DESIGNING AN ONLINE CIVIC PARTICIPATION PLATFORM

Socio-Computational Supports for Finding, Enlisting, and Motivating Contributors

August 6, 2014
Elizabeth L. Murnane
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Socio-Computational Supports for Finding, Enlisting, and Motivating Contributors
Today’s Presentation

• Introduction

• eGovernment & eRulemaking background

• Cornell e-Rulemaking Initiative, RegulationRoom
  • Recruitment of (under-represented) stakeholders
  • Facilitating engagement & collaboration
  • Assessing quality & value of participation
About Me

Research
• **Interests**: User Modeling; Recommender Systems; Social Computing
• **Domains**: Mental & Physical Health, Civic Innovation

Current
• Cornell Information Science
• 2011-present (4\textsuperscript{nd} year PhD)
• Committee: Profs. Dan Cosley (chair), Claire Cardie, Geri Gay

Background
• MIT S.B. in Mathematics with Computer Science, 2007
• Co-founder of MIT CSAIL startup, 2007-2011
• NSF Graduate Research Fellow, 2011
Background

• “e-Government”, “Open Government”

• Goals
  • alert and engage citizens
  • increase information access
  • provide interactive discussion spaces with lowered barriers for engagement that welcome diverse opinions

• In practice
  • redundant, irrelevant, polarized content
  • policymakers & citizens frustrated
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- **Rulemaking**: process federal agencies use to create regulations ("rules")
  - Public notice → open comment period → agency evaluation
  - 2001-2010: over 38,000 rules finalized
  - 2003-2010: 568 major rules with $100 million economic effect
  - Traditionally dominated by sophisticated and resourced entities

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  - Still poses barriers that prevent effective, broad engagement from citizens
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CeRI: Cornell eRulemaking Initiative

• Multi-disciplinary team
  • Law school, Legal Information Institute, Scheinman Institute on Conflict Resolution, Communication, Information Science, Computer Science

• Addressing behavioral & technical challenges
  • Social + behavioral sciences, NLP, HCI
Open Rules

Consumer Debt Collection Practices (ANPRM) 1207™

The Consumer Financial Protection Bureau (CFPB) might propose new federal rules on how creditors and debt collectors can act to get consumers to pay overdue credit card, medical, student loan, auto or
Since 2010 launch:

- 5 rulemakings
- DOT, CFPB partnerships
- Recognition
Civic Engagement Cycle

- Learn
- Question
- Contribute

1. Recruitment
   - Identify stakeholders
   - Target
   - Motivate

2. Deliberative Discussion

3. Consensus-building
   - Collaboration
   - Summarization
   - Consensus
Civic Engagement Cycle

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Participation Patterns

Since 2010:

- **40,500** visitors made **60,000** site visits
- **1,566** registered users
- **5** separate hosted rulemakings
- **1,544** individuals participated in various forms
- **609** actively engaged in deliberation
- **1,537** total comments generated
- **80%** of participants never took part in a rulemaking prior

Regulation Room
Hurdles to civic engagement

1. Motivated awareness barrier
2. Information barrier
3. Participation literacy barrier
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- **Identifying social and psychological drivers of effective civic engagement (Social science)**
- **NLP techniques to support effective civic engagement (Computer Science)**
- **Designing to support the cycle of civic engagement (HCI)**
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2. Information barrier
3. Participation literacy barrier
Motivated Awareness

• **Communications outreach plan**
  - Identify stakeholders
  - Outreach – email, phone, online communication
  - Social & online media – Twitter, Facebook, Google ads

• **Coordinated media outreach**

• **Framing (pos vs. neg; loss vs. gain; episodic vs. thematic)**
  - Personal stake
  - Participation efficacy

• **Leveraging existing social networks**
  - Peer referencing
  - Peer generated invites vs. authority figure invites
Motivated Awareness

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Accessibility

- Notices of proposed rulemaking (NPRMs)
- Economic analyses

- Triage
- Translation
- Layering
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Regulation Room
- Triage
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### Discussion

