Guest Editorial Preface

Special Issue on Open Government:
New Information Sharing Concepts and Opportunities to Solve Societal Problems

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Open government efforts have been embraced by many governments from all over the world. The opening of data, and the deployment of tools and instruments to engage the public and facilitate collaboration with the public, are important drivers for realizing open government. Open government efforts consist of a range of activities for opening data for use by the public, stimulating engagement and participation in policy-making and innovation. The resulting availability of data provides tremendous opportunity to tackle societal problems. Nevertheless, solving societal problems remains challenging due to the varying stakeholder interests, heterogeneous and incompatible data, and lack of understanding of the larger picture. The five papers in this special issue contribute to a better understanding of new opportunities demonstrate various promising information sharing concepts, which should enable to solve societal problems using data, and show the need to shift the focus from an internal government focus to a more external view.

Evgeny Styrin and Natalya Dmitrieva look at the complete open government ecosystems in their paper named: "*Evaluating Public Organizations using Open data: An Assessment Tool and Ecosystems Approach.*" Many open government efforts take only their own initiatives into account without looking at the whole system. Such narrow approaches face the risks of missing important elements and neglecting crucial players. An ecosystem approach takes into account all relevant actors and their contribution to create value from data. Such an approach enables the inclusion of a variety of stakeholder demands in the process. The authors derive valuable principles and present tools for evaluating open government efforts from an ecosystem approach.

In the paper: "*Constructing Investment Open Data of Chinese Listed Companies Based on Read-write Linked Data,*" written by Hongqin L. Dalian and Jun Zhai Dalian, the linking and publishing of investment data is investigated. While enterprises have to report data in different forms to several regulators, the various needs and legislation results in a huge interoperability problem. Collaboration among regulators and making use of linked data can help to deal with this fragmentation. In this work, the authors present a concept to link data using read-write linked data technology. In this way data can be reused, the administrative burdens of enterprises are reduced, and data becomes more accurate for making investment decisions.

Silvia van der Pligt-Benito Ruano and Joris Hulstijn focus on regulatory supervision in their paper, "*Governance and Collaboration in Regulatory Supervision: A Case Study in the Customs Domain.*" Improved regulatory supervision requires collaboration among governments and companies to share more and better data. The authors present a concept named Continuous Control Monitoring (CCM) for improving compliance. CCM is an innovative concept, driven by technology, in which governments and companies work together to share more data with each other. This can result in more accurate data and better compliance, but requires a dedicated infrastructure for data sharing.

The paper "*Building a Certification and Inspection Data Infrastructure to Promote Transparent Markets*" is a result of the collaboration between many authors, e.g. Joanne S. Luciano, Weijia Ran, Djoko Sayogo, Nicolau Depaula, Holly Jarman, Giri Tayi, Jing Zhang, Jana Hrdinova, Theresa Pardo, Deborah Lines Andersen, David F. Andersen and Luis Luna-Reyes. The authors present an architecture for data storage, retrieval and automated reasoning of certification and inspection data. This architecture supports public-private collaboration to solve public problems such as the promotion of sustainable production, fair labor practices or lowering energy consumption.

In the paper written by Anneke Zuiderwijk entitled: "*Analyzing Open Data in Virtual Policy Research Environments - New collaboration opportunities to improve policy making*," collaboration support is analyzed for policy-makers to share data with each other. Zuiderwijk posits that collaboration among different disciplines can result in the creation of more value from data. Based on this, Zuiderwijk presents the concept of a Virtual Policy Research Environment (VPRE), which is a platform to share data between stakeholders coming from various disciplines. Such a platform should take into account the variety of data, but also the various stakeholders interests and their norms and needs.

The papers in this special issue show innovative information sharing concepts and suggest the need for collaboration between governments and the private sector, taking an ecosystem perspective. These papers capitalize experiences from many countries containing different approaches. Data collaboratives, virtual policy research environments, linked data and continuous control monitoring are all innovative concepts providing opportunities to tackle societal problems. However, although the ideas behind these concepts are clear, their realization and implementation still faces considerable challenges. Further, significant, research efforts are needed to overcome those challenges. To tackle societal problems, research must address various factors, ranging from the technical to the organizational ones, and adopt interdisciplinary approaches.

Enjoy reading!

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