

**NOT BY TECHNOLOGY ALONE:
THE “ANALOG” ASPECTS OF ONLINE PUBLIC ENGAGEMENT
IN RULEMAKING**

ABSTRACT

Between Twitter revolutions and Facebook elections, there is a growing belief that information and communication technologies are changing the way democracy is practiced. The discourse around e-government is frequently focused on technical solution and based in the belief that if you build it correctly they will come. This paper departs from the literature on digital divide to examine barriers to online civic participation. Based on analysis of practices that evolved in a research project that works with federal government agencies in helping them engage public in the process of rulemaking, this paper draws a complex picture of motivation, skill, and general political participation divides. It illustrates the “analog” aspects of the digital divide in online civic participation and discusses some of the potential solutions and associated costs.

I. INTRODUCTION

Between Twitter revolutions and Facebook elections, there is a growing belief that information and communication technologies are changing the way democracy is practiced. Some view the internet as shifting the principles of political organization by making collective action cheaper and more easily available (Bimber, Stohl, & Flanagin, 2009; Shirky, 2008). Others allude to the “sunlight effect” of internet technologies that make political institutions and politicians more accountable to the public as their actions become more visible and information used for their decision-making is more easily accessible (Coleman, 2009; Schacter, 2009). Others note that adoption of information technologies by government institutions changes their character and their organizational arrangements (Fountain, 2009; Margetts, 2009). Yet others view the internet as altering the polity itself by shifting the power from the center of the communication network to its edges (Mueller, 2010) and by enabling a better informed (Hardy, Hall Jamieson, & Winneg, 2009; Reedy & Wells, 2009) and a more engaged public (Brundidge & Rice, 2009).

In this context, disparities in access and the ability to use the internet are viewed as the basis of flawed democratic processes, particularly of the “imperfect” civic participation by the populace (Mossberger, 2009). Recent developments in the Middle East, labeled by some as the “Facebook Revolution,” further fueled the ethos of the democratizing nature of information technology. In the West, the movement of more government data and services online continuously reinforces the notion of information society where the citizens are engaged in direct conversations with the powers that be. The popular discourse about the Internet, governance, and democracy tends to focus on technical solutions, while overlooking the social, political, and

cultural complexities of civic online engagement. The purpose of this paper is to delve into what it actually takes to turn internet technology into a meaningful tool for civic engagement.

The paper analyzes [project name], an interdisciplinary research project of [a research university at the Northeast] that offers an online public participation platform that allows interested individuals to learn about and provide input on proposed regulations in the federal agency rulemaking process. Its target audience is those whose voices are traditionally missing in the rulemaking process and who are also typically on the ‘wrong’ side of the digital divide. Through the lens of the digital divide scholarship, this paper explains how various aspects of online civic participation are addressed through design decision with deliberate care and focused attention on the needs of users who are unfamiliar with the complex process in which they are operating, unsure of every step they are taking, and often skeptical that the value of their participation is worth the effort they put into it. This analysis offers insights into comprehensive thinking about the digital divide and raises important questions to consider in future efforts in e-government.

II. CIVIC PARTICIPATION AND THE DIGITAL DIVIDE

The disparities in access and ability to use the internet are typically referred to as the “digital divide.” Originally rooted in a dichotomous notion of information “haves” vs. information “have-nots,” the concept of the digital divide has been used to analyze information technology-related inequalities within and between countries and regions (Epstein, 2011). When translated into policy, such categorical division results in fundamentally technocratic optimism and in focus on physical access to technology. Thus, early responses to the digital divide were focused on providing computers and internet connection to the have-nots, with the implied

notion that once available, the technology would be put into positive and productive uses spurring political, economic, and social progress (Epstein, Nisbet, & Gillespie, 2011).

Over the years, however, the scholarly debate about the digital divide grew in sophistication as the technocratic view of information technology and the causal relationship between adoption of technology and social outcomes came under increasing scrutiny. Some suggested that the digital divide should be understood as a series of divides (Barzilai-Nahon, 2006; Meredyth & Thomas, 2002) or inequalities (DiMaggio, Hargittai, Celeste, & Shafer, 2004), while others prefer viewing it as a continuum (Warschauer, 2002, 2003) or spectrum (Lenhart & Horrigan, 2003). Some also challenged the attention to access as determinist, utopian, and naïve, warning that the evident demographic disparities have to do with more than just the presence or absence of the technology, and do not simply disappear as ICTs and internet connectivity become more ubiquitous (Gunkel, 2003; van Dijk, 2006). Others have attempted to link the digital divide to the larger forces that perpetuate resource disparities: some see the digital divide as an element of broader waves of political and economic development (Norris, 2001; Pohjola, 2001; Warschauer, 2003), while others see it as a product of cultural imperialism (Chomsky, 2004), Westernization (Schiller, 1992), or an emerging power bloc within the information industry (Chomsky, 2004; Schiller, 1992).

