

1. The use of ICTs for citizen-centric services in the public sector

In the last decade, public administrations are being pressured for public service innovation toward a more personalized, outcome-driven, participative, efficient and collaborative model (IDA, 2011; Peedu, 2011). The use of information and communication technologies (ICTs) could help the public sector to achieve this aim, changing the roles played by citizens from “end-users” to “partners” and “co-producers” of information and services (Johnston and Hansen, 2011; Huijboom *et al.*, 2009). This way, governments will need to fundamentally change the way in which public services are provided (Chan *et al.*, 2008), involving citizens in the heart of the value chain (Tuomi, 2002) and expecting them to provide insight and knowledge and thus improve public services.

However, the ability of citizens to participate in public e-service development is much limited (Holgersson and Karlsson, 2014). The rise of smart cities and the development of new and emergent technologies (ETs) are promoting public participatory spaces for enhancing collaboration in problem-solving issues and innovation (Meijer and Rodríguez Bolívar, 2016; Rodríguez Bolívar, 2018; Alcaide Muñoz and Rodríguez Bolívar, 2019), improving service delivery and facilitating citizen engagement (Obedait *et al.*, 2019; Viale Pereira *et al.*, 2017).

Despite the great significance of the future implementation of emergent technologies and the calls for studies to analyze the impact of these technologies in improving citizen-centric services into the smart cities’ framework, little research has been conducted to analyze the use of these technologies to reform public service delivery. Papers included in this special issue have been driven to respond to this call making a great advance in the knowledge.

2. Emergent technologies in providing citizen-centric services

The recent technological advances and the emergence of new technologies represent new challenges for governments around the world and a new opportunity to transform the way governments engage with citizens, involve them in the make-decisions process, shape public policies, design strategic projects and redefine services public (Engin and Treleaven, 2019). Focusing on the implementation of ETs in public services, they are expected to bring benefits for improving public services and social life (Olofsson and Mali, 2019). Given that, these could have a substantial impact by influencing the internal efficiency of the public administration as well as improving the quality of the public services (van Noordt and Misuraca, 2020).

Although there is previous research that has focused on the implementation of ETs in public services (Harrison *et al.*, 2019; Valle-Cruz, 2019), the challenges surrounding its implementation, its impact, its consequences and much more still need to be addressed and cleared (Lindgren *et al.*, 2019; van Noordt and Misuraca, 2020). In this sense, politicians, public managers, policymakers and civil servants are not clear about the potential that the implementation of this type of technological advance could have, what influence it could have on public management processes, on the provision of public services, on interaction with citizens and so on (Lindgren *et al.*, 2019).

This uncertainty and challenges that public managers, politicians and policymakers must face suggests not only the need for more research but also efforts to improve their knowledge and ability to use them in creating public value successfully. Hence, the special issue on “*Emerging technologies for providing public citizen-centric services*” is presented here, an appropriate and timely result trying to clarify some challenges in this area of knowledge.



3. Main findings about ETs impact on public services in this special issue

Among the articles that make up this special issue, we can find papers that deal with disruptive blockchain technology as a solution in the current pandemic environment to verify the country visit trail and disease and treatment history of the passengers who arrive at the immigration counters located at various national borders and entry points (Pandey and Litoriya, 2021). Similarly, a research study indicates that this technology has a great potential for public management using a referring model of blockchain's systematized functionalities through a conceptualized matrix (Rainero and Modarelli, 2021).

On the other hand, there is an article which focused on how the cities are faced with the challenge of achieving system pluggability in the service integration due to numerous actors and systems needed for smart urban transformation. It shows both the structure to manage changes and main urban transformation and the alignment of the business with the underlying information from the perspective of the stakeholders. In addition, it describes how service integration of different pervasive platforms provides digital services for smart urban transformation (Bokolo *et al.*, 2021).

Also, there are papers seeking to understand citizens' perception of smartphone-based city management apps and to identify facilitators and barriers that influence app adoption and use. The findings highlight that city management apps are primarily perceived and used by citizens as handy and efficient tools for the provision of information and public services (Wang *et al.*, 2021).

Closely related to the above, there are three papers analyzing m-government applications for public services. First, we find a paper which evaluates how the social benefits of citizens using m-government affect citizens' satisfaction with the government. Its results indicate that the process gratification and content gratification are positively associated with citizen satisfaction with the government (Annis *et al.*, 2021). Second, there is a study which investigates the use of m-government apps for public services in Brazil. In this sense, results show that mobile apps include useful information of public services and that the development of apps and how they are used improve the region economic development (De Oliveira Malaquias and da Silva Junio, 2021). Finally, a study investigates how women's individual difference influences urban mobility service technology-use behavior, presenting five behavioral profiles of women, which affect the development of emerging economies and their quality of life (Hino and Cunha, 2021).

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