

Digitalisation and e-leadership in local government before COVID-19: Results of an exploratory study

IRMA RYBNIKOVA, VITA JUKNEVIČIENĖ, RITA TOLEIKIENĖ,
NORA LEACH, INESE ĀBOLIŅA, IVETA REINHOLDE, JANIKA SILLAMÄE

Abstract

The digitalisation of the public sector was already an emerging trend prior to the COVID-19 pandemic. However, the use of Information and Communication Technology (ICT) tools in municipal administrative settings was gaining traction in limited fields, with the digital preparedness of employees yet to be fully established. As already argued within academic debates, digitalisation leads to the emergence of e-leadership. As such, in order to evaluate the dynamics in operation, this study focuses on local municipalities in Estonia, Latvia, Lithuania and Germany, analysing the pre-pandemic practices. Moreover, it examines the challenges to public servants brought about by the adoption of ICT tools. As a pilot study, proposing further avenues for future research to explore, it expands the theoretical understanding of how digitalisation fosters e-leadership in local administration. The qualitative analysis relies upon interviews with managers and employees within local municipalities. The results suggest that even in the pre-pandemic period, an overall positive attitude towards digitalisation and e-leadership had already been established. However, the findings demonstrate that there are emerging challenges stemming from the process. More often than not, they are associated with the need for suitable training, difficulties in establishing an appropriate work-life balance, and disparities between the traditional organisational culture and digitalisation.

Key words

digitalisation; e-leadership; public sector; local government; municipality.

DOI: 10.23762/FSO_VOL10_N02_9

Irma Rybnikova

e-mail: Irma.Rybnikova@hshl.de
Hamm-Lippstadt University of Applied Sciences,
Germany

Vita Juknevičienė

e-mail: vita.juknevičiene@gmail.com
Šiauliai Academy, Vilnius University, Lithuania
University of Johannesburg, South Africa

Rita Toleikienė

e-mail: rita.toleikiene@sa.vu.lt
Šiauliai Academy, Vilnius University, Lithuania

Nora Leach

e-mail: Nora.Leach@nottingham.ac.uk
University of Nottingham, United Kingdom

Inese Āboliņa

e-mail: inese.abolina@gmail.com
University of Latvia, Riga, Latvia

Iveta Reinholde

e-mail: iveta.reinholde@lu.lv
University of Latvia, Riga, Latvia

Janika Sillamäe

e-mail: janikasillamae@hotmail.com
University of Tartu, Estonia

¹ Corresponding author

Introduction

The increased use of ICT tools is transforming the way institutional settings and employees are managed, controlled, evaluated and led. The newly adopted changes shape the functioning of central and local public administration. The role of digitalisation is becoming increasingly important at a municipal level, due to the expectation of higher efficiency and transparency, as expressed by citizens and political elites alike. The swift adoption of ICT tools is at the core of the process. As an emerging process, digitalisation fosters new aspects of leadership, thus expanding the common understanding of the term to include electronic leadership (e-leadership).

Leadership as such is a subject of enduring interest within debates in the fields of general management (e.g. Northouse, 2015; Schedlitzki and Edwards, 2017; Lang and Rybnikova, 2014; Yukl, 2013) and public sector management (Tummers and Knies, 2016; Vogel and Werkmeister, 2021). However, notwithstanding the extensive use of the term, a universally accepted definition is yet to be established. More often, it is understood as 'the process of influencing others [regarding] what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives' (Yukl, 2013, 7).

Unsurprisingly, as a complex organisational process, leadership is directly impacted by digitalisation and ICT. Whilst pivotal for any institutional setting, specific guidance as to how to approach effective e-leadership within municipalities continues to be found wanting. Consequently, the process is simply treated as a side-effect of digitalisation. The resulting dynamics are two-fold. On the one hand, leaders are perceived as influencing the implementation of ICT and digitalisation projects, whilst establishing norms, suitable culture and policy within organisations, thereby informing the attitudes and

behaviour of employees. On the other hand, however, leadership can be seen as being shaped and altered by the introduction of ICT and digitalisation. This paper engages extensively with the latter issue, specifically evaluating the process in the context of local government. As already recognised within academic literature, there is a significant difference in terms of leadership values and approaches to the matter between public and private sector settings (Franken et al., 2020; Walker and Andrews, 2015). This stems from a higher degree of accountability, involving various stakeholders, and higher levels of formalisation established within the public sector (e.g. Boyne, 2002; Orazi et al., 2013). As such, the successful implementation of e-leadership within public sector structures deserves further attention.

The aim of this paper is to shed light on the practices of e-leadership in the public sector, whilst placing the emphasis on municipalities, in the period preceding the COVID-19 pandemic. Drawing upon existing academic literature, this study constitutes a pilot project designed to inform future research and to suggest potential avenues for exploration in terms of the evaluation of good practices associated with e-leadership. The analysis relies upon qualitative data collected in municipalities in Lithuania, Latvia, Estonia and Germany prior to the onset of the global pandemic (July – October 2019).

Notwithstanding the varying historical trajectories in terms of local governance, the countries have been selected due to their similar continental models of public administration (e.g. Kuhlmann and Wollmann, 2019). However, when it comes to evaluating the implementation of digitalisation in public administration settings, the cases selected exhibit considerable variation. Whilst the Baltic states have emerged as frontrunners, Germany continues to make rather slow progress in that respect (e.g. Mergel, 2021).