**When consumers dispute a debt** - 133

Select other topics

<table>
<thead>
<tr>
<th>Subtopics</th>
<th>Questions</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What’s going on now with consumer disputes?</td>
<td>41</td>
</tr>
<tr>
<td>2</td>
<td>What should count as a “dispute?”</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>How should collectors investigate and “verify” the debt?</td>
<td>38</td>
</tr>
<tr>
<td>4</td>
<td>What should happen with unverified debts?</td>
<td>16</td>
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## Translation

- Airline regulation = 25,000 word Notice of Proposed Rulemaking (NPRM) + 34,000 word Cost-Benefit Analysis
- Home mortgage NPRM > 800 manuscript pages
- Graduate school level readability score

<table>
<thead>
<tr>
<th>From an original NPRM</th>
<th>vs.</th>
<th>From a translated NPRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>In addition, the Bureau has the authority to, after considering enumerated factors, conditionally or unconditionally exempt any class of covered persons, service providers, or consumer financial products or services from any provision of this title, or from any rule issued under this title, as the Bureau determines necessary or appropriate to carry out the purposes and objectives of this title [title X of the Dodd-Frank Act].</td>
<td></td>
<td>Consumers have the right to dispute a debt in collection, and both FTC and CFPB get a lot of complaints that collectors have the wrong debtor or are trying to collect more than what's owed.</td>
</tr>
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</table>
Layering

Regulation Room™

Home | Open Rules | Learn | About | Announcements

Consumer Debt Collection Practice ANPRM (Advanced Notice of Proposed Rulemaking)

Advance Notice of Proposed Rulemaking is the document an agency uses to get public comment on ideas and questions about possible new federal regulations before the agency is far enough along to have a specific proposal in mind.

An agency publishes an "Advance Notice of Proposed Rulemaking" to outline what it's working on and identify important questions or areas where it needs more information. The idea is to get initial feedback and information from the public to help in drafting the proposal. For a quick look at how the ANPRM fits into the entire rulemaking process, see What is Rulemaking.

The Regulation Room team produced this hypertext version of the "Debt Collection (Regulation F)" ANPRM. You can also view and print the ANPRM in the Federal Register.

BILLING CODE: 4810-AM-P
BUREAU OF CONSUMER FINANCIAL PROTECTION
12 CFR Part 1006
[Docket No. CFPB-2013-0033]
RIN 3170-AA41
Debt Collection (Regulation F)
AGENCY: Bureau of Consumer Financial Protection.
Hurdles to civic engagement

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Facilitating Participation

• Educational materials
• Targeted commenting
• Facilitative moderation
• Site design
What is effective commenting?
Discover how to make comments that count—and maybe change the outcome!

The key to writing effective comments is understanding how rulemaking decisions are made. Unlike members of Congress or the President, agency rulemakers aren't allowed to decide based on majority vote. Instead, they are supposed to study the problem, collect information, and use expertise, experience, and good judgment to come up with the overall best answer. The courts would overturn a rule that the agency adopted just because a lot of people support it.

This means that the best comments explain not only what the agency should do, but why. One person with some new information, a relevant personal experience, or a good idea will have more impact on the outcome than 1,000 people who just say they are for or against the proposed rule.

So, how do you make comments that count?
Targeted Commenting

at the beginning of the sentence. Should read..."If the amount of the debt reverted back to what it was at the time of the default, you can bet citibank would be working hard to work with me".

I have a 20 year plus debt. A couple of times I have refinanced and payed everything on my credit report. They never appear until it's over. Every year they get a judgement against me and freeze my bank account putting me behind on my bills.

