab 2013).

The work on Regulation Room to date has focused on devising socio-technical solutions to three barriers to effective civic engagement:

1. Motivated awareness barrier: Many individuals and groups do not realize when rule-makings that affect them are going on. Moreover, even on becoming aware of the fact of the rulemaking, many do not realize the nature and extent of how this complex policy proposal will affect their interests.
2. Information barrier: The volume and the linguistic, economic, technical and legal complexity of the typical set of agency rulemaking documents vastly exceeds what many would-be participants can, or will, read and comprehend.
3. Participation literacy barrier: Most new commenters do not understand that in this type of decisionmaking outcomes are determined by analysis of relevant factual information and policy arguments, rather than by majority preferences. Hence, many are not prepared to exercise the kinds of participation skills needed to comment effectively. At the same time (and relevant to the motivated awareness barrier) most do not realize the potential returns of acquiring participation literacy. For example, in rulemaking, government decisionmakers are legally required to consider every comment, and a single thoughtful contribution could affect the outcome.

Overcoming these barriers requires purposefully designed technical systems, accessible information structures and, for many new participants, human support and mentoring. Regulation Room employs social and conventional media outreach, careful design and presentation of relevant information, deliberate selection among possible online participation mechanisms, and human facilitative moderation to get "more better" civic participation in complex government policymaking (Farina, Newhart *et al.*, 2011; Farina, Miller *et al.*, 2011). The discussion that follows reflects some results of this research to date.

#### **4.1 Motivated Awareness Barrier**

Rulemakings are initially chosen for Regulation Room because they directly affect individuals or groups who, based on the agency's historical experience, are unlikely to participate meaningfully in the conventional process. Examples of such "missing stakeholders" include individual CMVOs and small business owners; travelers with disabilities; consumers who have had troubled mortgages; and small community banks and credit unions. Efforts to make such individuals and groups aware of the rulemaking begin several weeks before the official comment period opens.

First, we create a *communications outreach plan*: After defining the kinds of stakeholders we want to alert, we research where and how these targeted new participants get information. We identify membership associations, recreational and trade publications, and influential individuals such as bloggers, and reach out to them through email, phone, and online communications. We develop a list of keywords and phrases to use (1) proactively in daily tweeting and Facebook posting and, most recently, in Facebook and Google ads; and (2) reactively by setting up continuous automated search alerts and responding with comments or tweets when the rule or its subjects appears on news sites, blogs or Twitter. Over the course of the five rules, we made 1,218 tweets and 469 Facebook posts.

Second, we *coordinate media outreach* with the agency's communications office, and try to persuade conventional and online media to publicize the rulemaking and the availability of Regulation Room. We have found that print coverage can be surprisingly effective in driving online participation (Farina, Miller *et al.*, 2011).

These efforts are aimed at winning what Lupia (2009) calls "the Battle for Attention" (p. 63). The outreach objective is not simply alerting individuals in the targeted groups to the rulemaking, but also retaining their attention "for a period of time sufficient to accept and process the focal content" (p.64) and motivating them to act on the information. Although we are still experimenting with message framing, our experience so far suggests that the most effective strategy involves explaining (i) specifically how the proposed rule will benefit or harm them (*personal stake*) (Lupia & McCubbins 1998), and (ii) emphasizing that the agency is legally required to review and consider every comment before reaching its final decision

(*participation efficacy*).

#### **4.2 Information Barrier**

Informed participation requires information. In many policymaking contexts where government seeks public comment, the problem is not lack of information about what the government proposes per se, but rather information provided in a "one size fits all" package. The official federal rulemaking portal, Regulations.gov, is prime example. When agencies publish their materials through this site, they include the text of their "notices of proposed rulemaking" (NPRMs) and supporting economic analyses in the original form – a form that has evolved to meet the needs of professional policymakers, sophisticated organizational stakeholders, and legal and political overseers (GAO, 2012). Although Regulations.gov has created easier access to these materials and made comment submission simpler, it has not significantly broadened public awareness of, or effective engagement in, the process. (Coglianese 2006).