The remainder of the paper will first engage with the existing literature on e-leadership, both in general terms and specifically in the case of the Baltic states and Germany, with the aim of identifying the main themes and persistent limitations of research thus far. Next, it will introduce the data and methods employed for the purposes of the exploratory study. This will then be followed by a section dedicated to the empirical results obtained in the four cases evaluated. The paper will conclude with a discussion of the contribution of the pilot project and potential implications of the findings for future research.

1. Literature review

1.1. Previous research on e-leadership

A substantial body of the literature to date focuses on e-government and e-governance (e.g. Bannister and Connolly, 2011; Meijer, 2015), whilst further elucidating on e-leadership (e.g. Avolio et al., 2014; Jawadi et al., 2013; Kahai et al., 2017; Wilson et al., 2006). Notwithstanding the considerable interest, there is an observable scarcity of studies placing sole emphasis on e-leadership in the public sector, with the topic predominantly addressed in general terms.

It has been argued that the main distinction between leadership and e-leadership lies in the context (Avolio et al., 2014, Van Wart et al., 2019) whereby work is mediated by information technology. E-leadership refers to the process of conducting leadership tasks and activities through electronic channels and ICT-mediated communication. The most widely accepted definition of the phenomenon is provided by Avolio and his colleagues (2014, 107), who define e-leadership as 'a social influence process embedded in both proximal and distal contexts mediated by Advanced Information Technology (AIT) that can produce a change in attitudes, feelings, thinking, behaviour, and performance'. In addition, Van Wart and his colleagues (2019, 4) elucidate that e-leadership further

encompasses 'the effective use and blending of electronic and traditional methods of communication', implying technical competence and an awareness of current technical options that could be employed in the process. As an emerging concept, it calls for wider empirically-based research in order to advance the identification of various e-leadership modes and patterns (Van Wart et al., 2017).

E-leadership is assumed to affect communication and commitment amongst employees due to the lack of physical presence in the process. The findings thus far suggest that e-leadership negatively impacts the commitment level of employees due to reduced verbal communication and physical interaction with supervisors. Consequently, feelings of trust and, by implication, assurance decrease. Trust is considered a fundamental factor, being of pivotal importance in the process and determining the outcome, whether a success or a failure, in virtual and electronic environments (Jawadi et al., 2013; Wilson et al., 2006, 188). Moreover, it is deemed to provide a means for coping with complexity and uncertainty in contexts with high levels of interdependence and interaction between various actors. Trust further aids the creation of a climate of cooperation and shared social context at individual and collective level, whilst fostering good citizenship behaviour and improving the quality of the decisions made (Kanawattanachai and Yoo, 2002). Consequently, as argued in academic literature, e-leaders should be acutely aware of the importance trust holds in virtual environments (Kanawattanachai and Yoo, 2002; Liu et al., 2011, 2018).

Previous studies on e-leadership focus predominantly on the new requirements arising from the introduction of ICTs. As Groysberg (2014) asserts, in the context of e-leadership, leaders from all levels of the organisational hierarchy are expected to be familiar with new information and communication technologies in order to facilitate team and communication dynamics accordingly. Moreover, leaders should be aware of the distinct differ-

ence between in-person and digital communication. For instance, motivational language via e-mail exchange is perceived differently to messages with similar content, communicated face-to-face (Fan et al., 2014). The issue of a suitable e-leadership style is also the subject of academic attention. Debates revolve around a number of propositions in the virtual environment, such as transformational and transactional (Hambley et al., 2007; Kahai et al., 2013) leadership. However, as recognised in the literature, a distributed leadership style has proven the most popular and highly conducive to a successful e-leadership process (Jameson, 2014; Kahai et al., 2017; Liu et al., 2018). Overall, there is broad agreement among scholars that e-leadership creates new requirements for suitable behaviour: finding new ways to assert oneself as a motivating, communicative and thoughtful leader; trusting employees to work independently away from the typical office environment; abandoning symbols of hierarchy and steering away from undisputed authority; fostering an attitude of agility and flexibility; and measuring success in a different manner, both organisationally and personally (Bansal, 2010).

Notwithstanding the growing academic interest, there is a scarcity of research focusing on e-leadership in public sector settings. Thus far, the studies which have evaluated the process have highlighted a number of potential challenges (see Van Wart, 2017; Van Wart et al., 2019) related to communication (miscommunication, communication overload, loss of informal interactions, loneliness and a weakened sense of belonging), motivation (monitoring employees and milestone accomplishment, recognition, rewards, development of employees) and change management (positive attitudes towards change are difficult to foster in virtual environments).

1.2. Digitalisation and e-leadership in the Baltic states and Germany

The evaluation of e-leadership in local municipalities would require further elucidation

on the dynamics in each of the four cases selected. Lithuania has already adopted e-government services and is currently dealing with all the challenges and opportunities it offers. Despite its introduction, e-leadership remains a novel concept which is yet to be fully explored. Instead, Lithuanian scholars focus their attention on subjects such as ICT use in public administration, e-government, e-services, and leadership aspects at the national level, without an emphasis on local specifics. Consequently, albeit with a few exceptions, there is a scarcity of studies that contribute significantly to the body of academic literature on e-leadership in the context of Lithuania. Examining the dynamics in the country, Paražinskaitė (2014) focuses on the application of ICT at the ministerial level. As she asserts, a positive approach demonstrated by the leader and well-presented benefits of innovation may bring about suitably positive attitudes among employees. E-leadership in Lithuania has been evaluated in research by INSEAD (INSEAD eLab, 2012). As per the argument made, every e-leader should possess in-depth knowledge in a certain area (e.g. science, engineering, ICT, social sciences), as well as general skills (e.g. negotiation, critical thinking, design and systematic thinking, entrepreneurship, etc.). Rybnikova et al. (2015) examine various leadership practices in local self-government in Lithuania, as compared to Germany, asserting that technology may soon become a substitute for leadership.