Specifically in the area of civic engagement in political processes and e-government, the digital divide thinking lent itself to the “if you build it, they will come” mindset (e.g. Chen & Dimitrova, 2006). In other words, given the right technological tools members of the public will engage in political processes, and they will do it in a meaningful way (Macintosh, 2004; Reddick, 2005). A recent report by the Pew Internet and American Life Project, for example, suggests that 73% of adult internet users in the US (representing 53% of all US adults) could be

described as “online political users in 2010.” Yet most of the political use of the internet described in the report is about consuming political news, whether from online outlets, campaign websites, or online social interactions (Smith, 2011). While an informed public is an important component in a democratic society, it still does not mean that people effectively engage or interact with the government online. An earlier Pew report (see Smith, 2010) suggested that accessing government information is the most common interaction of US citizens with their government online, followed by consuming some of the government services, such as renewing a driver’s license or auto registration; only 23% of internet users, however, “participate in the online debate around government policies or issues, with much of this discussion occurring outside of official government channels” (p. 2-3). While this proportion is not negligible, the report suggests that there is still a divide to bridge in terms of civic online engagement; a divide that also mirrors the socioeconomic disparities. In other words, the digital divide amplifies the dynamics where the powerful are becoming more powerful and the politically weak are becoming weaker.

Employment of online tools for meaningful and productive engagement of the public in policymaking processes is not trivial. Simply providing the technology to people, even those, who know how to operate it, does not necessarily result in effective engagement. For example, soon after the election of Barak Obama, whose campaign was praised for its use of information technology, his transition team launched a series of initiatives aimed to engage the public in policy processes using the internet (White, 2008). The results of these initiatives were mixed. For example, in the *Citizen’s Briefing Book* the public voted for legalization of marijuana as the top topic to be included in the new administration’s agenda (Johnson, 2009), but this stand was not taken seriously by the powers that be. As a result, the transition team did not achieve the kind of

participation they hoped for about issue such as healthcare and unemployment and the members of the public who did participate felt they voices have not been heard.

Similar results were achieved in other online experiments of the transition team and later the administration, as well as in other contexts and countries (e.g. Chen & Dimitrova, 2006; Tomkova, 2009). These discrepancies between the democratic promise of the internet and the mixed results on the ground suggest that a more nuanced story about the digital divide and online civic engagement is to be told. Van Dijk (2005), for example, speaks about the digital divide as an assembly of different kinds of accesses, each shaping and at the same time being shaped by the other. Specifically, he describes motivational access, material access, skills access, and usage access—all positioned within social, political, and economic context and continuously interacting with the characteristics of technology.

Traditionally, the digital divide has been addressed in terms of material access; this is the perception behind the “build it and they will come” approach to online civic engagement. Yet, other kinds of access play out in important and unique ways when considered in the context of citizens’ engagement with the government. For example, Van Dijk explains *motivational access* as a function psychological processes or social context that supports adoption of new technology. He emphasizes the centrality of a consciously recognized need for the technology as well as a potential conflict between the moral and the cultural values of the users and perceived dangers of the new medium. In the context of civic engagement, however, motivational access relates not only to the motivation to use technology, but also to use the technology in order to engage in meaningful political discourse online; each one of these motivations can enhance or limit the other.

DiMaggio et al. (2004) emphasize the centrality of *skills* in adoption of new technology (see also Hargittai, 2002). Their research allows us to picture adoption of socio-technical practices as sort of a Maslow pyramid at the bottom of which is the physical access to technology, further up is the basic ability to use the technology primarily for recreational purposes, and at the top is the advanced ability to use the technology for capital enhancing activities. DiMaggio et al. allude to the reflection of social disparities in the digital divide when viewed through the lens of skills. Thus, they demonstrate that those belonging to higher socio-economic strata are more likely to engage in capital enhancing activities, compared to those belonging to the lower socio-economic strata. The Pew report mentioned above suggests that similar tendencies can be observed in online civic engagement where those in positions of social strength are more likely to engage in activities influencing policymaking processes as opposed to merely using government services online or consuming government information. In other words, the digital divide lens may suggest that technology amplifies already existing discrepancies in power. The way online content is often organized further enhances those processes as graphic design often takes priority over usability, thus requiring additional skills and cognitive abilities from the user to ensure meaningful engagement.

Norris (2001) refers specifically to the link between *understanding political processes*, democracy, and the digital divide. She emphasizes the role of social structures in mediating political activity and the information technology as a mechanism that can reify or challenge those structures. Groups that are traditionally marginalized in political discourse are more likely to be marginalized in the online political discourse as well; the power relations of the offline world are typically transferred online as well. Specifically for online civic engagement with policymaking processes, a lack of understanding of those processes and the “rules of engagement” in their

deliberation are significant barriers to broad public participation. Moreover, lack of knowledge about means of participation in the policymaking activities adds another layer to the technology-based divide.

