

Introduction to the special issue on Inclusion and E-Government: Progress and Questions for Scholars of Social Equity

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1. Introduction

Recently, scholars have argued that more attention is needed for inclusion in the achievement of e-government in democratic societies (Morte-Nadal et al., 2022; Rodriguez-Hevia et al., 2020). Citizens are increasingly interacting with the government using a broad range of digital applications (Rodriguez-Hevia et al., 2020), such as informational websites on COVID-19 (Kimemia, 2022), open data portals (Schwoerer, 2022), digital platforms for online deliberation (Shin et al., 2022), and platform and electronic procedures for social services and benefits (Marin, 2022). These e-government services provide new opportunities, but they can also reinforce or increase mechanisms of (social) exclusion (Macaya et al., 2021; Mervyn et al., 2014). For example, by ignoring those who do not have access or competencies to deal with these digital environments (Mariën & Prodnik, 2014).

E-government and inclusion have been discussed extensively in terms of the digital divide (Ciecielska et al., 2022; Mervyn et al., 2014), but limited work has been done on the factors that foster inclusion in relation to e-government (Weerakkody et al., 2012). Furthermore, technological developments in the public sector advance quickly, yet the examination of the impact of these new technologies on inclusion, is still underdeveloped (Schwoerer, 2022). In addition, there are many different definitions of inclusion without consensus on the nature of this construct or its theoretical underpinnings (Jansen et al., 2014; Shore et al., 2011; Weerakkody et al., 2012). We argue that inclusion, as it relates to e-government, needs to be conceptualized beyond the digital divide, and explored in relationship to other well-established concepts, such as diversity and social equity, so as to avoid any conceptual confusion.

In this introduction, we start with a conceptualization of inclusion. We identify three perspectives on inclusion and e-government: (1) the access perspective, (2) the user-driven perspective, and (3) the system perspective, and we describe how the articles in this special issue relate to these perspectives. Finally, we provide an agenda for future research in this area.

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2. Conceptualizing (digital) inclusion in relation to diversity and social equity

The concept of inclusion has received increasing attention in different domains varying from organizational studies, social work and social psychology (Jansen et al., 2014; Shore et al., 2011). In the public sector, McCandless et al., (2022 p. 129) point out that there is a growing normative understanding that public institutions should be Diverse, Equitable and Inclusive (DEI). Although the terms diversity, equity, and inclusion are related, definitions and implications of these terms vary (Chordiya et al., 2020; McCandless et al., 2022). Social equity is widely accepted as a pillar of public administration and refers to fairness and justice in the provision of governmental policies and services (Cepiku & Mastradascio, 2021; Frederickson, 2015; Gooden, 2015; Guy & McCandless, 2012; Riccucci, 2009). Scholars differentiate equity in terms of access to public services, whether citizens of different groups receive the same treatment, the same quality of public services and whether they experience similar outcomes (Cepiku & Mastradascio, 2021; Johnson & Svara, 2015; Rivera & Knox, 2022). Equity research is concerned with the characterization, measurement, and achievement of fairness in the provision of government services (Gooden & Portillo, 2011 p. 65). To advance social equity in the public sector, it is important according to several scholars (McCandless et al., 2022; Gooden, 2014; Wooldridge & Gooden, 2009) that researchers and practitioners *name* inequities (identify inequities), *blame* inequities (understand its causes and effects) and *claim* inequities (take *diverse*, *inclusive*, and meaningful steps to reduce or eliminate inequities). Hence, for these scholars, the concepts of diversity and inclusion are important subunits of social equity, aimed at reducing inequities.

Diversity is often described in terms of the make-up or composition of a group (Chordia et al., 2020; Miller, 1998; Vohra et al., 2015) based on, for example, gender, race, education or socio-economic status (Gooden & Portillo, 2011; Chordiya, 2022). Research on diversity has focused on reducing unfair and illegal bias, on increasing equity and social justice, and on the benefits that individuals, groups, organizations, and societies can derive from diversity (Ferdman, 2018; Vohra et al., 2015). Vohra et al., (2015) argue that there has been a shift in the discourse of diversity from debates about affirmative action to a focus on the notion of inclusion. Some scholars argue that diversity is an outcome, whereas inclusion is a process or practice of including people in a given structure (Ferdman, 2013; Vohra, 2015; Weerakkody et al., 2012)).