A substantial body of literature on ICT in the local government of Latvia focuses on e-government, e-governance and e-services. According to Lielpēters (2019), that country is currently experiencing rapid digital development, offering an easily accessible digital environment conducive to interaction and cooperation between citizens and public administration. According to Dumpe and Arhipova (2012), in order to further increase the use of e-services in Latvia, suitable policies and strategies designed to facilitate the

smooth adoption of the electronic process should be introduced. Stučka (2018) emphasises the specifics of local government in Latvia, whereby the chairperson of the municipality is a political leader with executive and decision-making functions. Such dynamics may restrict the scope of leadership activities, including e-leadership, due to the need for interaction with all political parties. She argues that agility may be impacted as a result.

E-leadership is yet to become the subject of rigorous research in Estonia. Teichmann et al. (2015) evaluate the preparedness for e-governance amongst public and private sector managers and teleworkers. Further, Roosna and Rikk (2019) assert that most innovations shaping digital development are informed by rigorous academic research and swiftly adopted within the private sector. However, the role of government and public service has recently increased, transforming their activities from catalytic and stimulating into core leadership in the context of digital technologies and their implementation in Estonia.

Previous studies on digitalisation in public administration in Germany suggest that e-leadership and the associated introduction of digital technologies remains a 'clear weakness', marked by modest progress (Thijs et al., 2018). Notwithstanding the early introduction of various initiatives and laws two decades ago, the country is still lagging behind the EU frontrunners in terms of digitalisation. Research to date has predominantly focused on services for citizens, businesses and civil society. As such, e-leadership and the required digitalisation in local government settings is yet to be evaluated. Comparing the dynamics in Lithuania and Germany, Rybnikova et al. (2015) demonstrate that the Baltic state is more digitally advanced. As they argue, leadership processes in communal organisations in Germany remain less influenced by digital technology. Whilst commonly utilised digital tools such as email communication and intranet platforms have been introduced in both

states, they are rather considered supplementary, without any core function in the leadership process in Germany.

Evaluating the existing body of literature on e-leadership, it becomes apparent that the specifics associated with the process in the public sector, and by implication in municipalities, are yet to be examined. Research to date does not place the emphasis on e-leadership, focusing instead on e-government in the public realm and engaging predominantly with citizens' perspectives. As such, empirically driven research that examines e-leadership as an internal organisational process remains a high priority.

Taking into account the dynamics discussed in the context of the Baltic states and Germany whilst acknowledging the limitations of the existing academic research, this study seeks to answer two research questions: 1. What type of e-leadership practices could be distinguished in municipalities in Estonia, Latvia, Lithuania and Germany and how are they justified by the employees? 2. What were the challenges faced by supervisors and employees in municipalities associated with the adoption of e-leadership prior to the global pandemic?

2. Methods

This study compares four countries which, whilst sharing similar continental models of public administration, differ in terms of local government structure and digital progress. In the past 30 years of post-Soviet history, the Baltic states have made huge social, economic and technological progress, thereby reinventing their local self-government systems. In contrast, Germany is a well-established Western democracy, enjoying advanced development and long-standing traditions of local self-government in line with the continental model (Hiden, Salmon, 2014; Vodyanitskaya, 2016). Importantly, the Baltic states and Germany differ dramatically in terms of digitalisation of public

service. Whilst Estonia is recognised as an EU trailblazer (Arm et al., 2019), Germany is perceived as lagging behind in terms of the digitalisation of the public sphere (European Commission, 2017; Wegrich, Hammerschmid, 2018). Notwithstanding the aforementioned disparities, as per the arguments made in research to date and in accordance with the findings of this study, the four countries share considerable similarities. This is particularly the case in terms of digitalisation as a factor framing work conditions and leadership in municipalities. Moreover, the four cases selected are similar in terms of their legal basis of digitalisation. In the last 20 years, a considerable body of normative acts, laws and regulations has been introduced in order to facilitate the adoption of digital technologies at state and local government level. In terms of the implementation of digital services at the local level, there is a slight variation in the scope of digital tools adopted. Diverging from Germany, local structures in the Baltic states have already implemented a more impressive variety of digital solutions.

In order to evaluate the practices and challenges associated with e-leadership in municipalities in the Baltic region and Germany, *the explanatory empirical approach* is deemed most appropriate. According to an argument made by Mollick (2014), it permits the development of an evolving topic, whilst providing useful foundation for future theory building.

As a main method, this study relies on *semi-structured interviews*, which were conducted with supervisors and employees in various municipalities in all four countries – Lithuania, Latvia, Estonia and Germany – between July and October 2019. The interview guide was developed and validated by the authors of the paper. It consisted of five parts: details of the specific organisation, position and experience in local government of the interviewee (three questions); e-governance and digitalisation in the specific organisation (six questions); e-leadership prac-

tice, including e-HRM tools and work modes (seven questions); the effects, impact and challenges of e-leadership (six questions); and demography (four questions). It consisted of 25 open-ended questions and one close-ended question enquiring about the gender of the interviewee. The interview guide was translated into all four languages – Lithuanian, Latvian, Estonian and German.

