Editorial



Editorial

Shefali Virkar*, Marijn Janssen**, Ida Lindgren***, Ulf Melin****, Francesco Mureddu*****, Peter Parycek*****, Efthimios Tambouris******, Gerhard Schwabe*******, Hans Jochen Scholl******

*Danube University Krems, Austria, shefali.virkar@donau-uni.ac.at **Delft University of Technology, The Netherlands, m.f.w.h.a.janssen@tudelft.nl ***Linköping University, Sweden, ida.lindgren@liu.se ****Linköping University, Sweden, ulf.melin@liu.se *****Lisbon Council for Economic Competitiveness and Social Renewal, francesco.mureddu@lisboncouncil.net ****** Danube University Krems, Austria, peter.parycek@donau-uni.ac.at ****** University of Macedonia, Greece, tambouris@uom.gr *******University of Zurich, Switzerland, schwabe@ifi.uzh.ch *******University of Washington, USA, jscholl@uw.edu

Welcome to EGOV-CeDEM-ePart 2020!

In a year marked by extreme unpredictability, one that has borne witness to the deferment or outright cancellation of numerous large gatherings and events, the third edition of this landmark conference has been moved completely online and is nominally hosted in its new digital avatar by the Linköping University, Sweden from 31 August - 2 September 2020. Undeterred by recent global events, these proceedings continue with the time-honoured tradition of showcasing high-quality academic and practitioner research-in-progress as Ongoing Research Papers, Reflections and Viewpoints, Workshop Proposals, and Poster Summaries that critically explore both well-established and emerging research issues, ideas and innovations from across the spectrum of the EGOV-CeDEM-ePart 2020 conference tracks: e-Government and e-Governance; e-Democracy and e-Participation; Artificial Intelligence, Data Analytics and Automated Decision Making; Smart Cities - Governments, Communities, Regions; Social Media; Social Innovation; Open Data - Social and Technical Aspects); the Digital Society; Cybersecurity; and Legal Informatics.

The quality and breadth of this year's submissions once again serve as a reminder for us to never discount the importance of ongoing research within the scholarly canon. This form of research publication constitutes an excellent medium for researchers to engage with emerging research gaps and issues situated either within the mainstream or at the fringe of their chosen disciplinary field. Let us take a look at, for example, work published within these proceedings on the subject of Open Data. Increasingly, every aspect of daily life is being impacted by the data revolution, and the

effective collection of data together with its practical application in real-world contexts is fast becoming one of the top strategic priorities of modern-day governmental actors and agencies. In their research paper, David Osimo, Francesco Mureddu, Vassilios Peristeras, Anita Cioffi, Cristina Moise, and Charlotte van Ooijen take a critical look at a selection of existing self-standing so-called "data strategies" aimed at maximising data-driven innovation in public administration. Their research opts to examine those strategies that have been recognised as pioneer approaches to public sector data governance, and to highlight the reasons for which these initiatives are considered as being at the forefront of data-driven public service provision. In complementing this notion, Ilka Kawashita, Ana Alice Baptista and Delfina Soares provide us with a rigorous assessment of current Open Government Data (OGD) benchmarking instruments, and argue that such an evaluation can be used to help improve both data quality and the conditions under which OGD is shared and reused. Elisabeth Gebka, Jonathan Crusoe and Karin Ahlin attempt to give an experiential twist to the concepts discussed in preceding papers, reporting on the development of a workshop-based technique rooted in design science research that may be used as a facilitator script by practitioners, data providers, or OGD re-users to inspire and inform their handling of open datasets. Similarly, Ahmad Luthfi, Boriana Rukanova, Marcel Molenhuis, Marijn Janssen and Yao-Hua Tan test, through the use of a case study, a Bayesian-belief Network method to demonstrate support for the proposition that a conscious decision to disclose their datasets is required from governmental actors. In recognising that that Open Data research is a crucial component in the creation and maintenance of sustainable Open Data ecosystems, Bastiaan van Loenen and his colleagues develop through their work an interdisciplinary multi-domain research approach that may be applied in so-called Open Data beginner countries such as Croatia to evaluate their efforts in this domain.