The notion of the digital divide is ever evolving as a function of changes in technical, social, economic, and political conditions as well as our understanding of the phenomenon. Most notably, one can trace a change from a simplified view of the digital divide as an issue of physical access into a more nuanced view that takes into account skills and context of technology adoption (Epstein, 2011). In the US, where physical access is less of an acute problem compared to other parts of the world, we need this more expansive view of what constitutes the divide in the context of online civic engagement, including one that accounts for all aspects of the divide: motivation, skills, and broader understanding of political processes. The analysis of [project name] that follows is arranged along those three aspects of the digital divide and online civic participation.

III. THE [PROJECT NAME] IN THE RULEMAKING PROCESS

[Project name] is a website where individuals can learn about and comment on proposed federal regulations. It provides a forum for participation in what is formally known as the rulemaking process. Rulemaking, or the legally-mandated procedure that all federal agencies must follow when enacting a new regulation, contains a mechanism for soliciting public opinion on the proposed rule. This “notice and comment process,” as it is officially known, allows all citizens to see exactly what the agency would like to do and offer their input on the wisdom of the proposal, based on their own experience and understanding of the substantive area to be regulated. On the surface, it appears to be a prime opportunity for widespread direct public

participation in government policymaking. In reality, however, the process is dominated by large industry actors whose lawyers compose complex and sophisticated comments. Few Americans have ever heard of rulemaking; fewer still have ever lent their voice to the process, particularly in a way that is helpful for the agency (Coglianese, 2006; Kerwin, 2003; Lubbers, 2006). It is in this context that [project name] emerged, seeking a way to educate, engage, and encourage participation by a broad swathe of the American public in a highly complex policymaking process that for decades has been the sole province of the most sophisticated corporate actors.

Under the Administrative Procedure Act, the post-New Deal law that lays out the parameters of rulemaking, an agency must come up with a proposed rule and present it to the public in a Notice of Proposed Rulemaking (NPRM). The NPRM, which often is around eighty pages long and written at a post-graduate reading level, explains what the agency proposes to regulate and the reasons it believes the regulation is appropriate. Later laws have added to the information the agency must provide, including, for instance, the cost and benefit calculations and the regulation's expected impact on the environment, privacy, and small businesses. Once the NPRM is published in the Federal Register (a daily publication by the federal government) and on Regulations.gov (the government's official e-rulemaking portal), the public may submit comments to the agency, either online or in paper. The comment period usually lasts between thirty and ninety days. At the end of this period, the agency is required to read and consider every comment it receives. When it issues the final regulation, it includes a description of why it chose this regulatory course, in light of the comments it received and the issues, concerns, and opposition raised in those comments.

Under federal law, when an agency chooses a specific regulatory course of action, it must do so based on the data and experiences that are available to it. It cannot decide to issue a rule

simply because a majority of commenters were in favor of it. This requirement of “reasoned decisionmaking” necessitates comments that provide the agency with information about how the proposed rule will work in practice, the impact the rule will have on the affected industry and other stakeholders, and how the rule will help (or hurt) the larger society. Hard data, specific cost estimates, and on-the-ground knowledge are particularly useful for the agency in making its decision.¹

Most comments that come from individual members of the public, as opposed to large industry actors or major interest groups, consist of a mere vote in favor of or against the proposal, or a general public opinion on a proposed rule; however, the agency cannot take mere votes or “sentiment venting” into account when formulating the final rule. As a result, even when average citizens do participate in rulemaking, their participation is largely meaningless in the final decision (Coglianese, 2006; Kerwin, 2003). Yet most do not even realize this, because they are unfamiliar with the rulemaking process and how it differs from the most common form of public participation in democracy, voting.²

[Project name] is designed to provide an alternative means of participation in the rulemaking process in which individuals can learn about the requirements of the process, the substance of the proposed regulation, and how to participate effectively. Designed and run by a team of researchers and students, the website offers live rulemakings by the Department of Transportation. The [project name] team writes a series of blog-type “issue posts” describing the different topics in the rule, based on the NPRM and regulatory analyses. These posts are written in an accessible manner and point out areas where the agency is particularly looking for input

¹ For more information on the rulemaking process generally, see Lubbers (2006) and Kerwin (2003).

² This deficit means that while institutional actors, often from the regulated industry, can hire lawyers to submit detailed comments tailored to what the agency needs, the input of average citizens is lost. The process, then, becomes tilted in favor of regulated industry, and against the concerns of many individuals who are affected by the rule in different ways.

from the public. Users can come to the site, read the issue posts, and leave comments. A team of active moderators points users to useful materials and tries to help them provide comments that will assist the agency in crafting the final rule, often by suggesting that users include specific data or details about how they see the rule working in practice. The full text of the agency documents, including the NPRM and all regulatory analyses, is available on the site. The site also contains a variety of learning materials to teach users about the rulemaking process, how commenting works, and the functionalities of the site.