Sample size in qualitative research is often a source of controversy. ‘Saturation’ is used as an appropriate measure, implying that no significantly different results could be obtained beyond a certain number of interviews. However, the definition of saturation often varies. Whereas ‘thematic saturation’ implies that the desired point is reached when *all* topics are covered by the interviews conducted, Weller et al. (2018) propose that it should be established based on the inclusion of the *most salient items*. Consequently, saturation as per Weller’s definition can be achieved in small samples. This study follows Weller’s rationale, thereby relying on a small sample of interviewees – supervisors and subordinates – in each of the four states. As such, it is envisaged that the point of saturation would be reached by incorporating the most salient issues in regard to e-leadership in municipalities. A small sample size is also appropriate for an exploratory study, such as this project, in order to gain initial knowledge of the field and to derive new ideas (Swedberg, 2020). Moreover, the authors believe that the contribution of this pilot study stems from its potential to reveal new dynamics and to capture ‘situational uniqueness’ (Tsoukas, 2011, 286) in regard to e-leadership in municipality settings. The final sample for the analysis consists of eight interviewees from selected municipalities, or two per country. In each state, interviews were conducted with one supervisor and one of their employees, or a leadership dyad, in order to examine both perspectives.

The study employs *the purposive sampling technique* (Burger, Silima, 2006; Etikan et al.,

2016), thereby following a *threefold criterion for the selection of interviewees* in various municipalities: experience with digitalisation, with emphasis on medium-sized municipalities in terms of organisation; duration of employment in the local government of at least

six months for employees; and experience of supervision in the local government of at least one year for supervisors (see Table 1). All interviewees signed the Specific Privacy Statement in order to ensure confidentiality and voluntary participation.

Table 1. Overview of conducted interviews

	Lithuania (N=2)	Latvia (N=2)	Estonia (N=2)	Germany (N=2)
Size of municipality	Medium-sized (100,000)	Medium-sized (23,000/10,000)	Medium-sized (20,000)	Medium-sized (100,000)
Field of activity	Social issues department	City council member / PR	Partnerships / Council Office	IT department
Experience in the position, in years	17/3	2/2.5	1/7	6/5
Age of interviewees	48/45	40/25	40/37	59/27
Gender of interviewees	f/f	m/f	f/f	m/f
Number of people supervised	150/0	0/0	3/0	16/0

Source: own elaboration

The interviews took place in the offices of the selected interviewees, with a duration of 30 to 90 minutes, or an average time of 60 minutes. All interviews were recorded, transcribed and content-analysed, employing the thematic and template analysis approach (Brooks et al., 2015). The answers of the respondents were codified according to the country and the order of the interview: LT_1, LT_2, LV_1, LV_2, EST_1, EST_2, GER_1 and GER_2. As e-leadership practices in municipalities are marked by a high degree of country-dependent specifics, the thematic analysis was conducted individually in each state in order to account for local particularities. The initial main themes, however, were set deductively for all four countries evaluated, tackling the research question pertaining to the practices of e-leadership and challenges stemming from the implementation of the process. The remaining sub-themes were generated inductively, informed by the data obtained during the interviews. For each country, a template was developed, outlining the main themes and sub-themes. In the

ensuing section, the paper engages with the results, evaluating e-leadership practices and the associated challenges in the pre-pandemic period in the four individual countries. A discussion of the findings then proceeds.

3. Research results

3.1. Lithuania

Results obtained in Lithuania demonstrate that both the supervisor, a top official, and the employee utilised ICT in their daily activities. Moreover, ICT formed an integral part of the tools facilitating various tasks, even in the pre-pandemic period. Together with email, accepted as the usual means of communication, the Beehive document management system was evaluated as an easy and accessible instrument. It was further appraised as an appropriate operational tool, facilitating the leadership and supervision of employees: *And it is always possible to assess how many were late, etc. It helps in the pursuit of quality. For us as, managers, such a system is very good (LT_1).*

Interviews have also indicated that Lithuanian local government representatives do not solely rely on organisational platforms. They further incorporate public platforms for a variety of management activities, including leadership. Google offerings were considered as useful for more efficient time planning: *With my supervisors we also have Google Calendars. <...> You open it and you already know what a specialist is doing this week or today, what tasks. <...> It is much more convenient (LT_2)*. The supervisor utilised public platforms for task coordination and communication. Social media, and Facebook in particular, were further employed as a relevant alternative form of communication, often used to resolve issues with colleagues from other institutions: *I find him on Facebook and we become friends. <...> Then I write a letter. <...> The next day I receive an e-mail, sent by the head of department, who has collected the information. <...> That's what speed is (LT_1)*.

Employees willingly accepted the variety of electronic tools, acknowledging that they offer an easy and swift alternative for communication with their supervisors. Recognising their benefits, supervisors were constantly searching for novel products that provide an even higher functionality: *I know there are other programmes that are more useful and convenient for communication. But there is no system which makes it possible to see the task as it is performed, to control it (LT_1)*.

