

Digital transformation in medium sized cities – Debate and research perspectives

Tomás Vellani, University of Potsdam

Digital transformation has arguably become the most significant reform trend in public administration (Dunleavy et al. 2005, 2008, 2013; Politt 2011; Bogumil and Jann, 2020; Mergel 2019). Within the literature, municipality size is thought to have a significant effect on digital transformation processes (for example, see Ho and Ya Ni 2004, Holden et al. 2003, Manoharan 2013, Moon 2002, Feeney and Brown 2017, Gulati et al. 2014, Reddick 2009). However, there are unaddressed questions in the link between municipality size and digitalization.

In Germany, most of the literature on local government digitalization focuses on large cities (Lerche 2012, Schwab and Danken 2017, Thapa und Schwab 2018, Schuppan 2009). While some studies have been carried out utilizing survey data of all municipalities over 15.000 inhabitants (Bogumil et al. 2019, Schwab et al. 2019), they turn to large cities for case studies that explain the survey results. Therefore, large municipalities seem to dominate the German digitalization debate.

At the other end of the municipality size continuum, there is also a significant body of literature on reform processes in small municipalities. While not strictly focused on digitalization, its implication is that, among small municipalities, a larger municipality sizes is associated with better capacity (Lauber 2014, Ebinger et al. 2019, Ebinger et al. 2011, Kuhlmann et al. 2012, Kuhlmann et al. 2017, Fritz and Feld 2015).

Thus, there is knowledge about transformations at both ends of the local size continuum. However, the middle ground has not been sufficiently researched. This study focuses on the 509 medium sized municipalities between 20.000 and 50.000 inhabitants.

One can nevertheless recognize two conflicting perspectives on transformations in medium sized municipalities within the public sector reform literature,

- There is a theoretical argument that medium sized municipalities enjoy a privileged position to carry out transformation processes (Wollmann et al. 1985; Bogumil et al. 2007). Compared to small municipalities, they are large enough to avoid issues of lacking capacity. At the same time, they are small enough to avoid some of the challenges faced by larger cities, mainly a complex organizational structure and political arena which can lead to blockades.
- However, the opposite can be argued. Medium sized municipalities could present capacities more akin to small municipalities while facing demands comparable to those in larger municipalities.

The latter perspective is supported by quantitative research. On average, larger municipality size correlates with a more advanced state of digitalization in international studies (Ho and Ya Ni 2004, Holden et al. 2003, Manoharan 2013, Moon 2002, Feeney and Brown 2017, Gulati et al. 2014, Reddick 2009) as well as in Germany (Opiela et al. 2019). Nevertheless, these quantitative overviews do not look inside the black box of digital transformations in medium sized cities.

The author's recently started PhD project, with the research question *How do the particularities of small medium sized municipalities affect the extent of adoption of digital transformations?* seeks to shed light on this topic by studying 1. the extent and variance of digital transformations in medium sized cities, 2. the institutional dynamics that play a role, and 3. the success factors and barriers that can be recognized.

This article discusses first perspectives on the following two sub-questions:

- What is the current state of discussion regarding success factors and barriers to digital transformation in medium sized cities?
- Which perspectives from administrative science can provide a conceptual framework to approach digital transformation processes in medium sized cities?

References

- Bogumil, J. and W. Jann (2020) *Verwaltung und Verwaltungswissenschaft in Deutschland. Einführung in die Verwaltungswissenschaft*, 3rd edition, Wiesbaden: Springer VS
- Bogumil, J., S. Grohs, S. Kuhlmann, and A.K. Ohm (2007). Zehn Jahre Neues Steuerungsmodell: Eine Bilanz kommunaler Verwaltungsmodernisierung. Sigma.
- Bogumil, J., S. Kuhlmann, S. Gerber, and C. Schwab (2019). *Bürgerämter in Deutschland: Organisationswandel und digitale Transformation*. Nomos Verlagsgesellschaft mbH & Co. KG. <https://doi.org/10.5771/9783748901778>
- Dunleavy, P. and H. Margetts (2013). *The Second Wave of Digital Era Governance: a quasi-paradigm for government on the web*, Philosophical Transactions of the Royal Society A, 371(1987).
- Dunleavy, P., H. Margetts, S. Bastow, and J. Tinkler (2005). *New Public Management is dead. Long live Digital-Era Governance*, Journal of Public Administration Research and Theory, 16 (3): 467-494.
- Dunleavy, P., H. Margetts, S. Bastow, and J. Tinkler (2008). *Digital Era Governance: IT Corporations, the State and e-Government*. Revised Edition. Oxford: Oxford University Press.
- Ebinger, F., S. Grohs, and R. Reiter (2011). *The Performance of Decentralisation Strategies Compared*. Local Government Studies 37 (5): 553–575. doi:10.1080/03003930.2011.604557.
- Ebinger, F., S. Kuhlmann, and J. Bogumil (2019). *Territorial reforms in Europe: effects on administrative performance and democratic participation*, Local Government Studies, 45:1, 1-23, DOI: 10.1080/03003930.2018.1530660
- Feeney, M.K., and A. Brown (2017). *Are Small Cities Online? Content, Ranking, and Variation of US Municipal Websites*. Government Information Quarterly 34(1):62–74.
- Fritz, B., and L.P. Feld (2015). *CESifo Working Paper no. 5676*. 38.
- Gulati, J.G., C.B. Williams, and D.J. Yates (2014). *Predictors of On-line Services and E-participation: A Cross-National Comparison*. Government Information Quarterly 31(4):526–533.
- Ho, A.T.K., and A. Ya Ni (2004). *Explaining the Adoption of E-government Features: A Case Study of Iowa County Treasurers' Offices*. The American Review of Public Administration 34(2):164–180.
- Holden, S., D.F. Norris, and P.D. Fletcher (2003). *Electronic government at the local level: Progress to date and future issues*. Public Performance and Management Review, 26 (4), 325-344.
- Kuhlmann, S., M. Seyfried, and J. Siegel (2017). *Wirkungen von Gebietsreformen*. Scientific expert opinion on behalf of the Brandenburg Ministry of the Interior and Local Affairs. Accessed 9 October 2018. Potsdam: Brandenburg Ministry of the Interior and Local Affairs. <https://www.uni-potsdam.de/fileadmin01/projects/lkuhlmann/Gutachten/Gutachten-11-06-17.pdf>.
- Kuhlmann, S., P. Richter, C. Schwab, and D. Zeitz (2012). *Gutachten zur Reform der Kommunal- und Landesverwaltung Brandenburg*. Scientific Expert opinion on behalf of the parliamentary group Bündnis 90/Die Grünen at Landtag Brandenburg in course of Enquete-Kommission 5/2.