Near the end of the notice and comment period, the [project name] team creates summaries of the discussion that has occurred on each of the issue posts. In summarizing, we remain faithful to the words users have written, while at the same time giving more prominence to that information that we know will be more useful for the agency. These summaries are posted on the site, and users can comment on them to point out areas where they think the summaries fail to take account of, or misrepresent, something that was said during the discussion. The summaries are amended and then submitted to the agency on the last day of the notice and comment period as a formal comment. Like all other comments it receives, the agency must read the [project name] comment and respond to its criticisms and proposed alternatives when issuing the final rule.

Over the last two years, [project name] has completed three live rulemakings on the site, as well as one beta rulemaking: a beta test on a previously-issued proposed rule governing labeling for car tires, and live rules on texting by commercial motor vehicle drivers (the “texting rule”), airline passenger rights (the “APR rule”), and required use of electronic on-board recorders in commercial motor vehicles (the “EOBR rule”). As of late September, [project name] features a fourth live rule, on accessibility standards for airport ticketing kiosks and airline

websites. All rulemakings were conducted by the Department of Transportation or one of its sub-agencies. The number of visitors to the site for each live rule varied greatly, from a low of 1,999 visitors for the texting rule to a high of 24,441 visitors for the airline passenger rights rule.³

In brief, then, civic engagement in the federal policymaking processes illustrates the multifaceted and multilayered nature of the digital divide in this domain. The rulemaking process has inherent barriers to the general public participation, which may be preserved or mitigated through the use of information technology. The rulemaking process is complex and not necessarily transparent to an average citizen; the information that the agency provides to the public, written by government lawyers who are intimately familiar with the subject matter, is extremely lengthy, dense, and often confusing. Yet average citizens do have input that is valuable, and when they are able to provide that input, the agency is required to read it and consider it.

The internet is believed to mitigate some of these barriers by making the relevant information and the rulemaking process itself more accessible; this is the goal of initiatives such as the Regulations.gov website. Yet introduction of information technology into an a priori complex environment can be a double edged sword. The citizens who are most affected by the regulation very well may be members of those demographic groups who often fall victim to the digital divide, and so lack the access, skills, or confidence to jump into the deep end of rulemaking participation online.

The “build it and they will come” approach does not necessarily work in this case, because the barriers to participation are only partially technological (although technology can help addressing them). In fact, the technical and the non-technical barriers to participation may

³ There are a number of reasons for the variations in the number of visitors. For instance, whereas the notice and comment period for the texting rule was only 30 days, it was 110 days for the airline passenger rights rule. Additional details are available in project publications.

reinforce each other: Even when the technology is at hand, effective participation in this process is not entirely straightforward, nor is it easily comparable to other government processes that most individuals are already familiar with.

[Project name] is attempting to intervene in this space with the goal of enabling meaningful online civic engagement. The project is helping to engage individuals in a highly complex policymaking process that most of them have never heard of, much less participated in, by developing a technological platform and practices for its effective use.⁴ At every stage, the project must address a different aspect of the digital divide in online civic participation, starting with issues of motivation, continuing to an assortment of skills-related challenges, and ending with the political participation divide.

IV. [PROJECT NAME] THROUGH THE DIGITAL DIVIDE LENS

A. Motivation divide

The main barrier to participation of the public in the federal government policymaking is lack of awareness and lack of understanding of the rulemaking process. To have the motivation to participate one needs to understand the costs of benefits of her participation and it should be “worth it” for someone to put the time and effort in commenting on the rule. On the face of it, moving the commenting process online makes it more accessible, but at the same time it adds to the “cost” of participation as there are no well-established practices for online participation of the general public in the policymaking process, which implies a learning curve on behalf of the commenter and assumes a level a confidence in her skills of using the internet. The [project

⁴ According to survey results, 92.5% of registered users for the three live rulemakings on [project name] had never participated in a federal agency rulemaking or were unsure if they had done so.

name]’s approach to motivation came to focus on raising awareness and increasing the transparency of the rulemaking process.

1. Awareness

Contrary to the “build it and they will come” approach, making the rulemaking documents available online does not automatically generate broad public participation. Raising awareness of a particular rulemaking means developing and employing an outreach plan that targets the interested parties, particularly those who have been traditionally underprivileged in the rulemaking process. For an online project, such outreach should take into account existing disparities in access and the ability to use the Internet as the goal is also to reach audience that are typically absent from online civic engagement practices.