The severity of the information barrier can be seen in the rulemakings offered on Regulation Room, which tend not to involve a high degree of scientific, technical or economic intricacy relative to many other rulemakings. Even so, the NPRMs and analyses typically total the length of a small novel. The APR rule, for example, had a nearly 25,000 word NPRM supported by 34,000 more words of cost and benefit analysis. The NPRMs for the Home Mortgage rulemaking totaled more than 800 manuscript pages. Based on standard readability analysis (Flesch-Kincaid), these documents were written at a graduate school level.

On Regulation Room we expand the accessibility of information and manage its complexity and volume through the techniques of triage, translation, and layering.

- *Triage* involves (i) identifying and foregrounding the information the targeted stakeholders will most likely be interested in and need to engage effectively, and (ii) packaging this information in thematic segments (6-10 "topic posts") of manageable length. Neither the segmentation nor order of topics necessarily matches the way the agency originally organized the information. This is because triage must occur from the perspective of someone outside the agency: The result must "make sense" to those who are not immersed in the particular proposal or the larger regulatory environment.
- *Translation* responds to the problem that the vocabulary and even syntax of agency documents impedes comprehension by those not conversant with regulatory materials. Drafting of Regulation Room topic posts therefore emphasizes relatively simple vocabulary and sentence structure. This technique, often referred to as "plain language," avoids legal and technical terms to the extent possible and stresses clarity and brevity (Murawski, 1999).
- *Layering* is the practice of leveraging hypertext, one of the core functionalities of the Web, to provide content in a way that allows users, at *their individual choice*, to get deeper or broader information- or, conversely, to find help greater than what triage and translation have already provided. Topic posts contain links to relevant sections of the primary documents (e.g., "Read what [the agency] said" and "Read the text of the proposed rule.") Textual references to statutes, regulations, research studies or other data, are linked to those sources. References to federal or private entities are linked to the most relevant section of their websites. We also provide a mouse-over glossary that defines unfamiliar acronyms and terms.

Once information about the agency proposal has been rendered more accessible and understandable through these techniques, the other essential component of lowering the information barrier for rulemaking newcomers is human facilitative *moderation*. Moderator interventions (described next) that support informed commenting include: recognizing when users are missing, or misunderstanding, important information and helping them acquire it; encouraging more knowledgeable or engaged users to go more deeply into the agency's analysis; and, pointing out other topics and comments related to the commenter's apparent interests or concerns.

#### **4.3 Participation Literacy Barrier**

If an important open government goal is getting *meaningful* engagement from those historically underrepresented in the process – *i.e.*, individual and group stakeholders historically "missing" from rulemaking – then remediating predictable gaps in participation skills becomes a design imperative. In our Regulation Room experience, one of the greatest challenges is redirecting users from their initial participatory instincts – *i.e.*, to vote or to vent – to the kind of fact-based, reasoned discussion that agency decisionmakers value.

*Educational materials* on Regulation Room include "Learn More" pages that use graphics and simple language to explain the rulemaking process and effective commenting. Users can also watch a short video on these topics. However, consistent with general website use patterns, these educational aids are used only sporadically (Farina, Miller *et al.*, 2011). Therefore, the message of these materials must be reinforced both through (i) the structure of the participation mechanisms offered and (ii) other forms of participation mentoring.

The principal participation mechanism on Regulation Room is *targeted commenting* on selected sections of text. We chose this functionality (which displays comments side-by-side with the text being discussed) over the standard blog format (with the comment stream below the full text) for several reasons. Requiring users to attach their comment to a selected section of topic post text discourages global conclusory remarks, or off-the-top-of-the-head reactions. The participation structure itself signals an expectation that participants will read the details of the agency's proposal and engage in thoughtful discussion of its various sections. Threaded comment capability allows users to engage each other's' comments, as well as respond to questions and suggestions from the moderator. After initial experience with users' simply attaching their comments to the first section of the post regardless of whether their comments actually concerned a later section, we provide a linked index to the sections at the top of the post. This has notably reduced impulsive overuse of the first available section. So long as the initial information preparation has divided topic post content into discernibly distinctive sub-topics, the targeted commenting functionality works well to crowdsource the substantive organization of comments. This benefits not only agency policymakers trying to review and categorize hundreds of comments, but also commenters themselves trying to follow and participate in discussion of issues that interest them most.