- Accessed 9 October 2018. Potsdam: Bündnis90/Die Grünen. https://www.gruene-fraktion-brandenburg.de/fileadmin/ltf_brandenburg/Dokumente/Publikationen/Kommunalverwaltungsgutachten.pdf.
- Lauber, J. (2014). *Gemeindegröße als Erfolgsfaktor? Das Beispiel des Kantons Luzern*. In: Reformen in Kantonen und Gemeinden, R. Steiner, A. Ladner, and P. Reist (Eds.), 133–147. Bern: Haupt.
- Lerche, R. (2012). *Vom Bürgeramt zum Bürgerservice – Heidelberger Erfahrungen*. Verwaltung & Management, 18(6), 324–328. <https://doi.org/10.5771/0947-9856-2012-6-324>
- Manoharan, A. (2013). *A Study of the Determinants of County E-government in the United States*. The American Review of Public Administration 43(2):159–178.
- Mergel, I. (2019). *Digitale Transformation als Reformvorhaben der deutschen öffentlichen Verwaltung*. der moderne staat – Zeitschrift für Public Policy, Recht und Management 12(1–2019):162–171. DOI: <https://doi.org/10.3224/dms.v12i1.09>.
- Moon, M.J. (2002). *The Evolution of E-government Among Municipalities: Rhetoric or Reality?* Public Administration Review 62(4):424–433.
- Opiela, N., J. Tiemann, J.D. Gumz, G. Goldacker, B. Thapa, and D.M. Weber (2019). *Deutschland-Index der Digitalisierung 2019*. 52.
- Pollitt, C. (2011) *Technological Change: A Central yet Neglected Feature of Public Administration*, The NISPAcee Journal of Public Administration and Policy, Vol. III, No. 2, pp. 31-53.
- Reddick, C.G. (2009). *The Adoption of Centralized Customer Service Systems: A Survey of Local Governments*. Government Information Quarterly 26(1):219–226.
- Schuppan, T. (2009) *Kooperationsanforderungen für E-Government: Ist die Verwaltung ausreichend netzwerkfähig?* eGov Präsenz, 2, 34–37)
- Schwab, C., and T. Danken (2017). *Characteristics and Implementation of Multilevel Joined-Up Government. The Example of the One Stop City Berlin*. In: H. Bjørnå, S. Leixnering, T. Polzer (Eds.) “Joined-up” Local Governments? Restructuring and Reorganizing Internal Management. Wien: Facultas, 71–97
- Schwab, C., S. Kuhlmann, J. Bogumil, and S. Gerber (2019). *Digitalisierung der Bürgerämter in Deutschland*. http://www.boeckler.de/pdf/p_study_hbs_429.pdf
- Thapa, B., and C. Schwab (2017). *Herausforderung E-Government Integration: Hindernisse von EGovernment-Reformen im Berliner Mehrebenensystem*. In: Ziekow, J. (Ed.). Verwaltungspraxis und Verwaltungswissenschaft. Schriften der Deutschen Sektion des Internationalen Instituts für Verwaltungswissenschaften Band 41. Baden-Baden: Nomos, 171–206.
- Wollmann, H., E. Scharmer, M. Argast (1985). *Rechtstatsachenuntersuchung zur Baugenehmigungspraxis*. Schriftenreihe des Bundesministeriums für Raumordnung, Bauwesen und Städtebau, Heft Nr. 03.110. Bonn