

## Guest Editorial Preface

# Special Issue on Enhancing Citizen Centricity With Web Applications in the Smart City Era

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Smart city is a term that has attracted a strong scientific and business attention and has emerged rapidly, while several definitions are given which vary (Anthopoulos, 2017; Anthopoulos and Reddick, 2015) but they all seem to converge to urban innovation, which is mainly –but necessarily- based on ICT that enhances local life in terms of economy, mobility, environment, living, people and governance. Understanding the smart city context is not a simple process and different schools-of-thought appear to serve this mission: theorists who explore challenges, identify problems and design frameworks for smart city development; practitioners that generate a novel dominant smart city market, which implements innovative products and services for enhancing urban living; governments, politicians and international organizations that strategically plan and evolve the smart city domain with respect to social and government issues in today and tomorrow cities. From an architectural point of view, a smart city consists of various components that form a multi-dimension framework (Anthopoulos, 2017; Giffinger et al., 2007), which respect several factors regarding economy, mobility, environment, living, people and governance. Although alternative frameworks appear, almost all agree on the above dimensions.

This special issue contains significantly extended versions of articles that were presented at the scientific workshop *4<sup>th</sup> AW4City - Web Applications for Smart Cities: Enhancing Citizen Centricity with Web Applications*, in conjunction with the Web Conference 2018 (WWW2018), Lyon, France and at the scientific track *SmaCit 2018 - Smart and Connected Cities: Creating People-centered City Government*, of the 8th International Conference on Advanced Collaborative Networks, Systems and Applications (COLLA 2018), Venice, Italy. Both the events dealt with the issue of the development of citizen-centered smart cities. In the era of cities, municipal leaders, service and utility providers are making an important shift regarding thinking of people as customers and of customer experience. This shift is not a simple task since it demands a continuous service monitoring, assessment and improvement (Anthopoulos, 2017; Anthopoulos and Reddick, 2015; Anthopoulos and Fitsilis, 2014), which normally is based on accurate data analysis and appears as a thinking that makes government and providers more personal and responsive. In this respect, this special issue aims to demonstrate how smart cities can enhance local service delivery and continuous monitoring and improvement.

The articles of this special issue illustrate the theoretical context, the existing state and current issues and trends with regard to developments of artefacts, which address smart service delivery and monitoring. More specifically, the first article written by Pereira et al. that is entitled “The Role of Smart Technologies to Support Citizen Engagement and Decision Making: The SmartGov Case,”

focuses on data-driven decision-making, which is based on the collection of citizen data (open government and social media). It uses the case of the SmartGov project and proposes a generic framework for Smart City Governance focusing on the inputs and outcomes of this process in the use of technologies for policy making.

The second article is entitled “Citizen Participation via Mobile Applications: A Case Study on Apps in Germany,” written by Beutelspacher, Mainka and Siebenlist recognize participatory smartphone Apps as means to empower citizens to interact with the city’s administration. As such, they investigate 248 from German local governments and generate several remarks with regard to their features and uses. The third article is provided by Kandpal and has the title “Shaping India’s Future by Building Smart Future Sustainable Cities.” The author presents the difficulties in financing Smart city projects and uses findings from India -the cities of Dehradun, Nagpur and Allahabad-, in order to provide with suggestions based on corresponding empirical evidence.

The fourth article that is provided by Degbelo, Wissing and Kauppinen is entitled “A Comparison of Geovisualizations and Data Tables for Transparency Enablement in the Open Government Data Landscape.” The authors address government transparency and they suggest Geovisualizations and Data Tables for transforming open government data streams to more visible and adequate for communication.

The final article that is written by Rehena, Janssen and Chattopadhyaya is entitled “A reference architecture for Context-Aware Intelligent Traffic Management Platforms.” It discusses the issue of traffic management improvement within cities. They propose a reference architecture of a system that utilizes citizen-generated data, and which can support intelligent traffic management systems for providing better commute, safety and security during travel and for making better traffic management decisions.

All the above works cover a broad scope of topics that deal with citizen centricity in smart cities, which ranges from managerial issues, openness, transparency and effectiveness with regard to smart city development and smart service provision. This special issue is timely since an increasing criticism is being generated that smart city represents an ambiguous urban utopia, which is supported by the partnership of local governments with big technological vendors (Anthopoulos, 2017b). In this respect, these articles contribute to a clearer view of smart city reality, while the presented cases can strengthen the existence of opportunities for new entrants in the smart city market.

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