The screenshot displays the 'Regulation Room' interface. At the top, there is a navigation bar with 'Regulation Room' and links for 'Learn More', 'About', 'FAQ', and 'My Profile'. On the right, there are social media-like buttons for 'Like' (152), 'Login', and 'Register'. Below the navigation, there are tabs for 'Issues', 'Agency Documents', 'Draft Summary', and 'Final Summary'. A list of issues is shown, including 'Who would have to use an EOBR?' (158) and 'What about privacy concerns?' (49). The main content area features an 'AGENCY PROPOSAL' titled 'Who would have to use an EOBR?' with 158 comments. The proposal text discusses FMCSA's new regulation on Hours of Service (HOS) and Electronic On-Board Recorders (EOBRs). To the right, there is a 'PEOPLE'S COMMENTS' section with a search bar and a 'SUBMIT COMMENT' button. Below this, there are two comments from users 'new creation transport' and 'Moderator', each with 'ENDORSE', 'SHARE', and 'REPLY' buttons.

Figure 1: Screenshot of Issues Post page, Regulation Room Version 4, showing targeted commenting

Although the targeted commenting design provides an environment well-suited to focused and informed discussion, many users need more. Therefore, an important part of the Regulation Room system is *human moderators* who mentor effective commenting using "facilitative moderation." Law students in an e-government clinic are trained in the conflict resolution techniques of content- and process-based group facilitation (Kaner, 2007). Applying and adapting established "face-to-face" techniques, they moderate asynchronously under the supervision of senior researchers.

A detailed Moderator Protocol identifies eight different roles, with a total of twenty-one types of interventions a moderator might make (see Table 2). Along with the advancement of general online-community building (e.g., Social Functions; Stimulate Discussion), moderators help users manage the information demands of rulemaking (e.g., Substance Education) and help them acquire and refine participation skills (e.g., Mentor Effective Commenting; Stimulating Discussion).

Table 2: Moderator roles and related interventions

<b>Roles:</b>	<b>Intenrentions:</b>
<i>Supervisory</i>	
<b>Social Functions</b>	Welcoming Encouragement; appreciation of comment Thanks for participating
<b>Site Use Issues</b>	Resolving technical difficulties
<b>Explaining the Role of Moderator</b>	Providing information about the goals/rules of moderation Providing information about who we (CeRI) are
<b>Policing</b>	Redact and quarantine Civility policing Wrong venue
<i>Substantive</i>	
<b>Clarity</b>	Asking for clarification of comment
<b>Wrong Information</b>	Correcting misstatements or clarifying what the agency is looking for
<b>Substantiation</b>	Pointing out characteristics of effective commenting Asking for more information, factual details or data Asking for examples of a personal experience Providing substantive information about the proposed rule Pointing the commenter to relevant information in primary documents or other data sources
<b>Focusing Comment</b>	Getting an off-topic commenter to engage the issue post Organizing discussion
<b>Further Engagement</b>	Asking for more information, factual details, or data Asking them to make or consider possible solutions/alternatives Asking for elaboration Stimulating Discussion Encourage users to consider and engage comments of others Posing a question or comment to the community Developing a story or experience

Facilitative moderation differs radically from the "policing" moderation typical on blogs and discussion forums. Regulation Room moderators are advocates for and keepers of the *process*. Their job is to facilitate a "knowledge building community" that supports learning about, participation in, and access to the rulemaking process. They model (and, in the very few cases it has proved necessary, remind users of) the kind of thoughtful, civil and inclusive engagement that we try to cultivate as the site norm. Most important, they strive not only to be neutral but also to be perceived by users as taking no position on any of the agency proposal.