Hello tankheadsr, thanks for joining us on RegulationRooM. This sounds like a
## Targeted Commenting

**Discussion - 1205**  
**Draft Discussion Summary - 51**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Views</th>
<th>Likes</th>
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<tr>
<td>Telling consumers what's happening with their debts</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>The &quot;validation notice&quot; sent to consumers</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>When consumers dispute a debt</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Making sure debt collectors &amp; buyers have info about the debt</td>
<td>6</td>
<td>0</td>
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<tr>
<td>Unlawful collection practices</td>
<td>6</td>
<td>0</td>
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<tr>
<td>Conclusion</td>
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| **Social Functions** | Welcoming  
Encouragement; appreciation of comment  
Thanks for participating |
| **Site Use Issues** | Resolving technical difficulties |
| **Explaining the Role of Moderator** | Providing information about the goals/rules of moderation  
Providing information about who we (CeRI) are |
| **Policing** | Redact and quarantine  
Civility policing  
Wrong venue (redirecting user who wants to do something other than comment on the agency proposal, e.g., file a complaint) |
| **Substantive** | |
| **Clarity** | Asking for clarification of comment |
| **Wrong Information** | Correcting misunderstandings about the proposal or clarifying what the agency is looking for |
| **Substantiation** | 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 |
| **Focusing Comment** | Getting an off-topic commenter to engage the issue post  
Organizing discussion |
| **Further Engagement** | Asking for more information, factual details, or data  
Asking them to make or consider possible solutions/alternatives |
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• Supporting moderator efforts & communicating norms
  • “Endorse” function
  • “Recommend” function
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• Teaching community and commenting norms
Site Design

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• Teaching community and commenting norms

• Increasing the visible value of contribution
  • Trivia challenges, points, badges, rewards
Editing Interfaces

- Writing support
- Collaboration
- Policymakers
- Advancement
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Mechanical Turk study

- **Members**: core, active, peripheral, outsiders
- Motivating peripheral members to increase activity
- Manipulate commenting interface to prompt contribution

- Study participants: Mechanical Turk Workers
- Opportunity
  - Worker challenges, motivations, communities
  - Experiences, attitudes regarding Amazon policies
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Measuring Engagement

• Standard web analytics
  • # of visitors, comments, page views

• Volume of new voices
  • 64% < volume < 98%

• Civic education

• Value to policymakers
  • Public comments cited in both finalized rules
  • Incorporate public comments despite industry opposition
  • In airline rule, cited comments appear in almost 20 different sections of agency’s discussion of new rule
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Thank you!
Questions, feedback, and guidance welcome

Elizabeth Murnane
elm236@cornell.edu
Automation

• Previous attempts at automatically evaluating contribution quality
  • Legal sophistication, comment length, expert self-identification
  • Not sensitive enough + miss unique value

• Differentiating claims that are supported vs. unsupported

• Detecting situated knowledge

• Easing moderator burden

• Targeting recruitment, funnelling work, personalizing moderation
Addressing Hurdles

1. Awareness
   - Who are the likely participants?
   - What information do they need to engage as equals?

2. Accessibility
   - Making complex information accessible?
   - Effective mechanisms beyond voting and bargaining?

3. How to participate effectively
   - Facilitating contribution?
   - Moderation techniques?
The People
A major goal of eRulemaking is to increase public participation across a broad audience and make the process more representative.

A major challenge is sustained participation by multiple actors across rules.

- **Twitter** is a popular medium where people express views and ideas.

A solution is to bring new users to an e-rule.

- Identify and target Twitter users who may be interested in contributing feedback on a rule.
Experiment

• How useful is Twitter content for drawing inferences about people’s interests and knowledgeability about a topic?
• Are users who create content about topics relevant to an e-rule more likely to engage in related e-Rulemaking processes if targeted with requests for participation?
1 Identify Subjects

**User:**

Document term matrix

- D1 = bio
- D2 = tweets
- D3 = bio+tweets ("combo")

**Rule:**

Query

- \( q = \text{words in rule} + \text{query expansion} \) *

- Similarity between query and each document
- Highest score used to assign user to condition

* via Google Keyword Tool, which provides less technical words used by public to discuss same topics
Send Tweets

- Highest ranked users in each group sent an outreach tweet
Measure Response

- Engagement (retweets, replies, and follows)
- Click Through Rate
- Contributed to the rule