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## **Editorial**

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Welcome to the third issue of the eJournal of e-Democracy and Open Government. This issue concludes the JeDEM and the CeDEM (Conference for E-Democracy and Open Government) 2016 cycle by presenting a selection of the conference papers that were nominated for the Best Paper Prize and keynotes. The different articles in this issue (Tambouris and Schreder et al. on multidimensional data, Rumbul addresses government transparency, Thiel et al. look at e-participation, whilst Hauser and Haenni focus on elctronic voting systems) mirror the CeDEM conference's participants and their background, research fields and interests. The original papers are published in the CeDEM17 Proceedings published with IEEE¹.

The issue begins with a paper by Efthimios Tambouris, who presented the keynote "Multidimensional Open Government Data" at CeDEM16. Here he looks at government data from 180 open data government portals from around the world. The majority of which is statistics, recorded both as official and unofficial data, which he suggests would be better represented as multidimensional data so as to overcome the challenge of data fragmentation. He also considers the data cube model, linked open data technologies as well as a process for multidimensional linked open data publication and reuse. The issue continues with the paper that won the CeDEM16 Best Paper Prize Award, "Developing Transparency through Digital Means? Examining Institutional Responses to Civic Technology in Latin America" by Rebecca Rumbul. The paper provides an examination of NGOs' development of civic technology that is to increase citizens' interaction with official information. Civic technologies rely on the openness and responsiveness of governments to operate, as with no access to the government information the platforms will ultimately fail. The empirical study analyses institutional behaviour in Latin America, specifically Argentina, Chile and Mexico, countries selected as they are members of the Open Government Partnership, and on the basis of their common language, their relative affluence, their internet penetration as well as the diversity and developed state of their indigenous civic technology communities. A total of 47 semi-structured interviews were conducted with relevant government officials, politicians, and civic technologists and the data obtained provide the basis for 3 case

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<sup>&</sup>lt;sup>1</sup> Proceedings of the 6th International Conference for E-Democracy and Open Government CeDEM16, IEEE Computer Society, ISBN 978-1-5090-1042-4

studies. Results clearly show institutionalized tendencies to preserve control over government information, yet significant variations among the Latin American countries, which Rebecca argues is due to very different histories, economies, cultures and development.

In "Playing (with) Democracy: A Review of Gamified Participation Approaches", Sarah-Kristin Thiel, Michaela Reisinger, Kathrin Röderer and Peter Fröhlich look at the use and role of games in eparticipation. They study the problem of low levels of public participation, suggesting that one way of increasing participation is by making such platforms more engaging. Thus a strategy to increase levels of e-participation could be the use of gaming elements that both encourage and motivate engagement. Their paper provides an overview of "gamified participations initiatives" (p.1) and discuss that most gamified e-participation initiatives only focus on reward-based gamification, a strategy that may only lead to short-term effects that may actually decrease the quality of participation by replacing intrinsic with extrinsic motivations. The results they gain show that although using games for civic causes is quite common, the effects have not been studied in much detail. On the basis of their review, they identify future opportunities for future Eparticipation initiatives such as providing two-way communication channels in such game contexts, and that including games' characteristics does not necessarily make it gamified. Severin Hauser and Rolf Haenni's paper "Implementing Broadcast Channels with Memory for Electronic Voting Systems "consider electronic voting systems, and address the issue of universal verifiability, which relies on cryptographic voting protocols based on a broadcast channel so that the election data can be spread the to the public. In their paper, they provide a formal definition for such broadcast channels with memory, describe the channels' properties, and analyse the significance of a broadcast channel with memory in cryptographic voting protocols. Beyond the introduction of a formal model for a broadcast model, they also define the functionality it should ideally have in a real-world setting. The concept of a bulletin board is an important building block in the verifiability in cryptographic voting protocols, so they also suggest a design for such a bulletin board with a generic interface that helps to make its use more flexible and adaptable to the different needs that may arise.

This issue of JeDEM concludes with a reflection that picks up on the first topic of this issue, multidimensional datasets, although "A Mental Models Perspective on Designing Information Visualizations for Political Communication" by Günther Schreder, Florian Windhager, Michael Smuc and Eva Mayr considers it in the context of increasingly complex and address the challene of designing accessible and coherent information information visualisation (InfoVis). In this paper they present the theory of mental models and the consequences it has for the design and research of InfoVis interfaces. Multidimensional data presents a particular challenge in the design of accessible and conceptually consistent InfoVis interfaces, but Schreder and his colleagues show how specific design features such as advance organizers, narrative visualizations, seamless transitions, and multiple coordinated views can be accomplished in the field of political communication and its associated data.

We wish you pleasant reading!