*Site design and functionality* support moderator efforts. Giving users the ability to vote on or rate a comment has been shown to increase engagement in online communities (Farzan *et al.*, 2009). Nonetheless, we made the deliberate choice not to encourage "rulemaking as pleb-

iscite" by including voting or ranking as participation mechanisms. *Moderators* can "recommend" comments that illustrate effective commenting, and this designation both reinforces desired site norms and teaches effective participation. Recently, we added an "Endorse" function (*i.e.*: "endorse comments that do a good job making of a good point"), based on post-rule survey evidence that some users did not comment because others had already made the point they would have made. We added "Endorse" to give such community-minded "lurkers" a method of participating if they wish (Preece, Nonnecke & Andrews, 2004). So far, about 25% of endorsements are made by users who do not otherwise comment, suggesting that the functionality is fulfilling an important role for some participants.

## 5. Measuring More, Better e-Participation

Standard quantitative web metrics – number of visitors, comments, page views, etc – are seductive. They are easy to gather through online analytics tools, easy to present in attractive charts and tables, and easy to compare over time and across versions. Such metrics can be useful, and we regularly collect and review them in Regulation Room. However, if *more* participation is not synonymous with *broader and better* participation, then success cannot be defined *only* by numbers. One of the main takeaways from our experience in Regulation Room is the need for better metrics that capture not merely quantity, but also quality of public participation and its unique value to the policymaking process.

With the stated goal of broadening civic engagement in policymaking, one important Regulation Room metric is the volume of the new voices joining policy deliberation. A survey question at registration asks users whether they have previously participated in a federal rulemaking. The proportion of users who answer "no" or "I don't know" (which seems to us the functional equivalent) has been as high as 98% in some rulemakings, and never lower than 64%.

Another useful indicator is change in perceived levels of civic education. In voluntary post-rule surveys, of respondents who never participated in rulemaking before (see Table 3), a large majority reported better understanding of the rulemaking process. Hence, those who are new to the process seem to be gaining the participation literacy we have tried to engender. Of all survey respondents, an even larger majority reported better understanding of what the agency was trying to do, and of the arguments of others. These responses suggest that informed participation can strengthen civic culture beyond a single engagement in commenting on a particular policy.

Table 3: [*Project Name*]: User survey data

<i>Did you gain a greater understanding of</i>	Yes	No	<b>Other</b>
<i>the rulemaking process?</i> ( <i>n=166</i> )	49.4%	25.3%	<i>Already knew about it: 25.3%</i>
<i>the positions/arguments of others?</i> ( <i>n=164</i> )	77.4%	9.2%	<i>Not sure: 13.4%</i>
<i>what the agency is trying to do in the rulemaking</i> ( <i>n=153</i> )	71.2%	13.1%	<i>Not sure: 15.7%</i>

The harder question is determining whether rulemaking newcomers make contributions of value to the policymaking process. We interview rulewriters after each public engagement, but agencies are very risk-averse about candidly discussing details of their comment assessment because of fear that discussing their deliberative processes with anyone outside the gov-

ernment could be used against them in litigation challenging the final rule. Still, in all rule-makings to date, rulewriters have told us that Regulation Room comments by missing stakeholders added useful information and perspective that they were unlikely otherwise to get. Some have specifically identified value in narratives where commenters recounted their own experiences relevant to the proposal. A more quantitative measure is citation to Regulation Room commenters in the discussion of comments that agencies are legally required to include with the final rule. At the time of this writing, only two of the five rules have been finalized, but Regulation Room commenters are cited in each case. In the APR Rule, these comments are mentioned in DOT's discussion of almost 20 different sections of the new rule. For example, in one section on Full Fare Advertising, DOT explained that Regulation Room commenters influenced its decision to require clearer information in fare advertising, even though comments from airline companies had opposed this change. In the final Home Mortgage rule, CFPB mentions Regulation Room comments at several points. For example, some Regulation Room consumer commenters opposed the agency's proposal to allow consumer error correction requests to be made orally to their mortgage servicer, rather than only in writing as in the existing rule. Commenters feared that consumers would be misled into thinking that an error had been corrected when there was no written record confirming this correction in the servicers' files. In response, the CFPB dropped its proposal, and retained the written-request requirement in the final rule.

