# T01P08 / Crowdsourcing as a Policy Tool: Co-Production in the Digital Era

Topic: T01 / Policy Process Theories

Chair : Araz Taeihagh (National University of Singapore)Second Chair : Michael Howlett (Simon Fraser University)

# GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Using crowds is more than a procedural novelty: it is a form of co-production which opens new venues for direct contact between the state and citizens that can affect the force and direction of decision making. However, to date, both 'crowdsourcing' and 'co-production' remain ill-defined and weakly investigated. This panel will present papers discussing the strengths and weaknesses of the use of this tool for public policy-making. Papers will contrast digital crowdsourcing with other types of tools and present evidence of its success and failure to enhance policy-making. Cross-national and cross-sectoral studies are especially welcome as are theoretically informed case studies.

# CALL FOR PAPERS

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# T01P08 / Crowdsourcing as a Policy Tool: Co-Production in the Digital Era

Chair: Araz Taeihagh (National University of Singapore)
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### Session 1

Friday, June 30th 10:30 to 12:30 (Block B 2 - 1)

#### **Discussants**

Araz Taeihagh (National University of Singapore) Helen Liu (National Taiwan University)

#### Examination of crowdsourcing as a tool for policy making

Araz Taeihagh (National University of Singapore)

Crowdsourcing is rapidly evolving and applied in situations where ideas, labour, opinion or expertise of large groups of people are used. Crowdsourcing is now used in various policy making initiatives; however, this use has been usually focused on open collaboration platforms and specific stages of the policy process such as agenda-setting and policy evaluations. Moreover, other forms of crowdsourcing have been neglected in policy making with a few exceptions. This paper examines crowdsourcing as a tool for policy making and explores the nuances of the technology and its use and implications for different stages of the policy process.

Keywords: Crowdsourcing, Policy cycle, Policy Process, Policy Tool, Open Collaboration, Virtual Labour Markets, Tournaments, Competition, Public Policy

#### Conceptualizing crowdsourcing for public policies

Helen Liu (National Taiwan University)

#### Abstract

Crowdsourcing has been adopted as a policy tool in the public sector with previous cases demonstrating that crowdsourcing can reduce administration costs, improve service efficiency, and enhance the relationship between the government and the citizens. For instance, since 2015, the Obama administration has requested all federal agencies to allocate at least one officer to coordinate crowdsourcing and citizen science projects. Meanwhile, scholarly work and practical reports have demonstrated recent crowdsourcing successes, such as Next Stop Design (Brabham 2015), Peer to Patent (Noveck 2009), Challenges.gov (Mergel 2011), and other recent federal initiatives (Bower and Shanley 2013).

The purpose of this paper is to provide a two-by-two conceptual framework to classify the functions of crowdsourcing as illustrated by international policy cases. Building on theories of government-citizen relations and co-production, this paper classifies crowdsourcing by drives (government demand vs. citizen supply) and nature (service vs. expressive). This framework then illustrates four types of crowdsourcing in terms of function, namely information creation, service coproduction, solution innovation, and policymaking. This paper then selects international cases to illustrate the characteristics of these four different types of crowdsourcing and makes suggestions for suitable criteria to adopt the four types of crowdsourcing given their potential costs and benefits as well as governments' various objectives.

Contribution to the Panel Topic: Crowdsourcing as a Policy Tool

Building on existing theories on government-citizen relations and co-production, this paper provides a

conceptual framework to define four major functions of crowdsourcing in the public sector. Also, by using case method, this paper provides cross-national crowdsourcing cases in both the public and private sector to illustrate the characteristics, potential costs, and benefits of these four types of crowdsourcing for policy makers and administers who are considering to adopt crowdsourcing as potential policy tool.

#### Policy making process based crowdsourcing benefits and types

Kankate Thapakorn (Technopreneurship and Innovation Management Program, Graduate School, Chulalongkorn University)

Crowdsourcing is an emerging online process used by public sector. This paper focuses on crowdsourcing in process of policy making. Preliminary findings from a qualitative exploratory study of policy making process based crowdsourcing benefits are reported and different crowdsourcing types are identified in each process.

