
Guest editorial: Public value creation through information technologies in government

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Introduction

Public value, a concept centering on meeting the citizens' collective expectations with government and public services (Moore, 1995), has gained a growing interest in public management theory and practice (Bozeman, 2019; Bryson *et al.*, 2014; Smith, 2004; Stoker, 2006). This growing interest responds in part to the increasing complexity of both the problems faced by public managers (Bryson *et al.*, 2014) and the networked environment in which they need to operate (Pardo *et al.*, 2011). Moreover, a public value perspective seems useful given that it enables linking insights from different analytical and conceptual perspectives (Smith, 2004). Because of the increasingly recognition of the importance of public value scholarship and the wide applicability of the public value framework, there is a variety of perspectives and areas of study where public value has proven to be valuable as a conceptual framework (Hartley *et al.*, 2019). Wallmeier *et al.* (2019), for example, identify three different interpretive schemes of public value in the public management literature:

- public value as a strategic management approach, with a focus on managerial actions to produce value (Moore, 1995);
- public values as a contested democratic practice superseding economization, engaging on a discussion on what the public values are and what values government and public services add to the public sphere; and
- public value as a form of democratic accountability, integrating the public into policy making through several forms of co-production.

Public value creation through information technologies has been adopted by scholars in Digital Government. The incorporation of public value in the digital government research is especially relevant because the adoption of technology, and technology enabled organizational innovations and policy development are frequently tied to the more comprehensive value creation, such as enhancing public service delivery, improving program effectiveness, and advancing democratic values. In a sense, technologies provide additional resources and capabilities to engage the public, inform the deliberation process, enable broad participation and collective decision making, monitor progress and performance, and ensure accountability, transparency and equity.

The dominant view of public value in this domain is more similar to the view of public value as a management strategy (Bryson *et al.*, 2014; Moore, 1995). From the perspective of digital government scholars, information technologies are understood as operational capabilities to facilitate organizational transformation and thus produce value to the citizens (Neumann *et al.*, 2019; Panagiotopoulos *et al.*, 2019; Twizeyimana and Andersson, 2019). The common conceptualization entails transformation and value creation as the result of complex interactions between information technologies and organizational actors and practices, enabled (or not) by a specific set of institutional rules (Panagiotopoulos *et al.*, 2019; Picazo-Vela *et al.*, 2018).

Although less common, public value as a lens has also been applied in the research of the evaluation of impacts of technology investments in the digital government literature. In this



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stream of research, the focus is often centered on unpacking what constitutes public value and what is valuable in the context of technology-driven transformation. [Bannister and Connolly \(2014\)](#), for example, identified a taxonomy of values by classifying values in three major categories: duty-oriented values such as accountability or economy, service-oriented values such as responsiveness or transparency, and socially-oriented values such as inclusiveness or fairness. In another work with a focus on discussing what is public value, [Cook et al. \(2015\)](#) identified several types of *intrinsic* value of government as a societal asset and *substantive* value of government actions and policies that benefit particular individuals, groups, or organizations. They further propose a method not only for evaluating their digital government initiatives, but also for public managers to incorporate the consideration of public values in the selection or design of information technologies.

Finally, the topic of using public value as a theoretical instrument in the co-production literature has emerged in digital government literature. Co-production refers to the phenomenon of including stakeholders of different kinds in the design and development of digital public services. [Scupola and Mergel \(2022\)](#), for example, specifically connected digital transformation, co-production, and public value in the digital government literature. This is an area with much potential for cross-fertilization, particularly from user-centric approaches to information technology development and the movement of living labs for government innovation.

Overall, the public administration scholarship – rich on theories and perspectives to understand public value – has yet to fully embrace the importance of information technologies and their roles in producing public value ([Andrews, 2019](#)). This lack of integration limits potential cross-fertilization and research agendas progress in public management, digital government, and other domains engaged in the discussion of organizational and societal impacts of information technologies, such as information science and management information systems. In this special issue, we attempt to bridge this gap and promote the adoption of public value research in digital government research by including a collection of papers that introduce different aspects of public value creation through information technologies.