To move beyond anecdotal evidence, we have tried to develop metrics of comment quality. Quality of rulemaking comments has traditionally been judged by characteristics that federal agencies have come to expect from sophisticated commenters – *i.e.*, reason-giving that takes the rhetorical form of premise-argument-conclusion; legal and empirical analysis that provides relevant source material; and detailed attention to the proposed text of the rule. A small body of previous research has tried to measure comment quality either by coding directly for qualities such as measures of legal sophistication (e.g., commenter revealed knowing the difference between a statute and a regulation) and suggestions of specific text changes to the proposed rule text (Cuellar, 2005) or by using proxies such as comment length, commenter self-identification as an expert, and whether the comment came from a Washington "insider" (defined as coming from a Maryland, Virginia or Washington DC address) (Yackee & Yackee, 2006). We found that these metrics, developed in the context of conventionally submitted comments (including large proportions of experienced industry commenters) were not sensitive enough to sufficiently discriminate among comments of rulemaking newcomers made in the Regulation Room online environment. Moreover, we came to realize that such metrics may miss the unique value of comments generated by the lay members of the public.

Even with moderator support, comments within the Regulation Room discussion will not look like the extended written comments submitted as a document file to the agency by experienced industry commenters. In part this is because our online environment does not encourage lengthy, self-contained exegeses of the proposed rule, and we do not permit users to simply attach a file with their comment text. Beyond these technology-rooted differences, we have observed a substantive difference in the nature of comments made by rulemaking newcomers. Missing stakeholders tend to engage with the agency's proposal by describing their first-hand experience within the regulatory environment, often through the form of a story about an issue the agency is trying to address. They thus provide *situated knowledge*, by which we mean information about impacts, problems, enforceability, contributory causes, unintended consequences, etc. that are known by the commenter because of lived experience in the complex reality into which the proposed regulation would be introduced. This is knowledge that the agency is unlikely itself to possess; moreover, it is not information that representative organizations can readily gather from individual members and convey credibly and in sufficiently rich detail to the agency (Farina, Epstein, *et al.*, 2012).

For example, a central proposal in the Accessibility rulemaking was a requirement that airport check-in kiosks be modified (or replaced) in order to be accessible to travelers with a range of physical or cognitive disabilities. Commenting on Regulation Room, travelers with disabilities (or their family or friends) recounted how they currently interact with airport personnel and told stories of airlines not following existing regulations requiring accommodation of travelers with disabilities. The formal comments filed by prominent national disability

rights organizations strongly supported DOT's proposal, but several individual travelers with disabilities commenting on Regulation Room questioned whether the focus on accessible technology best served their needs. Drawing on described experience with other parts of their lives becoming more automated (e.g., accessible ATMs), they expressed concern that the result would be fewer customer service representatives available to help them with the various ways they needed assistance navigating the airport environment.

People naturally and comfortably communicate through storytelling and similar forms of experienced-based rhetoric (Polletta & Lee, 2006). Thus, insisting on a rhetorical hierarchy of value that privileges abstract reasoning and formal argumentation can alienate rulemaking newcomers and devalue their contribution. Moreover, encouraging storytelling and other forms of revealing situated knowledge can create a surprisingly deliberative discussion that reveals otherwise marginalized points of view because of the form's inherent openness (Polletta & Lee 2006). The challenge – which must initially be addressed within Regulation Room itself through moderation, and ultimately with our agency partners through educative discussion—is creating new norms of valuable discourse that accept stories and other personal experiential communications as serious contributions worthy of policymakers' attention.

Our analytic focus has now shifted to developing quality metrics that reflect the distinctive nature of comments from "non-sophisticated" commenters. And, our moderation research is developing interventions that will encourage and guide expressions of situated knowledge. At this point, our principal contributions are the unique (we believe) observations that (1) newcomers should not be expected to participate in discussion of complex policy proposals in same form and with the same substantive focus as sophisticated participants—attempting to force them into "standard" forms of participation is likely to frustrate both the participation designers and the participants; and (2) newcomers, particularly missing stakeholders, can provide input into complex policymaking by revealing experiential situated knowledge, contributions that are valuable to the policymaker and empowering for the participant (Faina, Epstein, *et al.*, 2012).