On [project name] the outreach process involves a mix of both offline and online activities. For example, offline, as soon as a new rule opens, the team sends out a traditional press release packet to various organizations that represent relevant stakeholders or their interests as well as to traditional media outlets. There is an appeal to relevant organizations to inform their members about the rulemaking that affects them and the ways they can participate using the [project name] website. Even then however, the response is not immediate and the outreach involves repeated “nudging” of the organizations to communicate the opportunity to their membership with limited success rate. While some organizations go as far as including mentions of the rulemaking process and [project name] in their newsletters and other communication, others do not respond. The offline outreach also includes targeting traditional media and engaging in public relations activities. For example, during the EOBR rule, a member of the [project name] team did an interview with a truck drivers station on satellite radio and the team

contacted special-interest print publications, such as Land Line Magazine. All of these activities are “expansive” and are typically omitted from the technology focused ethos of e-government.

Similar outreach strategies are employed online with an emphasis on social and alternative media. The [project name] focuses on identifying and exploiting the ties provided by existing communities. Social media, such as Facebook and Twitter, as well as targeted advertising, such as Google Ad Words, are used to reach relevant stakeholder groups in their “natural online habitat.” Those members of the affected communities, who do have online presence, are often lacking awareness or motivation to participate in the policymaking activities. Leveraging the affordances of these media, the project allows and encourages sharing of its content, which is a low cost activity. Over time, targeting those members of potentially affected communities who were already on the more sophisticated end of the spectrum in terms internet access and skills, but often lacked the motivation to use the web as a tool for government participation, appear to have been highly successful, particularly in the EOBR rule: two of the top sources of traffic to the site were Facebook and Twitter.⁵

DiMaggio and van Dijk both observe that one of the greatest predictors of whether an individual will have internet access and skills and will use them for “capital-enhancing” purposes is whether or not the individual’s friends, relatives, and coworkers have adopted similar uses of the internet (DiMaggio, 2004; van Dijk, 2005). Thus creating practice of online civic engagement is an important element of developing an e-government culture.⁶

⁵ Other top sources of traffic were search engines (Google, Yahoo, and Bing), the website of the Digress-It plug-in used on the site, the [university] site, and the Department of Transportation site. The most common way people got to the site was by typing the URL into the address bar.

⁶ In survey results, users reported that they shared information about [project name] with others through a variety of means, including email, on a webpage, on Twitter and Facebook, and by making an announcement at a conference. At this point, there is no way to definitively determine whether adoption of participation in rulemaking via [project name] sufficiently permeated the relevant stakeholder networks to reach the “tipping point” at which it becomes so common that members of the network feel they are missing something if they are not using it. Nonetheless, [project

2. Increasing process transparency

The complexity of the rulemaking process and its image as a highly bureaucratic endeavor add to the lack of awareness and experience with the rulemaking process among the general public. Taken together, these factors increase the perceived “cost” of engaging in the policymaking process. Consequently, making the rulemaking process itself more transparent should lower the anticipated costs and positively affect stakeholders’ motivation to participate. To increase the transparency of the rulemaking process, [project name] contains a “Learn More” page that gives a one-paragraph overview of what rulemaking is; the user can expand the paragraph to get a more in-depth lesson on the process. If a user wants more detail still, there is a link at the bottom to a step-by-step description of everything that happens when an agency makes a regulation. In addition to a description of the steps of the rulemaking process, there is a section on effective commenting. This section explains what federal agencies are looking for in public comments on proposed rules, and what goes into a good comment. The information on the “Learn More” page is written by the [project name] team at a high school reading level. On the website home page, links to the Learn More pages are prominently displayed and clearly marked with questions such as “How does rulemaking work?”⁷

B. Skills divide

Skills to use the computer and the internet have long been recognized as an important factor in people’s ability to utilize web-based opportunities for their social, political, and financial capital enhancing activities (DiMaggio et al., 2004). Those who are more affluent

name]’s increasing successes at inducing participants to tell others in their communities about the site is certainly a positive sign.

⁷ The efforts taken by [project name] to increase the transparency of the rulemaking process may be necessary, but not sufficient. The Learn More page attracts very few visitors, and those who do view it stay there for a limited time. For instance, in the EOBR rule, only 2.9% of page visits were to the Learn More pages, and the average time spent on those pages was 1.29 minutes, compared to 2.32 minutes for all pages on the site. In the airline passenger rights rule, visits to the Learn More pages accounted for only 0.37% of all page views, and users spent 1.25 minutes on those pages, as compared with 3.17 minutes on all pages on the site.

online are more likely to engage the government, beyond pure consumption of its services and information (Smith, 2010). Yet, for such a specific and well-defined activity as rulemaking, general internet skills may be not enough, and in fact, too much of the Internet culture may impair effective participation in policymaking. On [project name], the users must not only be able to use the functionality of the site and know how to interact with a social, content-oriented platform, but also know how to make an effective comment that will be useful for the agency. [Project name] focuses on addressing the issue of skills by making explicit efforts to lower the technical skills threshold and develop practices that enhance users' process-relevant skills.