Key word: crowdsourcing benefits, crowdsourcing types, policy-making process

## Crowdsourcing – lesson from successful ICT communities and commercial initiatives.

Magdalena Roszczynska-Kurasinska (University of Warsaw, NIP 525-001-12-66, Krakowskie Przedmie?cie 26/28, Warsaw)

Kacprzyk Marta

Agnieszka Rychwalska

Application of ICT to the area of policy making has raised high hopes for better and more inclusive governance since the moment the idea was introduced (Breindl, & Francq, 2008). It was believed that new ICT tools for e-participation will allow widespread and quite inexpensive access of different groups of stakeholders into policy making process.

However, in many cases this ideal is still not met because of misrepresentation of stakeholders, unrecognized individual differences in motivation, skills and pace of adoption of innovation among citizens to name just few.

Here we will show how policy makers can draw from experience of successful commercial and open projects that were able to form an engaged community of contributors, consultants and/or creators. If so many people were willing to spend ample time to write an Encyclopedia of human knowledge or design products like coffee recipes or toys, there is a good chance that, if properly motivated, they will be willing to devote some of their time to also help design the environment they live in and the policies that affect them.

Well-developed procedures of participation of citizens should acknowledge natural individual differences in both engagement and experience, and adjust both information presentation as well as decision making activities to various levels of motivation, engagement and skills. Examples from ICT mediated self-governing communities, such as Wikipedia or Open Source Software projects, show for example that there needs to be a core and a periphery group, whose roles in contributing to the community are different (Crowston et al., 2006). The periphery are mostly contributing content, usually limited in scope (single ideas, etc.), while the core are contributing content in many areas but also taking supportive roles, maintaining and moderating the work of the community. Both groups are crucial to the success of a project.

These division reflects different segments of population that are described in the area of innovation adoption. We can identify five segments of the population: innovators, early adopters, early majority, late majority, laggards (Rogers, 2002; Nowak et al., 2013); each with its own characteristics and its own timing of innovation adoption. Innovators exhibit great potential of creativity but they often lack wider perspective and therefore others groups should be engaged as well. Laggards on the other end prefer to maintain a status quo: they see any new activity or product as very risky. It is therefore crucial for policy makers to understand which segment of adopters they are addressing at a given time. Viral marketing and social network research shows how and when initial seeding of ideas to identified trend-setters results in widespread adoption (Centola, 2010, lyengar, Van den Bulte, & Valente, 2010, Weng, Menczer, & Ahn, 2013). Therefore only with suitable incentives and communication adjusted to particular groups crowdsourcing might attract users from different segments.

## **Enhancing Urban Water Governance: ICT and Collaborative Learning**

Farhad Mukhtarov (International Institute of Social Studies, Erasmus University Rotterdam)

Scholars and policy-makers alike bestow much hope on Information and Communication Technologies

(ICT) to improve public participation in urban governance of water and facilitate collaborative learning. While ICT initiatives increase by the day in this area, there are only a few coherent reviews of the literature. The aim of this paper is two-fold. First, we aspire at understanding how ICT applications in urban water governance influence the potential for collaborative learning between citizens and government authorities. Secondly, we aim at providing policy recommendations for public managers in enabling collaborative learning in urban water governance. We provide a typology of ICT facilitated interactions between citizens and governments, such as "citizen crowdsourcing", "do it yourself government", "collaborative planning", and "government as a platform". We find that apart from "collaborative planning", three other types of interaction provide little room for collaborative learning. Instead, the major value of ICT tools for collaborative learning is in helping manage broader intra- and inter-organizational policy networks in order to promote venues and incentives for collaborative learning, both on the side of policy-makers and citizens. We provide examples of such ICT initiatives, which contribute to collaborative learning and public deliberation in the context of urban water governance.