Papers in the special issue

Papers in the special issue all contribute to the conversation about using information technologies to produce public value, with each focusing on a distinctive aspect of using information technology to produce public value. The first three papers introduce a focus on the organizations and the institutional environment. The fourth paper focuses on the interactions between citizens and legislators in the creation of value, and the two final papers focus on the technological artifact for the creation of value. The last three papers in the special issue have either direct or indirect implications for the co-production of public value using information technologies, an area that we believe is understudied in both the digital government and the public management literature.

The first paper in the special issue, by Johansson and colleagues, explores the challenges and opportunities of robotic process automation (RPA or automating repetitive tasks) at the local level in Sweden. Using the normative lenses of traditional bureaucracy, new public management and public value management, the authors identify opportunities and challenges of the adoption of RPA in municipal actions of policy design for building legitimacy in their relationships with citizens. The paper contributes to the conversation of what are public values by providing a framework to understand approaches to the development of RPA applications according to the levels of technical and political

complexity of the domain. Involving citizens and other key stakeholders into the discussion of the development of RPA applications is suggested as a key to build legitimacy.

In the second paper of the special issue, Najafabadi and Cronemberger study the case of an open data program in the New York State Health Department. Open data programs are commonly considered potential sources of public value through the promotion of innovations as well as more transparent and accountable institutions. However, in their analysis of the Food Protection program, they find that competing demands of fulfilling public health and economic development goals produce unexpected results in the implementation of the open data program, potentially compromising the quality of the data. Creation of public value, as illustrated by this case, requires the creation of an environment in which all stakeholders are in agreement about the value of the program and their outcomes, creating what Moore (1995) referred as an enabling environment.

Duhamel and colleagues, in the third paper, emphasize on institutional and organizational factors and their impact on the development of public sector innovations and the creation of public value, which is conceptualized, in their case, as internal efficiency gains through the adoption of a Document Management System (DMS). In their analysis of the DMS adoption across fourteen ministries in a Mexican State, they identify mechanisms in which institutional inertia, political leadership, and laws and regulations have an impact on the agencies' assessment of the risks and benefits of adopting the DMS as a technological innovation. They found that using simple tools such as process mapping has the potential of breaking institutional inertias by helping in understanding of the risks and benefits of the new system.

In the fourth paper of the special issue, Straus explores the interactions between senators and their constituents as a potential source of value creation through a better understanding of major policy issues that require legislation as well as their impacts on mis- and dis-information. Using twitter data, they find that the quality of followers is related to ideological and personal characteristics of the senator as well as the number of low-quality followers and the amount of noise that they produce. The authors identify the importance of managing social media to promote high quality conversations between senators and citizens, with important implications for constituent representation and public policy quality and decision making.

In the fifth paper in the special issue, Porwol and colleagues introduce a technology architecture to facilitate the use of Virtual Reality (VR) in the processes of e-participation. Moreover, they also provide tools and approaches to gather data that informs better designs of VR in e-participation processes. The architecture introduced in the paper builds capacity to improve participatory processes that reduce distance barriers and other participation costs in any process of co-production of policy through e-participation.

The final paper in the special issue explores how multiple actors in South Korea collaborated to co-produce an information system to manage decentralized identity (DID). Using a case study approach, Rim demonstrates how public and private actors can collaborate and produce a decentralized identity standards-based architecture that can be widely adopted to manage and protect individual and organizational identities. Continued adoption of the DID system is based on demonstrated value of the co-produced architecture.

Luis F. Luna-Reyes

*Department of Public Administration and Policy, University at Albany State University
of New York, Albany, New York, USA and Department of Administracion de
Empresas, Universidad de las Americas Puebla Escuela de Negocios y Economia,
Chohula, Mexico, and*