1. Technical skills

One of the primary goals of [project name] is to engage individuals who have never participated in the rulemaking process before. Thus, the goal of the platform design was to streamline the usability in the service of the process.⁸ One of the first issues [project name] dealt with in coming up with initial designs for the site was how to give a prominent place to the main functions of the rulemaking process: learning about the agency's proposal, and providing input on the proposal. [Project name] also offers the ability to read other users' comments and respond not only to what the agency has said, but also to what other stakeholders have said.⁹ Each of these functions needed to be readily apparent to all users, particularly those who were unfamiliar with the different functions that could be performed on a government participation website.

Making the core functionality explicit and adding explanations in places where it seems redundant to an experience user, is part of the effort of lowering the skill barrier. For instance, based on a feedback from users who did not know how to comment, added text in the comment

⁸ The research team could not make choices based on the assumption that users would be familiar with functionalities that serve the rulemaking process, such as those at the base of the federal government's e-rulemaking portal Regulations.gov. Those functionalities include a particular way to access various rulemaking documents, read other users' comments, and leave comments of one's own.

⁹ While available on Regulations.gov, this functionality is not highlighted there.

box that says, “Click here to comment,” changed the wording of the button under the comment box from “Submit” to “Submit comment,” and made the color contrast stronger. Moreover, the team added a “How do I comment?” link underneath the comment box that, when clicked, opens a video explaining how to comment. The aim of the iterative process of streamlining the navigation and highlighting the main functions of the platform, is to lower the online skills requirement from [project name] users.

2. Process skills

Most users come to [project name] with little, if any, familiarity with the rather arcane process of federal agency rulemaking. Survey data suggests that upwards of 90% of visitors to the site have never participated in a rulemaking before. Many users who first come to the site assume that rulemaking is like voting, so that expressing their opinion on the rule is all that is required. One of the most difficult educational tasks [project name] faces is to counter this “voting instinct.” So, in addition to the often complex substantive subject matter of the proposed rule, voters must contend with a public participation process that on the surface appears similar to voting, but in reality is entirely unfamiliar. To address such process-related difficulties, [project name] employs a series of technical and procedural solutions.

Some of the technical solutions were also aimed to lower the skills requirements related to the rulemaking itself. In other words, these solutions intended to assist the users in making meaningful comments. For example, the Digress-It plug-in also allows to “dissect” the lengthy rule into subtopics and sub-subtopics. If a user is interested in on specific aspect of the proposal, she can click on the relevant Digress-It section within an issue post and see what other users have been saying about that aspect, and add her own targeted comments. At the top of each issue post, there is a list of sub-topics, and by clicking on the topic they are interested in, users are

taken to that specific paragraph and its accompanying comments. Given the wide range of issues often covered in a rulemaking proposal, and the cognitive complexity of many of them, giving users easy access to only those issues that interest them or affect them directly represents a major interface innovation to increase accessibility for all users. Furthermore, allowing users to highlight just one Digress-It section and see only the comments associated with that section cuts down on the amount of text on the page.¹⁰

The technical solutions, however, provide only a partial answer to the process skills deficit; active moderation of the comment space is a pivotal component of the [project name] solution. Very few [project name] users visit those pages on the site with explicit educational materials; much of the education about the rulemaking process must be done by the moderators. Moderators are trained to respond to users who simply say, “This is a bad idea!” with an explanation that rulemaking is not a vote and some tips on providing information that is useful for the agency. Similarly, when a user suggests that the agency take a course of action that is outside the scope of the current proposed rule, or is indeed outside the scope of authority that Congress has granted to the agency, moderators explain that the agency cannot do what the user has suggested and guide the user back to the proposal under consideration. In the most recent

¹⁰ While the [project name] team strives to ensure that the issue posts contain all the information most users will need to make educated and effective comments on the proposal, it is still important to provide access to the full text of all rulemaking materials. There is a line at the end of each section in the issue posts that says, “You can see what the agency had to say here,” and includes a link to the section of the NPRM or rulemaking analysis that is described in that portion of the issue post. As a further means of making users aware of and giving them access to the agency documents, on version four we created a system of tabs at the top of the webpage that users could click on. The tab that is open by default when a user goes to a section of the rule is the issue post tab. There is also a tab labeled Agency Documents, however, that users can click on if they wish. Prior to introducing the tab design, agency documents could be accessed via an inconspicuous link at the top of each issue post. The introduction of the tab system resulted in a marginal increase in views of agency document pages. This could mean that the agency documents are still too difficult to find or, more likely, that very few users feel a need to access those pages.