## 5. Conclusion

Open government enthusiasts tend to assume that more public participation will lead to better government policymaking, and that if technology provides new opportunities to participate, people will use these opportunities to participate effectively. However, design of online civic engagement systems cannot proceed on these comfortable assumptions. Successful design requires asking (i) what capacities are required for effective citizen engagement; and (ii) how the choice of participation mechanisms and supports can enable users to develop these capacities. This inquiry is a matter of principle as well as efficiency, for a democratic government should not solicit civic participation that it does not value.

Regulation Room experience indicates that a broader range of citizens can indeed be meaningfully engaged in even policymaking processes as complex as rulemaking. But it also cautions that getting better participation from more people requires the investment of resources. Informed and thoughtful comment on complex public policy questions does not emerge spontaneously. It requires far more planning and support than open government advocates may recognize, or be able to provide and more resources than popular notion of Web-2.0-enabled civic engagement may suggest. More projects like Regulation Room, which occur on the border between theory and practice, are essential to identify (i) the nature and degree of resources that are needed; and (ii) the conditions in which such investment is likely to yield a return that satisfies government decisionmakers and citizen participants alike. Perhaps more fundamental, both government decisionmakers and participation designers must be open to recognizing non-traditional forms of knowledge and styles of communication—and willing to devise participation mechanisms and protocols accordingly.

## References

Al-Dalou, R. & Abu-Shanab, E. (2013). "E-Participation Levels and Technologies." *The 6th*

- International Conference on Information Technology (ICIT 2013)*, 8-10 May, 2013, Amman, Jordan, pp.1-8
- Chen, Y.-C. C., & Dimitrova, D. V. (2006), "Electronic government and online engagement: Citizen interaction with government via web portals", *International Journal of Electronic Government Research*, Vol. 2, No. 1, pp. 54-76.
- CFPB, 2012 Real Estate Settlement Procedures Act (Regulation X) Mortgage Servicing Proposal, 77 FR 57200.
- CFPB, 2012 Truth in Lending Act (Regulation Z) Mortgage Servicing, 77 FR 57318.
- Coglianesi, C. (2006), "Citizen participation in rulemaking: past, present, and future", *Duke Law Journal*, Vol. 55, pp. 943-968.
- Committee on the Status & Future of Federal e-Rulemaking (CSFFR) (2009), *Achieving the Potential: The Future of Federal E-rulemaking*, Committee on the Status & Future of Federal e-Rulemaking/American Bar Association, Washington, DC.
- Cuellar, M.-F. (2005), "Rethinking regulatory democracy", *Administrative Law Review*, Vol. 57, No.2, pp. 411-500.
- Farina, C., Miller, P., Newhart, M., Cardie, C., Cosley, D., & Vernon, R. (2011), "Rulemaking in 140 characters or less: Social networking and public participation in rulemaking", *Pace Law Review*, Vol. 31, No. 1, pp. 382-463.
- Farina, C., Newhart, M., Cardie, C., Cosley D. (2011), "Rulemaking 2.0", *Miami Law Review*, Vol. 65, No.2, pp. 395-448.
- Farina, C. R., Epstein, D., Heidt, J. & Newhart, M. J. (2012), "Knowledge in the people: Rethinking "value in public rulemaking participation", *Wake Forest Law Review*, Vol. 47, No.5, pp. 1185-1241.
- Farina, C., Heidt, J., Newhart, M. (2012), "Designing an online civic engagement platform: Balancing "more" vs. "better" participation in complex public policymaking," working paper, Cornell Law School, Cornell eRulemaking Initiative, Ithaca, NY.
- Farina, C., Newhart, M., Heidt, J. (2012), "Rulemaking vs. democracy: Judging and nudging public participation that counts", *Michigan Journal of Environmental and Administrative Law*, Vol. 2 No. 1, pp. 123-172.
- Farzan, R., DiMicco, J., and Brownholtz E. (2009). "Spreading the honey: A system for maintaining an online community", in *Proceedings of the ACM conference on Supporting Group Work*, pp.31-40. New York, ACM Press.
- GAO (2012) "Federal rulemaking: Agencies could take additional steps to respond to public comments", Report to congress, United States Government Accountability Office. GAO-13-12.
- GPO. E-government act of 2002, 44 u.s.c. § 3601 et. seq., 2002.
- Johnston, P. (2009) "Open government: Assessing the Obama administration's efforts to make government transparency a reality", available at: [http://www.cisco.com/web/about/ac79/docs/pov/Open and Transparent Government Formatted 120209FINAL.pdf](http://www.cisco.com/web/about/ac79/docs/pov/Open%20and%20Transparent%20Government%20Formatted%2020209FINAL.pdf). (accessed 30 January 2013).
- Kaner, S. (2007). *Facilitator's guide to participatory decision-making (2nd ed.)*. San Francisco, CA: Jossey-Bass.
- Kerwin, C.M. (2003), *Rulemaking: How Government Agencies Write Law and Make Policy*, 3rd ed., CQ Press, Washington, DC.
- Lubbers, J. S. (2006), *A Guide to Federal Agency Rulemaking (Fourth.)*, American Bar Association.
- Lupia, A (2009), "Can online deliberation improve politics? Scientific foundations for success", In T. Davies & S. Pefia Gangadharan (Eds.), *Online Deliberation: Design, Research, and Practice*, Stanford, CA: CSLI Publications, pp. 59-69.
- Lupia A & McCubbins, M. D. (1998). *The democratic dilemma: Can citizens learn what they need to know?* New York, NY: Cambridge University Press.
- Murawski, T. A (1999), *Writing readable regulations*, Durham, N.C: Carolina Academic Press.
- OMB, "2011 report to congress on the benefits and costs of federal regulations and unfunded mandates on state, local, and tribal entities", Report to congress, Office of Management and Budget, 2011.