Notwithstanding the benefits, interviewees have also highlighted certain aspects of ICT usage that could pose challenges. As the most important aspect, personal skills and willingness of supervisors and employees were seen as being pivotal to the adoption of ICT: *I think everything depends on the managers. How you set an example, how you teach, how you educate (LT_1)*. The respondents further indicated that appropriate training for the adoption of e-tools remains wanting: *We get more psychological, managerial*

training on how to empower our employees, but not about e-systems, tools (LT_1). Such a lack of training created the impression that an established national policy in Lithuania is lacking, particularly in regard to enabling supervisors and employees to develop their ICT proficiency. An additional problematic aspect of e-leadership resulting from the efficiency of ICT tools was identified, namely the increased workload: *Work becomes more efficient, but more and more work is being created (LT_2)*. Intimately linked to the growing list of tasks was another concern of the interviewees, according to whom e-leadership could seriously impact work-life balance, particularly when the boundaries between private and work environment become obscured, as in the case of remote working: *Some look at remote working as motivation for employees, but sometimes I think of it as an intrusion into your personal space. And we work more hours then (LT_2)*. As ICT has become an integral part of daily life, such dynamics led to around-the-clock availability: *Even though I'm working from home, I am always available thanks to these technologies, "they follow me" (LT_2)*. Furthermore, ICT usage changed the work style of supervisors, as multitasking and working on various assignments simultaneously, combined with high fragmentation of managerial work, became the norm: *It can be both positive and negative when you can do five jobs at once. On the one hand, it mistunes a person; on the other hand, I cannot imagine how to deal with so many areas (LT_1)*. Finally, as prompted by the increased adoption of ICT tools, supervisors are required to find new strategies to demonstrate respect and appreciation for employees by blending e-tools and personal communication: *Perhaps it is also our problem that we do not find ways to show a person that his or her work makes sense and adds value (LT_1)*. Overall, as demonstrated, supervisors and employees were very proactive in utilising ICT tools for leadership purposes even in the pre-pandemic period.

3.2. Latvia

In Latvia, e-government and digitalisation became increasingly important, thereby facilitating communication and improving the quality of services provided to citizens. Staff at Latvian municipalities adopted the use of an organisational tool – a document management system called *Lietvaris* – for their daily activities. Such a move brought about success in terms of time-saving and simplifying the process, particularly in relation to the standardisation of the flow of delegated tasks, as implemented in *Lietvaris*: *When a task is entered into the system, its performance sequence is automatically generated <...>. By standardising the flow, we save time (LV_2).*

The majority of digital innovations, however, were designed to improve the quality of services provided to citizens. Currently, Latvian citizens are able to submit all their requests to the local authority electronically. E-mail communication adopted in the process has proven very helpful: *We also offer an e-mail service – an opportunity for residents and businesses, offering them the ability to communicate with all municipal offices electronically using their e-mail addresses (LV_1).* An ever-expanding variety of tools was further employed, such as webpage information and monthly municipal newsletters delivered via e-mail. Municipalities offered an interactive map, displaying business enterprises registered in the area and free Wi-Fi hotspots. Moreover, an electronic queue management system was introduced, combined with a mobile application, allowing residents to obtain a service number remotely and thus to reduce waiting times. Furthermore, a free municipal hotline was launched, subject to continuous improvements: *Residents can call us and get advice from professionals within the municipality, make claims or ask questions (LV_1).*

Overall, ICT tools were utilised to communicate with citizens, to speed up the communication process and to reduce bureaucracy. A variety of communication platforms were employed, such as Facebook, Twitter

and Instagram. The resulting transparent and timely manner of interaction with citizens had a positive impact on the reputation of the local authority: *As a municipality, we strive to be active in social networks. <...> therefore, people often choose this channel to get answers to their questions as quickly as possible (LV_1).* Facebook was often the social platform of choice: *Facebook is clearly considered to be the most effective, because communication is moving in two directions – we communicate current issues and receive questions, and quite often find out much more quickly about the issues of population, and this allows us to react and act immediately (LV_2).*

Notwithstanding a myriad of advantages, ICT tools were evaluated as posing certain challenges. Electronic bill payment was one of the procedures requiring additional training: *Getting used to the electronic bill payment process is a challenge and we regularly arrange training for our staff to ensure that our personnel understand the procedure (LV_1).* Inflexibility, as demonstrated by the local authority, has also proven to be challenging. The issue arose in relation to the retroactive correction of errors, which is difficult to implement electronically: *No changes are expected in municipalities, everything is done as usual. <...> However, the possibilities of ICT are minimally used (LV_2).* Moreover, one of the interviewees disclosed that they struggle with the lack of a strategic approach in the context of e-leadership: *Lacking a strategic approach, different systems in use (LV_1).*

The use of ICT tools was swiftly adopted in order to simplify day-to-day operations, reduce the volume of printed materials, and provide easily accessible information to employees and citizens alike. However, such rapid digitalisation found supervisors underprepared. This was particularly the case in relation to maintaining motivation levels of employees in an electronic environment: *Managers should be able to explain to employees the necessity and benefits of change, and, despite the increasing volume of digital solu-*

tions in their daily work, be able to motivate and engage with their employees in the process of getting used to e-tools (LV_1). In an e-leadership context, the balance between remote and direct communication had to be maintained: *Of course, there is also a need to ensure that personal communication in the work environment would not be lost (LV_2)*. As demonstrated, Latvian municipalities were more than willing to adopt various ICT tools, including for leadership purposes.

3.3. Estonia

A significant part of the digital infrastructure in Estonian municipalities was made available by the central government. It included, but was not limited to, a register of the population, a training platform and an e-invoice system. The interviewees willingly acknowledged that in the past 10 years there has been considerable progress made towards digitalisation, both at state level and locally: *What the state has done is, for example, enacted a law which has now come into force as of July, which prevents public authorities, including local municipalities, from accepting any paper or PDF invoices or anything other than e-invoicing – which means that it is cross-system e-invoicing. And this is happening nationwide (EST_1)*. Simultaneously, the development and provision of municipal services, including e-services, was decentralised. It was left to the discretion of the local authority to determine the extent to which the process could be transferred to an electronic platform.