rule, the team added a feature of “recommended comments” as another means of implicitly conveying to users how to provide effective comments.¹¹

Both moderator techniques and the recommended comment feature show users who may be hesitant to participate out of fear that they do not fully understand the process an opportunity to see how rulemaking, specifically the commenting portion, plays out in reality. Moderators always adopt an encouraging tone, even when correcting users’ misunderstandings about the process, eliminating some of the intimidation inherent in leaping into an entirely unfamiliar policymaking context. And by modeling their comments after recommended comments, more cautious first-time users can feel more comfortable that they are “doing it right.” Similarly to the case of lowering the motivational barrier, overcoming the skills divide require additional effort beyond technical solutions.

C. Political participation divide

The third aspect of the digital divide that is relevant to online civic participation is more general political participation divide. It is not only the lack of knowledge of the rulemaking processes that poses a hurdle in the way of public participation in the process; rather, it is also the more broadly defined misunderstanding of the political process and perhaps even mistrust in the ability to make one’s voice heard that prevent people from effective participation in the policymaking processes. In addition to the steps aimed at making the rulemaking process more transparent, [project name] addresses some of these broader barriers by focusing on the language barrier between the agency and the public; by ensuring that the users make their voice heard with

¹¹ Moderators recommend comments that are easy to understand, contain reasons for the position the commenter takes, and include facts, data, or personal experiences that support the commenter’s stance. Often in a response to a recommended comment, a moderator will commend the commenter for one or more of the features that earned the comment a recommendation.

the agency; and by acknowledging the concerns citizens have in their interactions with the powers that be.

1. The language barrier

The complex language and the highly professionalized jargon used in federal rulemaking constitute another barrier to broader public participation in the policymaking process, even though the possibilities exist through outlets such as the Regulations.gov portal. Thus, in addition to choices about the website interface and the technology used on the site, the [project name] team has made deliberate decisions in how the substantive content of a proposed rule is conveyed to the public. The content presented is intended to be accessible to users with a variety of education levels, internet skill levels, and degrees of understanding of the rulemaking process and the substantive subject matter of the rule. Recognizing that many users lack what Wilson calls the “inequality of cognitive access” (Wilson, 2000) or, as DiMaggio et al. (2004) describe it, “the extent to which users are trained to find and evaluate the information they seek” (p.377), we have instituted multiple mechanisms to help users both locate and make sense of relevant information regarding the proposed rulemaking.

The majority of the substantive content on the site is presented in the issue posts. These posts, written at a high school reading comprehension level, are written with the assumption that the reader has little or no knowledge of the subject the agency plans on regulating. The posts pull out the most important information included in the very lengthy and confusing notice of proposed rulemaking and regulatory analyses and are written in a less formal, more conversational tone that is easy to understand and follow. Furthermore, the issue posts highlight, in the form of questions, information that the agency in particular hopes to gain from the notice and comment process. Simple and straightforward questions are obvious signals to even the least

sophisticated users that this is a place where input is wanted. This fundamental step towards enabling public participation relies extensively on expertise that lies outside of the technical system.

2. Meaningfulness

One of the main hurdles in the way of public participation in the policymaking processes is the skepticism that one's voice can actually be heard in the large-scale bureaucratic endeavor such as the rulemaking. In the context of [project name], this concern is mitigated primarily through moderation practices aimed to produce better comments. To assist users find information that will help them understand the agency proposal and offer helpful comments, moderators point users to information they might find helpful.

Moderators are trained to look for clues to the user's approximate level of technological sophistication and degree of familiarity with both the rulemaking process and the substantive area under consideration. Moderators then choose the approach they take with users based on the information the user has provided and the capacity the user has displayed for engaging with the content of the agency proposal in a way that will provide valuable input for the agency. For more sophisticated users, moderators may suggest that they examine specific details of the agency's proposal and respond to any errors or inconsistencies they see. They may ask users to examine previous statements in light of different sections of the agency proposal, or to provide sources or citations for data included in a comment.

For users who appear less adept at either making sense of the agency proposal or adding comments that are useful for the agency, moderators may include very simple explanations of the proposal or attempt to focus the user's attention on an area the moderator believes the user may be able to comment effectively on. As a less sophisticated user returns and comments repeatedly,

the moderator pushes him or her to engage with the material on a deeper level and conduct a more advanced analysis of it. In this way, each user is encouraged to take advantage of the opportunities offered by [project name] in the fullest manner that he or she is capable of.