According to Rivera and Knox (2022), inclusion refers to the extent to which diverse groups of the public such as ethnic minorities, people with special needs (i.e., individuals with disabilities, the elderly, children, immigrants, the homeless, etc.), and individuals of different genders, sexual identities, religious groups, and cultures are integrated into management processes. Others, Chordiya (2022), Miller (1998), Mor Barak and Chrin (1998) and Shore et al., (2011), stress the degree to which individuals are part of critical organizational processes in their definition of inclusion, but they add to the definition the degree that individuals are represented by the extent to which they have access to information and resources, have voice, can participate and influence decision-making processes. Some scholars focus on their definition on individuals and their needs. For example, Shore et al., (2011 p. 1265) define inclusion as the degree to which individuals experience treatment from the group that satisfies their need for belongingness and uniqueness. However, Jansen et al., (2014) argue that inclusion consists of belonging and authenticity instead of uniqueness. They define authenticity as the extent to which a group member perceives that they are allowed and encouraged by the group to remain true to themselves. They illustrate this point by indicating that there is a difference between organizations that merely tolerate the presence of diversity and those that lend active support for diversity. They argue that in the process of inclusion, it is the group or organization rather than the individual that has primary agency (Jansen et al., 2014). In this line of

thinking, an inclusive climate and inclusive leadership are considered important antecedents of inclusion (Shore et al., 2011).

In the context of e-government, inclusion is often associated with the digital divide (Morte-Nadal, 2022; Rodousakis, Mendes dos Santos, 2008; Weerakkody et al., 2012). To illustrate this, Morte-Nadal et al., (2022 p. 2) define inclusion as bringing the knowledge and use of digital technologies to those who do not already have it, thereby bridging the digital divide. Weerakkody et al., (2012) observe a trend in Europe to move away from the term digital divide and focus on inclusion, as the latter has a more positive connotation. Furthermore, Helbig et al., (2009) describe that the term e-inclusion was described as one of the three strategic pillars of the European *i2010* Strategic plan, which specifies overarching goals of quality of life, employment and growth. The European Strategy in relation to inclusion states: “*making sure that ICT benefit all citizens; making public services better, more cost effective and more accessible; and improving quality of life [. . .] strong emphasis is given to full participation and to providing people with basic digital competence*” (European Commission, 2005, p. 9).

Building on the conceptualization of inclusion in other fields, digital inclusion, not only implies access to technology and connectivity to technological devices and networks for all. Digital inclusion also concerns whether individuals have the digital skills to use technology and e-government services and whether the use of technology leads to beneficial outcomes for all (Esteban-Navarro et al., 2020; Morte-Nadal et al., 2022). It is concerned with whether individuals have voice, can participate in (online) democratic processes (Van den Berg et al., 2020), and whether they have the ability based on technology to influence decision-making. Furthermore, switching the perspective from the individual to the organization, digital inclusion also concerns how government agencies actively promote and steer towards inclusion in e-government services (Esteban-Navarro et al., 2020; Van den Berg et al., 2020). Building on the work of Chordiya (2022), Mor Barak and Chrin (1998) and Shore et al., (2011) we therefore define digital inclusion as a multi-faceted concept distinguished by the degree to which individuals are part of (digital) democratic and organizational processes, by the extent to which they have access to government information and digital information services, and have the digital skills to participate and influence decision-making processes.