The Estonian interviewees disclosed that they do indeed utilise organisational tools in their daily activities, for instance a platform for e-services: *We have this new SPOKU system (self-service environment for citizens) (EST_1); when it comes to the social area, they have their STAR programme (EST_1)*. Communication and interaction with citizens were mainly facilitated by e-mail or telephone, with some of the services provided via an internet platform. Moreover, an interactive page was created, displaying relevant

statistical information for the municipality: *In our district, there is a web page – it is an interactive environment that basically displays the district's statistics, collected from various state databases (EST_1)*.

Notwithstanding considerable progress made at the national level, interviewees still asserted a lack of digital advancement on a local scale. According to them, the ever-evolving digital tools on offer were designated to facilitate interaction with citizens, rather than aid the intra-organisational processes at the municipality. The systems established within the organisation were commonly used office software products. The introduction of novel digital tools, for instance an accounting programme or a digital solution to manage school and nursery lists, was still at the discretion of the local authority. As disclosed, it could be quite time-consuming to initiate the introduction of new digital products, if a such proposal were met with lacklustre support by the unit manager.

There were no specific management-oriented digital tools in the selected Estonian municipality. The interviewees confided that, although in possession of myriad advanced technical tools, the vast majority remained unused within the organisation due to a lack of staff competence. The main forms of digital interaction were basic channels, such as e-mail correspondence and file-sharing systems. For instance, an advanced Skype conference call system was readily available, albeit remaining largely unused due to a lack of training provided to employees. Moreover, Microsoft 365 Teams software offered a variety of digital communication solutions which remained unexplored, as staff were not made aware of its potential.

An established policy in the municipality allowed staff to occasionally work remotely, on the condition that employees were available via e-mail and telephone: *When working remotely, the channel remains the same, so you communicate via email or phone, or use the same file management software (EST_1)*. It

should be mentioned that the policy was not widely used due to the small size of the establishment and the preference of staff for office-based work. As such, face-to-face communication remained the preferred form of interaction.

The age composition of the cohort within the municipality also played an important role in the process of digitalisation: *People have been working here for 10-20 years and they do not want any changes. When I got here, I sort of went back to the past (EST_2)*. The main obstacle to the process of digitalisation turned out to be the resistance of senior-aged managers, who resisted the introduction of novel technologies. As the interviewees disclosed, the number of employees who willingly adopted digitalisation was equal to the number opposing the process: *But it depends on the supervisor; for example, one department that has employed a young supervisor, who is under 40, uses all available software and does it perfectly (EST_1)*. Despite progress made towards digitalisation on a national scale, the pre-pandemic period saw slower introduction of ICT tools within Estonian municipalities, particularly for intra-organisational purposes.

3.4. Germany

Whilst German respondents evaluated their municipality as being far less advanced compared to the Baltic states, the interviews demonstrated that there was a range of digital tools already in use. This was especially the case in relation to citizen-oriented standard services, such as digital parking fines. Moreover, digital solutions for internal use were further established, for instance an HRM tool for digital job applications, an HRM pay-off system and a software programme that facilitated the management of employees' suggestions. Extensive use of the Microsoft Outlook platform was also adopted by employees and supervisors alike, in order to facilitate appointments or to monitor the engagements of colleagues. The inter-

viewed supervisor further disclosed that they rely extensively on e-mail communication in order to provide instructions to staff, rather than written correspondence, as was previously the established practice. They specifically emphasised the adoption of e-mail as a positive, particularly compared to phone communication: *Email is my favourite solution, because thereby a commitment occurs (GER_1)*.

Doodle – an online scheduling tool offered by Google – was also popular, especially in the management of large groups of employees, and was perceived as enhancing group work. Whilst all offices were equipped with phones, permitting conference calls, the supervisor disregarded the option due to the proximity of the office spaces and the need for face-to-face interaction.

Both interviewees from the German local authority referred to three main factors behind the increased adoption of digital tools. According to them, increased efficiency, improved accessibility to services for citizens ('sofa municipal services', as aptly described by the supervisor), and political pressure towards digitalisation in municipalities were the main catalysts. Political pressure was further emphasised as being very significant: *Management is also driven by politics and citizens to move forward with this and expects it to bring about rationalisation that translates into cost, staff savings, faster operations and more services (GER_1)*. As demonstrated, digitalisation was considered to be motivated by considerable societal expectations and stipulated by political elites in the city, with the local authorities more than willing to adapt. E

Notwithstanding the motives behind digitalisation and the advancements made, the interviewees remain reserved in their appraisal of the success achieved thus far, citing structural challenges stemming from the nature of municipal tasks and the strategies adopted by the city council. They also mentioned organisational and psychological difficulties encountered in the process.

The structural challenges were related to the heterogeneous nature of municipal tasks, whereby general digitalisation was not feasible, instead requiring different approaches and different digital solutions for every field: *The underlying processes are completely different and that makes automation very difficult because we don't have a lot of synchronisation (GER_1)*. According to the interviewees, handling sensitive aspects of the activities in the local authority was not conducive to full digitalisation: *Like, for example, digital complaints. <...> You will certainly have to use your fingertips to pick up the phone and drive there, instead of answering it digitally (GER_1)*. Moreover, the diversity of citizens made digital solutions somewhat unsuitable. For instance, foreigners and refugees lacking proficiency in German or English required personal assistance and interpreters, instead of a digital tool, in order to fully benefit from the municipal services offered.