Many users on the site express frustration that they feel that their voice does not matter and that any participation is futile in the end, either because the process is dominated by powerful interest groups or because the agency has already decided how to act and will not change course. To counter this widespread sentiment, moderators engage in regular encouragement of commenters. They offer frequent “pats on the back” and point out where a comment provides information that is particularly useful for the agency. This technique works not only to encourage further participation on the part of the user whom the moderator is addressing, but also to demonstrate to other users that on [project name], individual citizen participation in government decision-making is highly valued. Users are constantly reminded and reassured that their voice need not be silenced in the policymaking process, and that participation is not in fact futile.

At the end of the comment period, the [project name] team composes a summary of the discussion that has happened on the site. To ensure that users do not feel that those in charge of the website are commandeering their comments and misrepresenting what they have said, there is a draft summary phase during which all users can read the summaries and suggest changes. If a user feels that the summary has misrepresented something that was said on the site, she can offer a correction, and the summary will be amended. This ensures that users feel that their voices are the ones heard in the summary that is sent to the agency, not the voices of [project name] team members.

3. Acknowledging the concerns

An array of concerns that are external to the rulemaking process constitutes another layer of complexity in the barrier to effective civic engagement in federal government policymaking. While members of the public are accustomed to consuming public goods and official government information, engaging in a direct dialogue with a federal government agency is a relatively rare practice. People project their prior experiences of interacting with the government agencies, as well as their prejudices and hesitations regarding the policymaking process.

To address potential fears, [project name] users may, for example, remain entirely anonymous on the website. While registration is required before users can leave comments, they do not have to provide a real name to register. The only identifying information that is required before users comment is collected from two survey questions: whether the user has ever participated in a federal agency rulemaking, and what their interest is in the rule. This data is collected so that [project name] can report to the Department of Transportation the different stakeholder groups represented on the site, and what members of those groups had to say about the rule. Beyond identifying a user as a member of a broad stakeholder group, however, no further demographic or identifying data is collected. In their comments, of course, users may choose to reveal more about their personal experiences and identity, and many choose to do so in order to explain where their knowledge about the agency proposal comes from.

Especially for those users who suffer from what van Dijk (2005) calls a lack of motivation due to concerns about internet use, this anonymity offers an increased level of reassurance that user data is not collected and shared with others. Because van Dijk asserts that intermittent internet users feel they have a more insecure position in society and that internet dropouts feel they have less control over their lives, the protection from secondary negative consequences that anonymity provides may be particularly helpful for these users that have

otherwise relatively limited access. They will not feel the increased risk of their employer discovering that they have been participating in a rulemaking that will affect the industry they work in, for example.

For users who are unaccustomed to online interaction with government or online participation in government processes, and especially for those users who have avoided government interactions online due to privacy concerns, [project name]'s offer of anonymity is particularly attractive. In the government-run notice and comment process, agencies may choose whether or not to accept anonymous comments. Thus, while Regulations.gov users may choose to leave their comments anonymously, there is no guarantee that the government will read their comments and take them into account when formulating the final rule. On [project name], however, users may retain total anonymity, and their comments will still be included in the official summary sent to the agency ([project name] identifies itself as the entity submitting the comments, so its comments are not considered anonymous by the agency.) [Project name] offers those users who may be more uneasy about government participation online a "safe" environment in which they can do so without worries about the government discovering their identity.

IV. CONCLUSION

Producing a successful mechanism for online public participation in government decision-making is complex and resource-intensive. Adding the "e" to the processes of government and civic participation requires taking an expansive look at the digital divide. It goes far beyond creating "a simple discussion forum," as a former senior White House official once (incorrectly) described [project name] or simply designing the right tool. It requires adjusting the

process and allocating resources to non-technological activities that contextualize online participation.

The case of the [project name] illustrates that contrary to the commonly held belief of technological innovation reducing the costs of enabling civic participation, the actual costs may lie outside of the technical domain. In other words, while information and communication technology is indeed an enabling tool and in the context of e-government it is a necessary one, it is not sufficient to ensure effective public participation. Specifically the [project name] case highlights the importance of addressing the motivation for online civic engagement by increasing awareness and process transparency, lowering the skill barrier when it comes not only to the technical skills, but also to the process of participation in the bureaucracy, as well as addressing contextual factors that lie completely outside of the technological realm when it comes to the policy language barrier and addressing various concerns members of the public may have based on their perceptions and previous experiences of interacting with the government.

All the factors discussed in this paper are inherently interrelated. Some of them are indeed technical and are focused primarily on design decisions and iterative approach to developing technological platforms for public participation. The majority of the factors, however, lie outside of the technological domain. The challenges of motivating the public, addressing its fears of complex bureaucratic processes, overcoming their mistrust and skepticism of the system, and educating them about the particular format of policy debate all belong to the analog world of process planning, outreach, and education. The social and physiological factors impacting civic participation require attention of the policymaker and further research from the academic community. While the mainstream debate about civic participation online is focused

primarily on technological solutions, the nuanced lens of the digital divide illuminates the non-technical aspects of non-participation.

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