3. Three perspectives on E-government and inclusion

Building on this conceptualization and recent work on inclusion (Esteban-Navarro et al., 2020; Morte-Nadal et al., 2022; Mariën & Prodnik, 2014), we distinguish three interrelated perspectives of digital inclusion in this special issue:

- The *access-driven* perspective focuses on how connectivity can be a limiting factor for using e-government services (Rodriquez-Hevia et al., 2020). In addition, this perspective focuses on the (quality of) access of individuals to e-government services, and on the availability of information for all (Mariën & Prodnik, 2014; Morte-Nadal, 2022).
- The *user-centric* perspective (Mariën & Prodnik, 2014) focuses on the user and in particular on the importance of digital skills, the needs of users in terms of user-friendly e-government services, and whether citizens have voice and have influence in participatory processes. This perspective builds upon participatory approaches by actively engaging individuals or communities so that the provided solutions are much more in line with the reality and circumstances of these individuals and communities (Mariën & Prodnik, 2014).

- The *system perspective* (Esteban-Navarro et al., 2020; Mariën & Prodnik, 2014) moves away from human agency and focuses on the wider system context in which inclusion and exclusion mechanisms take place. This perspective focuses on governance, on how government organizations can implement and promote inclusion programs (Suchowerska & McCosker, 2022), and on whether and how digital inclusion initiatives and strategies are embedded across organizations and policy domains (Mariën & Prodnik, 2014).

The authors in this special issue cover all three perspectives. Using a variety of methods in different national contexts (see Table 1), the authors identify mechanisms of inclusion for each perspective, and demonstrate the importance of the interplay between the different levels.

3.1. Access perspective

The empirical research article by *Kayla Schwoerer* focuses on the availability of relevant open government datasets for citizens that can advance inclusion of citizens in participatory processes. Kayla Schwoerer speaks of a democratic divide that poses questions concerning increased access to information via internet-based applications such as open data portals and whether this enhances democratic participation by empowering new groups of citizens or if it remains a tool for those who would otherwise participate anyway. Based on a qualitative content analysis of New York City's open data portal, this study demonstrates that non-citizen-relevant datasets outnumber citizen-relevant datasets and that non-citizen-relevant datasets are viewed and downloaded at higher rates. The author concludes that therefore lay citizens may be at a disadvantage when it comes to the information they need to meaningfully participate in democratic activities. If governments aim for open government data to foster democratic processes, they need to ensure that the data they make available is inclusive of the diverse interests and information needs of citizens.

The country report on Kenya by *Douglas Kimemia* focuses on inclusion in terms of the provision of reliable and adequate public information and online services to all citizens. This report describes that the Access to Information Act was adopted in 2016 by the Kenyan government. The Act outlines documents that public entities are required to make proactively available to the public. The focus of the report is whether county websites promote active engagement and public participation by providing relevant, timely information and interactive functions. An analysis of 47 county websites demonstrates that some of the websites are well functioning and organized while others only have basic information. Douglas Kimemia concludes that the county government websites require significant improvement in terms of providing timely information and more interaction options. There is a need for increased internet access and broadband in rural areas to foster inclusion in participatory processes.

Sumanjeet Singh, Vimal Kumar, Minakshi Paliwal, Pratima Verma, Binod Rajak focus on the intersection of access and user-centric perspective. The authors examine the effectiveness of e-government web portals in India. They indicate that the e-government services in India are still evolving and stress the importance of a citizen-centric approach for inclusive access to e-government services. The authors use an online survey consisting of a multi-item scale to measure the perceived quality of web portals, user satisfaction, and user intention. Their study demonstrates that factors of e-government such as information quality, accuracy and relevance, influence the perceived quality of India's e-government web portals, user adoption, and intentions. The authors point out that their multi-item scale can be used to continue evaluating the service quality of government portals while these portals evolve through different stages of maturity.