As the interviewees asserted, the most significant challenge to successful digitalisation was the lack of personnel resources. According to them, new job vacancies should be created, specifically facilitating the process. As digital projects were carried out by existing staff, digitalisation constituted an add-on to their existing list of tasks: *That's just one of many tasks and not necessarily what would do justice to it (GER_2)*. Consequently, the respondents recognised the disparity between the high relevance of digitalisation, as rhetorically asserted, and its low importance in practical terms. This was to remain the case until personnel shortages were addressed.

The municipality further faced an organisational challenge associated with e-leadership – the local institutional culture, whereby face-to-face contact and personal interaction were seen as pivotal. The requirement for in-person communication as an established institutional norm was strongly linked to group cohesion, resulting from previous personal interaction. As such, the expected

digitalisation of leadership was seen as sub-optimal, since in-person contact was held in high regard for all leadership purposes, be it performance feedback or work instructions. Unsurprisingly, it was still the preferred method of communication for supervisors as well as for the employees: *I personally would find it strange if I received a digital work instruction from my boss – he sits three doors down. I would ask myself why he hadn't approached me personally. I think I would always find that a bit weird (GER_2)*. Such attitudes suggest that digitalisation and e-leadership are yet to be embraced due to their conflict with the established local organisational culture. Consequently, supervisors were faced with yet another challenge – the successful blending of digital and in-person activities. They had to exercise judgement and become highly selective in terms of appropriate modes of interaction, thereby differentiating between leadership issues requiring face-to-face communication and digital engagement.

4. Discussion

The results of the exploratory study demonstrate that e-leadership was already taking place in municipalities, even in the pre-pandemic period. However, it was a side-effect of proliferating digitalisation attempts, mainly related to services provided to citizens, such as speedy communication via e-mail or Facebook, or digital documentation management. Concurrently, internal administration processes became increasingly digitalised as well. As such, e-leadership, holistically understood as supervision of staff via technical channels, emerged as an integral part of daily leadership activities. Despite the lack of official guidelines focusing on the process, initial hands-on experiences were already occurring. However, it has to be recognised that e-leadership was still regarded as somehow inferior, since face-to-face engagement was considered the gold standard in leadership activities during the pre-pandemic period.

Focusing on the first research question, related to practices of e-leadership in municipalities in Estonia, Latvia, Lithuania and Germany, this study revealed that there was a range of e-leadership activities observed in the specific context. It incorporated the coordination of tasks and meeting management via Google tools; phone, e-mail, Microsoft Teams or Facebook communication with employees; and various HRM electronic solutions. According to public servants, the main advantages stemming from the adoption of ICT tools were the increased efficiency and time-saving solutions they offer, be it for external (citizen-focused) or internal (employee-focused) activities. Moreover, the process of digitalisation gained traction, stimulated by considerable societal and political pressure. Interviewees acknowledged that the use of the newly adopted digital tools – and, by implication, the emerging e-leadership – provided a myriad of advantages, such as speeding up communication between employees and supervisors, reducing bureaucracy by simplifying daily activities, reducing the volume of printed materials, and making information more easily accessible for employees and citizens alike. Importantly, offering digital solutions was considered an enhancing factor for the reputation of the municipalities. However, as emphasised by public servants, e-leadership did not provide a complete solution, with face-to-face leadership remaining significantly important in the pre-pandemic period. E-leadership was seen as suitable for routine daily activities such as task-based communication.

Addressing the second research question, it is important to note that whilst there was an overall positive attitude towards digitalisation and e-leadership, interviewees highlighted a number of challenges which are yet to be addressed by municipalities. *Lack of suitable personnel*, specifically focusing on digitalisation, was reported as a significant structural obstacle. With digital projects carried out by existing employees as ‘on-top-jobs’,

e-leadership remained either a lower priority issue or a process emerging spontaneously, thereby lacking any solid foundation, preparation or time for reflection. Moreover, the *lack of training*, specifically targeting digitalisation, did not allow supervisors and employees to adequately address the ever-increasing requirements for advanced technological knowledge and skills. Further challenges stemming from the *intensification and fragmentation of work* in the new electronic context could be identified. With the increased usage of platforms, such as Facebook, for private as well as for work-related communication, the *work-life balance of staff* began to suffer in the process. An additional challenge posed by e-leadership was its *conflict with the established organisational culture*. With face-to-face communication established as the gold standard, the absence of personal interaction was considered as disrespectful or even embarrassing. As interviews asserted, the variety of communication channels employed, offering around-the-clock availability and blurring work-life boundaries, *increased stress levels for supervisors and employees* alike. This, in turn, had a significant impact on *work motivation*. In the new electronic environment, motivating employees and maintaining their engagement in the process has proven crucial.

This exploratory study significantly contributes to the existing body of literature on e-leadership, demonstrating the increasing importance of the process in the public sector. With previous research mainly addressing the issue in private settings (e.g. Liu et al., 2018; Kahai et al., 2017; Jameson, 2014), this paper offers an additional perspective on e-leadership in the context of the public sector and local government in particular. By evaluating the practices and highlighting the challenges emerging – many of them yet to be addressed by municipalities, such as conflict with organisational culture, growing work fragmentation and intensification, increased training requirements and per-

sonnel needs – this study provides relevant insights into the process. The results diverge from previous findings in regard to challenges posed by e-leadership in the public sector. Whilst Van Wart and his colleagues (2017; 2019) cite communication risks, social loneliness, a weakened sense of belonging, decreased motivation and demanding change management, this study reveals that fundamental organisational processes are the culprit. They include sufficient personnel resources, adequate training, transformation of organisational culture, and suitable work-life balance in the context of digitalisation. Such problematic areas remained relevant during the COVID-19 crisis and will continue to be so in the post-pandemic period.

