Large-Scale Ideation & Deliberation: Tools and Studies in Organizations

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INTRODUCTION TO THE SPECIAL ISSUE

Why should researchers and designers care?

Social computing research has rapidly evolved during the past decade. Large crowds of people are now able to share knowledge using wikis, blogs, and forums; communicate using social networking platforms; and perform tasks using crowdsourcing platforms. Research on Collective Intelligence (Malone, Laubacher, & Dellarocas, 2010) has improved our understanding of how Web technologies and social media, in general, can enable groups (from small to large numbers of people) to think, make sense, and act as a group in more intelligent ways than they would have otherwise done in isolation and without technology mediation. In the meantime, many organizations have appropriated social computing for their own benefits. Thus, a new frontier for design and research has emerged: tools that support large-scale ideation as well as defined and repeatable deliberation processes in organizations. This new frontier is the topic of this special issue.

Consistently with the vision put forward by the editors of the Journal of Social Media for Organizations (Convertino, Damianos, Drury, & Grudin, 2014), the technology settings of interest for the special issue are organizations, broadly intended. These include large civic communities (e.g., the first three articles in this special issue) and business organizations (e.g., the fourth article; Westerski, Dalamagas, & Iglesias, 2013) that deliberate on issues of common interest.

Prior events that led to this issue

The growing engagement of research and industry in developing these deliberation technologies has triggered a number of international events for researchers and designers. In particular, this special issue is an outcome of sustained interest for the topic during a series of three international workshops on Large-Scale Ideation and Deliberation (LSID) organized during three conferences: Computer-Supported Cooperative Work (CSCW) 2012 in Seattle (USA, www.parc.com/ciorg), The 10th International Conference on the Design of Cooperative Systems (COOP 2012) in Marseille (France) and the Conference on Communities and Technologies (C&T) 2013 in Munich (Germany).

Those three workshops on ideation and deliberation emerged as a focused debate within the broader discussion on collective intelligence in organizations. In fact, the tools and studies for collective intelligence in organizations have been the topic of a previous special issue that appeared in the Computer Supported Cooperative Work journal (Grasso and Convertino, 2014).

The current special issue presents research on the evolving LSID domain. Further, it aims to broaden the community of researchers formed during the three workshops by attracting new authors and informed readers who have conducted related work.

The four articles in this issue contribute a mixture of mature findings from research iterated and improved over a series of publications as well as a fresh look at new exciting projects by researchers and practitioners who have joined the above-mentioned informal community on LSID during the past few years.

Large-Scale Ideation and Deliberation Systems: the topic and the open challenges

A number of promising applications have been developed for commercial and non-commercial uses, such as: Ideastorm, Project 10 to the 100, and the LivingVoters guide. Powerful software support platforms have also been deployed (for example, see www.spigit.com, www.ideascale.com, www.brightidea.com, http://evidence-hub.net/). Many types of organizations, from business to education to government, are seeking such platforms to include their constituencies in their deliberation processes, and their constituencies increasingly expect such opportunities.

LSID platforms, however, face open challenges that include:

- Overwhelming contribution volumes with large redundancy and variable quality

- Visualizing and managing large-scale deliberations

- Summarizing the state and content of deliberation to promote engagement and deepen understating, comparing, prioritizing and evaluating ideas or groups of ideas

- Generating collective creative solutions

- Translating proposals into commitment to action

- Proposing interaction, browsing, and input methods that stimulate participation and substantively empower participants

- Handling complex problems whose solutions require many interdependent parts

- Defining, evolving, and applying agreed-upon value criteria among multiple stakeholders

The challenges listed above have been used as the starting point for the ongoing debate on future LSID systems during the events that preceded this special issue (see the workshops mentioned above). The solutions to cope with such challenges, the priorities for addressing them, and the lessons learned during field studies and experiments with deliberation systems are the highlights for the content of this journal special issue.

The articles

This Special Issue edition of the Journal of Social Media for Organizations includes four articles reporting research done worldwide in relation to LSID. Each article focuses on a different area and presents the reader with unique insights of top-class researchers engaged in deliberation projects set in a variety of application contexts.

The first article by Aitamurto and Landemore is entitled "**Five design principles for crowdsourced policymaking: Assessing the case of crowdsourced off-road traffic law in Finland**." This article reports on a pioneering case study where crowdsourcing was applied to the law-reform process; that is, citizens in Finland contributed to the law-reform process by sharing their knowledge and ideas for defining a better policy. The authors address the question of what design principles should govern crowdsourced policymaking processes. They analyze the results of the experiment and put forward a design framework of five principles for crowdsourced policymaking: inclusiveness, accountability, transparency, modularity, and synthesis. The principles apply to both the process and the technology for deliberation. In addition to the rare in-vivo experiment, this article contributes a theoretical framework that can serve as a reference system for the designers of future deliberation technologies for communities that want to define their own public policies.

The second article by Bertone, De Cindio, and Stortone is entitled "**LiquidFeedback in Large-scale Civic Contexts: Framing Multiple Styles of Online Participation**." The article reports on two case studies of two communities of citizens in Italy, who do large-scale deliberation via the LiquidFeedback platform. The authors describe the innovative features of this open-source platform which had been developed and used by activists in Germany but, in these two case studies, is used by thousands of Italian "pioneer citizens." For each case study, authors analyze the political context and the impact of socio-technical design choices. Besides describing the platform, the deliberation process, and the two case studies, the article extracts useful lessons learned from the two use cases. It analyzes how different participation styles take place in both case studies. Further, it describes the implications of deploying the LiquidFeedback platform, which was designed to support a rich and complex deliberative process, for public deliberation purposes in civic contexts.

The third article by Kropczynski, Cai and Carroll is entitled "**Understanding the Roles of Artifacts in Democratic Deliberation from the Citizens' Initiative Review**." This article reports on an ethnographic study of the Oregon Citizens' Initiative Review (CIR), a democratic deliberation practice observed in Oregon USA. The CIR uses public deliberation of a panel of citizens to create a voters' pamphlet about a particular ballot measure. The ethnographic study identifies the main mediating artifacts contributing to the production of quality deliberation outcomes and proposes ways in which the CIR deliberation process can be enabled in an online environment and therefore move to a larger scale of participation. The description of the artifacts is also used to describe the CIR deliberation process details and quality. The authors study high-quality deliberation processes and the challenge to enable such processes at scale.

The fourth and final contribution by Klein and Convertino is entitled **"A Roadmap for Open Innovation Systems."** This visionary article concludes the special issue by proposing a direction for the future development of LSID systems in Open Innovation spaces. The article is a position paper that presents a formalized view on Open Innovation systems with a detailed analysis of achievements so far as well as yet unsolved challenges. In response to those challenges, the authors chart their "Roadmap for Open Innovation Systems" and support it by contributing a description of three techniques: micro tasks, semi-formal systems, and attention mediation.

In summary, the four articles include a variety of contributions: the first three articles present case studies of large-scale deliberation in three different countries, and the fourth presents a critical analysis of the state of the art of the research on open innovation systems in organizations. To better guide the ongoing proliferation of social technologies in organizations, social computing research needs theoretical contributions that are grounded in rigorous studies of real technology deployments. The first three articles present rare exemplars of this type of contribution: in-vivo studies that offer reusable lessons for future design. In addition, the last article offers a useful roadmap by calling the attention of researchers and designers to promising approaches and key open challenges.

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