3.2. User-centric perspective

The conceptual article, authored by *Luigi Reggi, Sharon Dawes and Ramon Gil-Garcia* focuses on the potential contribution of open government data to governance network inclusiveness. The authors define inclusion within governance networks as the possibility for new actors to both enter the network and to influence its decisions. Based on an extensive review of the literature, they develop a framework that identifies three main types of Open Government data strategies to governance network management strategies aimed at improving the social and cognitive inclusiveness of governance networks. Furthermore, the authors identify two success factors to make governance networks more inclusive by proactive data strategies to expand the network of interested parties (access) and by empowering interested new actors and using their feedback (influence). Based on their review they conclude that more empirical research is needed to examine the relation between network inclusiveness and performance.

The empirical article by *Bokyong Shin, Mikko Rask and Pekka Tuominen* focuses on digital platforms for public engagement in participatory budgeting in Finland. The authors point out that on digital platforms more people have a chance to obtain information, exchange voices, and vote. At the same time, digital platforms have increased the scale and complexity of citizen input to an extent that may exceed the capacity of traditional data processing, resulting in difficulties in synthesizing the diverse voices of citizens. The authors therefore propose using Big Data indicators in a longitudinal design to be able to better judge deliberative processes and improve them. Based on Big Data analysis, their study demonstrates that over time the levels of participation on the digital platform remained low but that the continuity and responsiveness of online deliberation developed positively. The authors conclude that the use of Big Data based indicators is promising and can be increased for additional monitoring of online deliberation, by adding more specific equity indicators.

3.3. System perspective

The article by *Bijan Azad and Fouad Zablith* examines inclusive design processes for e-government services. Based on a survey among users of e-government services and interviews with providers of e-government services in the United Kingdom, Lebanon and Qatar, they develop a three-component model of inclusive e-Government design that combines the user and system perspective to inclusion. The first component consists of social inclusion affordances such as listening to users and an instant response by government. The second component, design inclusion support processes, focuses on how government entities can support social inclusion affordances. This for example entails a systemic redesign of e-government services and a structural participative approach in government's operations and processes. Lastly, the authors demonstrate the importance of organizational capabilities among e-government provider organizations, that include understanding the value of input, maintaining openness, and formally integrating input into the process of e-government design.

The empirical article of *Monica Marin* focuses on the wider system context in which inclusion and exclusion mechanisms take place. The author examines e-government social services for vulnerable groups in Romania. More specifically the study studies whether there is a difference in the availability of electronic delivery of social services and benefits during the COVID-19 pandemic and whether there are potential differences between types of services and benefits, counties/regions and types of institutions. This study demonstrates that electronic procedures in Romania seem to be county and institution rather than citizen-focused, there is no set of available electronic procedures for similar institutions. Furthermore, there are regional inequalities leading to administratively disadvantaged counties. Monica Marin concludes

that for inclusive and equitable e-government social services, an integrated institutional and citizen-centric approach is necessary.

Finally, this special issue includes a book review by *Jennifer Campbell-Meijer*. The book, *Foundations of Information Literacy* by Taylor, Natalie Greene Taylor and Paul T. Jaeger, examines the role of information literacy in social, cultural and political contexts and discusses how information literacy is necessary for an engaged citizenry.

Table 1
Overview of articles and their perspectives on inclusion and E-government services

Perspective on inclusion	Authors	E-government service studied	National context	Methodology
Access	Schwoerer	Open Data Portal	New York City, USA	Qualitative content analysis
	Kimemia	County websites	Kenia	Qualitative analysis
	Singh, Kumar, Paliwal, Verma, and Rajak	Government web portals	India	Online survey
User	Reggi, Dawes and Gil-Garcia	Open data usage for governance networks	–	Literature review
	Shin, Rask and Tuominen	Online deliberation platform	Finland	Big data analysis
System	Azad and Zablith	Variety of e-government services	UK, Lebanon, Qatar	Survey and interviews
	Marin	E-services for social benefits	Romania	Quantitative analysis of database operational procedures

4. Next steps

Collectively, the authors of this special issue demonstrate the importance of digital inclusion from a range of perspectives, using a variety of methods in several different contexts. They demonstrate that inclusion needs to be conceptualized beyond the digital divide. The authors identified a broad range of mechanisms that underlies the concept of digital inclusion. Digital inclusion is not only about connectivity and access to technology or government services but also about access and availability of information. Inclusion requires user-friendliness of government services, building informational literacy skills, having voice and whether users can enter and influence participatory (network) processes. Finally, this special issue demonstrates the importance of organizational capabilities and institutional rules and procedures for fostering inclusion. In sum, the authors have pushed our understanding of the field and state of practice of inclusion in the context of e-government.

