Policy-making as a Research Field in Complex Systems in Digital Sciences

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Abstract: The field of policy-making is changing driven by developments like open data, computational methods for processing data, opining mining, all combined with public engagement, social media and participatory tools. To take advantage of these development in the digital world new approaches, concepts, instruments and methods are needed which are able to deal with societal and computational complexity. This requires the knowledge traditionally find in different disciplines including public administration, policy analyses, information systems, complex systems and computer science. The aim of the workshop is to bring together researchers from various disciplines within a single workshop. This workshop will serve as a platform for exchanging ideas and initiating collaborations.

The field of policy-making and public administration is changing, whereas at the same time the complexity this field has to deal with is immense. There are a number of developments that influence the traditional way of policy-making including social media as a means to interact with the public [BJH12], blogs [CM08], open data [JCZ12], freedom of information [Bu11], the wisdom of the crowds [Su04]. All these developments can be used for enhancing citizens engagements and to involve citizens better in the policy-making process.

Efforts to design public policies are confronted with highly complex situations in which a large number of potentially relevant factors need to be considered, outcomes are uncertain and conditions are changing rapidly. Utilizing computational methods and utilizing different simulation and modelling methods is often key [KZ]. This new field has various names, including e-policy-making, computational intelligence, digital sciences and policy informatics. Essential to these new fields are the following aspects.

- *Recognize the vast amount of complexity and uncertainty*: the necessity to consider the complexity of policy process, the stakeholders involved and instruments used and inherent unpredictability.

- *Recognize of being part of an ecosystems*: an increasingly diverse stakeholder invovlement and iteratively developed of policies which mutually influence each other results in the the necessity to view policy-making processes as part of an ecology.

- *Recognizing the variety of sources and the need to orchestrate the policy process*. Policy making is not the domains of experts anymore, governments should have the capabilities to orchestrate the process and involve others. Furthermore all kind of data needs to be used as an input.

- *Recognizing the interwovenness of technology throughout the whole policy-making cycle*. Representing and modelling policy-problems using new computational methods by blending of all kind of different policy-making models.

The essence of dealing with these challenges is that multiple disciplines are needed. Participants of this workshop will discuss the advances in complexity theory, new models and tools and the applications of the methods of complexity research in policy, governance, decision-making, and public management.

References

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