Electronic Participation also makes a comeback within the pages of these proceedings as a cutting-edge field of study. Andrei Chugunov, Yury Kabanov and Georgy Panfilov critically explore the quality of e-participation platforms and tools in the Russian context, and present a framework for their immediate evaluation. The authors apply the proposed framework to evaluate over 200 portals across Russia, and posit that their differences are representative of the current e-participation state-of-play in the country. Moving over to the United States of America, Angie Westover- Muñoz, David Landsbergen, and Amanda Girth critically explore how the local authorities in smart cities engage citizens in their digital transformation programmes, and generate popular support for smart city initiatives. Maria Murphy also takes a critical look at mobilising citizens, this time through the enactment of crisis volunteerism, based on data obtained from Sweden during the time of the 2018 forest fires. Extending this idea, Olga Filatova and Radomir Bolgov present us with a rigorous analysis of the digital public sphere in Russia, delineating the prerequisite environmental conditions, as well as the required characteristics of tools, necessary for the establishment of effective two-way communication between government and the general population. Christian Madsen, Willem Pieterson and Sara Hofmann focus our attention further on how channel choice - digital or traditional - and effective multi-channel management are vital in establishing meaningful government-to-citizen interaction. In the light of rapid developments in new and innovative communications technologies, Jesper Holgersson and Max Ellgren caution that some vulnerable groups in society, including senior citizens, are in danger of being excluded. Based on data collected in Sweden, they argue that the negative effects of rapid technological progress might be mitigated through the provision of adequate training and soft-skills development.

5

Other ongoing research papers published in these proceedings critically explore co-creation and co-production in the context of innovative new technologies. Evrim Tan and A. Paula Rodriguez Müller critically discuss how Blockchain technology, in creating an autonomous, transparent, and secure decentralized system, facilitates the redesign of public governance systems and the adoption of co-production practices in a similarly more transparent, efficient and effective manner. Lieselot Danneels and Stijn Viaene similarly explore open IT-based co-creation practices for public service provision, and report on how the open innovation and technological platform literature can be used to better inform empirical research on the topic.

The term 'smart cities' may be used to broadly identify, describe, and analyse the challenges faced by urban stakeholders when they use ICT to address prevailing urban challenges. One aspect of research conducted within this field focuses on the political actors behind the policy decisions, and the factors that motivate them to pursue a particular course of action. In their ongoing research paper, Aneta Kulanovic, Fredrik Carlsson and Elin Wihlborg examine how political leaders at the municipal level in Sweden perceive their own personal capacity and assess their own confidence in pursuing policies aimed at building more smart cities. Xiaoyi Yerden and colleagues turn to examples of smart city development in Ignacio, Colorado and Chicago, Illinois to provide us with a comparative study of the role of public libraries in promoting stakeholder engagement within these initiatives. In exploring the darker side of smart city transformation, Leif Skiftenes Flak and Sara Hofmann argue that smart city initiatives can at times challenge human rights. They voice concerns that vulnerable groups in society are prone to exclusion, and to the violation of fundamental freedoms including those of expression, adequate standards of living, and access to public services.

Modern administrations, it is argued elsewhere, need to exchange an increasing amount of information in order to pursue their policies and to deliver better services. The study conducted by Maxim Chantillon and his co-authors aims to portray the complexity inherent in current European systems of governance. Through a case study based in Belgium, this research seeks to highlight the importance and usefulness of Multi-level Governance as a concept applied to better understand policy developments in the e-government domain. Leif Sundberg, through the critical examination of data collected in Sweden, similarly aims to explore the demographic parameters of electronic services diffusion resulting from the intensified use of digital technology. Nitesh Bharosa and Marijn Janssen are also concerned with understanding the innovation standards and guidelines necessary for the successful harnessing of digital technologies to promote a more fair and inclusive society. They share experiences of starting a quadruple helix ecosystem for public service innovation in the Netherlands, known as Digicampus, that involves the active participation of governmental actors, academics, and citizens. Our focus then turns towards immigration, within which domain Luz Maria Garcia-Garcia and J. Ramon Gil-Garcia examine the role played by intermediaries in the provision of targeted digital public services. The impact of rapid digitalisation is also examined within the context of service provision in the healthcare sector. Diana Frost and Mufti Mahmud take a close look at the strengthening of healthcare systems infrastructure through enhanced stakeholder engagement, while Pasi Raatikainen and Samuli Pekkola argue for the correct identification of the target users of such information systems to better serve their requirements. Complexity in public administration, and the role played by user-centric information systems design in its reduction, are also explored in the research article by Inayat Ullah and Wafa Akhoubzi. Through a critical

discussion of the Punjab Land Record Management Information System (PLRMIS), the authors report on the results of a thorough systems impact analysis, and evaluate the validity of the approach to digitalisation being pursued by the Pakistani province of Punjab.

Staying with the deployment of advanced technologies in local government, Ida Lindgren presents the results of an ongoing research project designed to map the current use of Robotic Process Automation in Sweden. The ultimate aim of the initiative is to develop an analytical tool that can be used by both researchers and practitioners to decide whether, and to what degree, a specific process warrants automation. In a similar vein, Per Rådberg Nagbøl and Oliver Müller report on X-RAI, a framework for quality assurance that may be applied to evaluate machine learning models in production within the Danish context.