Based on the findings of this symposium we can develop a research agenda for future studies on e-government and inclusion:

1. *Identification of system-level mechanisms that foster digital inclusion.* Based on our three perspectives we think that more research needs to be done on the system perspective and the identification of wider mechanisms that foster digital inclusion. Realizing long-term processes of digital inclusion is challenging and requires highly coordinated and well-thought through policy interventions in which public policymakers, civil society, and private stakeholders collaborate (Mariën & Prodnik, 2014). Research could focus on the role of good governance at the national and local level, on inclusion in public service in general, and in specific policy domains. Research could also focus on what public leaders can do to foster digital inclusion in their organizations.

2. *Interplay between perspectives.* Research that focuses on the interplay of all three perspectives, access driven, user-centric and system, could result in a more integrative and holistic understanding of digital inclusion (Ciesielska et al., 2022; Mariën & Prodnik, 2014).
3. *Diversity.* More research could be done on a wider, diverse range of citizen groups, services, and technologies. New technologies, such as big data, algorithms, AI, smart cities, and digital twins, might lead to new challenges for inclusion.
4. *Different contexts.* We encourage researchers to study different contexts across the world. Unfortunately, in this symposium, we do not have all areas of the globe represented. Focusing on a wider range of contexts would help push our understanding of how the different perspectives hold up in practice.
5. *Advancing DEI.* Finally, while the concept of e-government and the concepts of inclusion, diversity, and social equity have received a lot of attention in different strands of literature, we encourage DEI scholars to double down on their efforts to further parse out the relationship between the concepts and to apply them to the e-government context.

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References

- Blessett, B., Jennifer, D., Beverly, E., Goedel, H. T., Gooden, S. T., Headley, A. M., Riccucci, N. M., & Williams, B. N. (2019). Social equity in public administration: A call to action. *Perspectives on Public Management and Governance*, 2(4): 283-299.
- Cepiku, D., & Mastrodascio, M. (2021). Equity in Public Services: A Systematic Literature Review. *Public Administration Review*, 81(6): 1019-1032.
- Chordiya, R. (2022). Organizational inclusion and turnover intentions of federal employees with disabilities. *Review of Public Personnel Administration*, 42(1): 60-87.
- Ciesielska, M., Rizun, N., & Chabik, J. (2022). Assessment of e-government inclusion policies toward seniors: A framework and case study. *Telecommunications Policy*, 46(7): 102316.
- Esteban-Navarro, M. Á., García-Madurga, M. Á., Morte-Nadal, T., & Nogales-Bocio, A. I. (2020, December). The rural digital divide in the face of the COVID-19 pandemic in Europe – recommendations from a scoping review. In *Informatics* (Vol. 7, No. 4, p. 54). MDPI.
- Frederickson, H. G. (2015). *Social equity and public administration: Origins, developments, and applications*. Routledge.
- Ferdman, B. M. (2013). The practice of inclusion in diverse organizations. *Diversity at work: The practice of inclusion*, 3-54.
- Ferdman, B. M. (2018). Incorporating diversity and inclusion as core values in organization development practice. In *Enacting Values-Based Change*, Palgrave Macmillan, Cham, pp. 157-167.
- Guy, M. E., & Sean A. M. (2012). Social equity: Its legacy, its promise. *Public Administration Review*, 72(s1): S5-S13.
- Gooden, S. T. (2015). PAR's Social Equity Footprint. *Public Administration Review*, 75(3): 372-381.
- Gooden, S., & Portillo, S. (2011). Advancing social equity in the Minnowbrook tradition. *Journal of Public Administration Research and Theory*, 21(suppl_1), i61-i76.
- Helbig, N., Gil-García, J. R., & Ferro, E. (2009). Understanding the complexity of electronic government: Implications from the digital divide literature. *Government Information Quarterly*, 26(1), 89-97.
- European Commission. (2005) *i2010, a European information society for growth and employment*. Communication from the Commission to the Council, the European parliament, the European Economic and Social Committee and the Committee of the Regions, European Commission.
- Jansen, W. S., Otten, S., van der Zee, K. I., & Jans, L. (2014). Inclusion: Conceptualization and measurement. *European Journal of Social Psychology*, 44(4): 370-385.