- Polletta, F. & Lee, J. (2006), "Is telling stories good for democracy? Rhetoric in public deliberation after 9/11", *American Sociological Review*, Vol. 71, pp. 699-723.
- Preece, J., Nonnecke, B., and Andrews, D. (2004). "The top five reasons for lurking: Improving community experiences for everyone", *Computers in Human Behavior*, Vol. 20 No.2, pp. 201-233.
- Schudson, M. (2000), "Good citizens and bad history: today's political ideals in historical perspective", *The Communication Review*, Vol. 4 No.1, pp.1-19.
- Strauss, P.L. et al. (2011) *Gel/hom and Byse's Administrative Law, Cases and Comments*, 11th ed., Foundation Press.
- Tornkova, J. (2009), "E-consultations: New tools for civic engagement or facades for political correctness?", *European Journal of ePractice*, Vol. 7, pp. 1-10.
- Towne, W. B., & Herbsleb, J. D. (2011), "Design considerations for online deliberation systems", *Journal of Information Technology & Politics*, Vol. 9 No. 1, pp. 97-115. doi: 10.1080/19331681.2011.637711
- USDOT (2010a), Limiting the Use of Wireless Communication Devices, 75 FR 16391.
- USDOT (2010b), Enhancing Airline Passenger Protections, 75 FR 32318.
- USDOT (2011a), Electronic On-Board Recorders and Hours of Service Supporting Documents, 76 FR 5537.
- USDOT (2011b), Nondiscrimination on the Basis of Disability in Air Travel: Accessibility of Web Sites and Automated Kiosks at U.S. Airports, 76 FR 59307.
- Wang, F., & Hannafin, M. J. (2005), "Design-based research and technology-enhanced learning environments", *Educational Technology Research and Development*, Vol. 53, No. 4, pp. 5-23.
- Wilhelm, A G. (2000). *Democracy in the Digital Age: Challenges to political life in cyberspace*. New York: Routledge.
- Yackee, J. W., & Yackee, S. W. (February 01, 2006), "A bias towards business? Assessing interest group influence on the U.S. bureaucracy", *The Journal of Politics*, Vol. 68, No. 1, pp. 128-139.