Jing Zhang

Clark University, Worcester, Massachusetts, USA

References

- Andrews, L. (2019), "Public administration, public leadership and the construction of public value in the age of the algorithm and 'big data'", *Public Administration*, Vol. 97 No. 2, pp. 296-310, doi: [10.1111/padm.12534](https://doi.org/10.1111/padm.12534).
- Bannister, F. and Connolly, R. (2014), "ICT, public values and transformative government: a framework and programme for research", *Government Information Quarterly*, Vol. 31 No. 1, pp. 119-128, doi: [10.1016/j.giq.2013.06.002](https://doi.org/10.1016/j.giq.2013.06.002).
- Bozeman, B. (2019), "Public values: citizens' perspective", *Public Management Review*, Vol. 21 No. 6, pp. 817-838, doi: [10.1080/14719037.2018.1529878](https://doi.org/10.1080/14719037.2018.1529878).
- Bryson, J.M., Crosby, B.C. and Bloomberg, L. (2014), "Public value governance: moving beyond traditional public administration and the new public management", *Public Administration Review*, Vol. 74 No. 4, pp. 445-456, doi: [10.1111/puar.12238](https://doi.org/10.1111/puar.12238).
- Cook, M., Harrison, T.M., Zhang, J., Puron-Cid, G. and Gil-Garcia, J.R. (2015), "Using public value thinking for government IT planning and decision making: a case study", *Information Polity*, Vol. 20 No. 2,3, pp. 183-197, doi: [10.3233/IP-150359](https://doi.org/10.3233/IP-150359).
- Hartley, J., Sancino, A., Bennister, M. and Resodihardjo, S.L. (2019), "Leadership for public value: political astuteness as a conceptual link", *Public Administration*, Vol. 97 No. 2, pp. 239-249, doi: [10.1111/padm.12597](https://doi.org/10.1111/padm.12597).
- Moore, M.H. (1995), *Creating Public Value: Strategic Management in Government*, Harvard University Press, Cambridge.
- Neumann, O., Matt, C., Hitz-Gamper, B.S., Schmidhuber, L. and Stürmer, M. (2019), "Joining forces for public value creation? Exploring collaborative innovation in smart city initiatives", *Government Information Quarterly*, Vol. 36 No. 4, p. 101411, doi: [10.1016/j.giq.2019.101411](https://doi.org/10.1016/j.giq.2019.101411).
- Panagiotopoulos, P., Klievink, B. and Cordella, A. (2019), "Public value creation in digital government", *Government Information Quarterly*, Vol. 36 No. 4, p. 101421, doi: [10.1016/j.giq.2019.101421](https://doi.org/10.1016/j.giq.2019.101421).
- Pardo, T.A., Gil-Garcia, J.R. and Luna-Reyes, L.F. (2011), "Collaborative governance and cross-boundary information sharing: envisioning a networked and IT-enabled public administration", in O'Leary, R., Van Slyke, D.M. and Kim, S. (Eds), *The Future of Public Administration around the World: The Minnowbrook Perspective*, Georgetown University Press, Washington, DC, pp. 129-140.
- Picazo-Vela, S., Gutiérrez-Martínez, I., Duhamel, F., Luna, D.E. and Luna-Reyes, L.F. (2018), "Value of inter-organizational collaboration in digital government projects", *Public Management Review*, Vol. 20 No. 5, pp. 691-708, doi: [10.1080/14719037.2017.1305702](https://doi.org/10.1080/14719037.2017.1305702).
- Scupola, A. and Mergel, I. (2022), "Co-production in digital transformation of public administration and public value creation: the case of Denmark", *Government Information Quarterly*, Vol. 39 No. 1, p. 101650, doi: [10.1016/j.giq.2021.101650](https://doi.org/10.1016/j.giq.2021.101650).
- Smith, R.F.I. (2004), "Focusing on public value: something new and something old", *Australian Journal of Public Administration*, Vol. 63 No. 4, pp. 68-79, doi: [10.1111/j.1467-8500.2004.00403.x](https://doi.org/10.1111/j.1467-8500.2004.00403.x).
- Stoker, G. (2006), "Public value management: a new narrative for networked governance?", *The American Review of Public Administration*, Vol. 36 No. 1, pp. 41-57, doi: [10.1177/0275074005282583](https://doi.org/10.1177/0275074005282583).
- Twizayimana, J.D. and Andersson, A. (2019), "The public value of e-government – a literature review", *Government Information Quarterly*, Vol. 36 No. 2, pp. 167-178, doi: [10.1016/j.giq.2019.01.001](https://doi.org/10.1016/j.giq.2019.01.001).
- Wallmeier, F., Helmig, B. and Feeney, M.K. (2019), "Knowledge construction in public administration: a discourse analysis of public value", *Public Administration Review*, Vol. 79 No. 4, pp. 488-499, doi: [10.1111/puar.13005](https://doi.org/10.1111/puar.13005).