- Johnson, N. J., & Svava, J. H. (2015). *Justice for all: Promoting social equity in public administration*. Routledge.
- Macaya, J. F., Ribeiro, M. M., Jereissati, T., dos Reis Lima, C., & Cunha, M. A. (2021). Gendering the digital divide: The use of electronic government services and implications for the digital gendergap. *Information Polity*, 26(2): 131-146.
- Mariën, I., & Prodnik, J. A. (2014). Digital inclusion and user (dis) empowerment: A critical perspective. *Info*, 16(6): 35-47.
- McCandless, S., Bishu, S. G., Gómez Hernández, M., Paredes Eraso, E., Sabharwal, M., Santis, E. L., & Yates, S. (2022). A long road: Patterns and prospects for social equity, diversity, and inclusion in public administration. *Public Administration*, 100(1): 129-148.
- Mervyn, K., Simon, A., & Allen, D. K. (2014). Digital inclusion and social inclusion: a tale of two cities. *Information, Communication & Society*, 17(9): 1086-1104.
- Miller, F. A. (1998). Strategic culture change: The door to achieving high performance and inclusion. *Public Personnel Management*, 27(2): 151-160.
- Mor Barak, M.E., & Chrin, D. A. (1998). A tool to expand organizational understanding of workforce diversity. *Administration in Social Work*, 22(1): 47-64.
- Morte-Nadal, T., & Esteban-Navarro, M. A. (2022). Digital Competences for Improving Digital Inclusion in E-Government Services: A Mixed-Methods Systematic Review Protocol. *International Journal of Qualitative Methods*, 21, 16094069211070935-16094069211070935.
- Riccucci, N. M. (2009). The pursuit of social equity in the federal government: A road less traveled? *Public Administration Review*, 69(3): 373-382.
- Rivera, J. D., & Knox, C. C. (2022). Defining Social Equity in Emergency Management: A Critical First Step in the Nexus. *Public Administration Review*.
- Rodousakis, N., & Mendes dos Santos, A. (2008). The development of inclusive e-Government in Austria and Portugal: a comparison of two success stories. *Innovation: The European Journal of Social Science Research*, 21(4): 283-316.
- Rodríguez-Hevíá, L. F., Navío-Marco, J., & Ruiz-Gómez, L.M. (2020). Citizens' involvement in E-government in the European Union: The rising importance of the digital skills. *Sustainability*, 12(17): 6807.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of management*, 37(4): 1262-1289.
- Suchowerska, R., & McCosker, A. (2022). Governance networks that strengthen older adults' digital inclusion: The challenges of metagovernance. *Government Information Quarterly*, 39(1): 101649.
- Van den Berg, A. C., Giest, S. N., Groeneveld, S. M., & Kraaij, W. (2020). Inclusivity in online platforms: recruitment strategies for improving participation of diverse sociodemographic groups. *Public Administration Review*, 80(6): 989-1000.
- Wooldridge, B., & Gooden, S. (2009). The epic of social equity: Evolution, essence, and emergence. *Administrative Theory & Praxis*, 31(2): 222-234.
- Weerakkody, V., Dwivedi, Y. K., El-Haddadeh, R., Almuwil, A., & Ghoneim, A. (2012). Conceptualizing e-inclusion in Europe: An explanatory study. *Information Systems Management*, 29(4): 305-320.