Policy and best practice solutions are discussed in several ongoing research papers as being the appropriate means by which the chances of e-Government project failure are reduced. Colin van Noordt, Rony Medaglia and Gianluca Misuraca compare and evaluate the strategies rolled out in European Union member states aimed at enhancing the uptake of Artificial Intelligence in public administrations. Meanwhile, Martin Lukáš and Miloš Ulman critically examine Enterprise Architecture (EA) projects, and argue for the adoption of best practice in the selection of EA elements to reduce ambiguity in any systematic project evaluation. Björn Lundell, Jonas Gamalielsson, and Andrew Katz address the vital issue of how public sector organisations can, in theory, deploy a proprietary SaaS solution while simultaneously retaining control of their digital assets. Once again considering the development of effective policy, Michael Kizito and Johan Magnusson, take a close look at how healthcare policies in Sweden and Uganda are positioned in terms of possessing ambidextrous balance, arguing that these sorts of policies need to facilitate the concepts of exploitation and exploration in equal measure. In their ongoing research paper, Boriana Rukanova and colleagues attempt to advance our understanding of how collective data analytics capability building processes contribute to the realisation of value by participating organisations.

As the importance of the role played by digital technologies in the generation of social value has increased, Annika Hasselblad and Leif Sundberg argue that the logic underpinning this value creation now needs to be urgently considered. The authors outline and compare the logic of two so-called "ideal-type" societies, and their (in)compatability with an industrial-based NPM logic when it comes to setting and executing policy in key sectors of the economy. The final ongoing research paper of these proceedings critically explores the impact that the Open Government doctrine has on the public disclosure of citizens' personal information. Matteo Pastore, Maria Angela Pellegrino and Vittorio Scarano investigate herein which combination of best practices should be followed, based on data published by the Italian government.

This year's proceedings present to the reader three Reflections & Viewpoints, inviting us to take a closer, more critical look at e-participation and e-democracy from the distinct perspective of the author. Marius Rohde Johannessen and Lasse Berntzen consider the need for an in-between, lowthreshold type of democracy that involves the so-called "silent majority" of citizens. Based on their findings from various cases, the authors argue that this type of system can contribute to what they term call "stealth democracy" or "implicit democracy", terms that imply the regular provision of feedback by citizens on particular issues raised by politicians. Ulrika Lundh Snis, Irene Bernhard,

stakeholder challenges arising during

and Anna Karin Olsson reflect on the nature of stakeholder challenges arising during the development of a "smart old town", and examine the possible innovative solutions available to overcome them based on stakeholder involvement and governance. Smart objects, cyber-physical systems and applications based on Artificial Intelligence also open up new possibilities for police forces worldwide. In taking a closer look at the potential benefits accruing from the deployment of advanced technologies to support day-to-day policing, Jörn von Lucke poses some essential questions about the limitations and risks associated with technology-driven law enforcement.

Workshops provide organisers with the means of tapping into the scholarly and experiential knowledge of the participants. Two workshops are featured within these proceedings this year. Bastiaan van Loenen, Ali Mansourian, and Frederika Welle Donker aim to facilitate, during their allotted session, the sharing of experiences from the Geographic Data domain with the Open Data research and education community to promote and strengthen active innovative learning and teaching in both disciplinary spheres. The express purpose of the second workshop, curated by Anne Fleur van Veenstra, Gabriela Bodea, Tjerk Timan, Gianluca Misuraca, and Colin van Noordt, is to validate a methodology that may be used to assess the social and economic impacts of Artificial Intelligence on public services, and to develop a roadmap for its eventual implementation - including the identification of potential opportunities, threats, enablers and barriers.

The selection of posters featured within these pages provides researchers with the ideal platform to showcase their current work, and to encourage conference attendees to think more deeply about specific research questions or topical research issues. Daniel Toll and Fredrik Söderström, for instance, examine the portrayal of Robotic Process Automation (RPA) solutions by vendors to potential public sector clients. They argue that although RPA has been much touted as a means to solve challenges within public administration, new problems and challenges arise continuously during its deployment in the public sector. One reason for this, they claim, may indeed be a mismatch between how the solution is portrayed prior to its purchase, and what it turns out to actually deliver. In their poster, Fritz Meiners and Fabian Kirstein present a prototype of a chatbot for Open Government Data known as ENDA, which is based on the ChatScript framework and the Linked Data specification for public sector datasets DCAT-AP, and is aimed at resolving usability issues prevalent in existing Open Data access points and solutions. The objective of the poster authored by Michele Benedetti, Claudio Russo, Luca Tangi and Irene Vanini is to advance a framework for the measurement, and the subsequent assessment, of the overall impacts of Open Government Data owned and published by public agencies – particularly in terms of value creation and efficiency bolstering.

We hope that you find the conference in its new digital format as enjoyable and as stimulating an experience as in past years! The editors would like to thank the contributing authors for their hard work, dedication, and passion; together with the expert peer-reviewers, the programme committee, the track chairs, the proof-readers, and the sponsors for the time and effort expended towards making the EGOV-CeDEM-ePart 2020 conference an event to be remembered.

Enjoy reading!