This pilot study provides one of the first empirically based accounts of e-leadership in municipalities of the Baltic States and Germany. As such, it represents a valuable resource, suggesting further avenues to explore for future research in the field of digitalisation and e-leadership in local government. Conducted in the pre-pandemic context, the COVID-19 crisis dramatically changed the institutional fabric in the period of 2020-2021, thereby giving an even greater prominence to e-leadership. As demonstrated by the analysis of the four cases selected, ICT tools became a necessity, rather than an additional opportunity for municipal administrations. However, the global pandemic brought about new challenges associated with e-leadership for staff and local government. Most significant were the organisational disruptions related to changes in regulations on teleworking; job-based challenges, affecting dynamics between employees and supervisors; and leadership-based issues (Juknevičienė et al., 2021). As other studies attest (Toleikienė et al., 2020; Dwianto et al., 2021), certain challenges of e-leadership in municipal settings were promptly resolved. Remote working was approved by the national regulation as a legal form of daily activity in the public

sector, subsequently embraced by leaders as the new norm. Moreover, novel ICT tools were swiftly introduced and adopted even by staff who had previously opposed digitalisation and with a strong preference for face-to-face interaction. However, certain challenges persisted during the pandemic. New skills required from municipal leaders and managers remained underdeveloped. They were required to ensure a smooth organisational process, to transition swiftly and efficiently to new channels and platforms of communication, to adapt to new political, social and technological contexts, to learn how to allocate more autonomy, responsibility and freedom to employees, and to manage the emotional and psychological toll brought about by the pandemic (Toleikienė et al., 2022). Leaders' skill development remained as important as their abilities to build trust within the institutional setting, to facilitate communication and coordination, and to foster ethical behaviour (Elyousfi et al., 2021) in the context of the post-pandemic period. Importantly, the maintenance of the motivation levels of employees by e-leaders remained crucial during the COVID-19 outbreak (Bajaba et al., 2021; Aristovnik et al., 2021), albeit difficult to execute via digital communication (Yilmaz et al., 2020).

Whilst useful for future research, several significant *limitations* of this study should be acknowledged. As a starting point, it is important to emphasise yet again that this project is of purely exploratory character, thereby evaluating the dynamics in a limited number of municipalities, whilst relying on a small sample of qualitative interviews. Consequently, no claims are made in regard to the representative nature of the findings. Considerable disparities between municipalities in the countries evaluated were taken into account, which were further highlighted by interviewees. Such country-specific variations in regard to e-leadership were not explored in depth, as the study employed an identical interview instrument and initial

scheme for interview analysis in all four cases. Whilst the procedure allowed for a country-based comparison, country-sensitive analysis was impacted to a certain degree.

Measures brought about by the global pandemic forced local government organisations to swiftly deploy digital tools and implement remote work for public servants. Unsurprisingly, the new context raises *further questions for future research*. Three themes emerge as deserving of special attention in the field of e-leadership in the public sector: 1) the co-existence of face-to-face and digital communication in leadership, and challenges stemming from the process for supervisors and employees alike; 2) work-life imbalance in the process of e-leadership and potential ways to restore the balance in the context of continuous multitasking activities and increased workload; 3) providing and maintaining staff motivation. Additionally, a comparative analysis of e-leadership practices in foreign municipal establishments offers a promising direction for future research.

Conclusions

Fully embracing the digitalisation of public sector activities affects the management process in local government, altering leadership styles and methods. Traditional aspects such as motivation-building, communication, and control exercised through face-to-face interaction evolve under the influence of the electronic environment. Newly introduced ICT tools, as adopted in the leadership process, alter the structure and the content of such traditional activities. ICT solutions enable supervisors to implement better time-management, more efficient task scheduling, swift decision-making, simplified operations, and ultimately reduce the bureaucratic burden.

In the period preceding the COVID-19 pandemic, e-leadership was already associated with certain challenges, such as the

fragmentation of digital systems, the lack of specifically appointed personnel, and suitable training. Moreover, the proliferation of ICT tools and communication channels led to an increase in multitasking activities and blurred work-life boundaries. Such challenges have proven crucial, thereby impacting the successful implementation of e-leadership.

The main recommendation for representatives of local government structures is to focus on the provision of institutional support necessary for the development of e-leadership. Suitable training, technical equipment and motivation will enable the rapid development of e-leaders' technical and managerial skills, allowing them to respond to the changing work requirements stemming from teleworking.

Acknowledgements

This work was supported by the Baltic-German University Liaison Office / the German Academic Exchange Service (DAAD) with funds from the Foreign Office of the Federal Republic of Germany, under grant no. SU-27-(8.2) "E-leadership in local self-government organisations".

References

- Aristovnik, A., Kovač, P., Murko, E., Ravšelj, D., Umek, L., Bohatá, M., Hirsch, B., Schäfer, F. S., Tomažević, N. (2021), The use of ICT by local general administrative authorities during COVID-19 for a sustainable future: Comparing five European countries, *Sustainability*, 13, 11765, 1–20. DOI: 10.3390/su132111765.
- Arm, M., Egipt, K., Hansen, R., Harjo, O., Hendrikson, M., Hänni, L., Viik, L. (2019), *e-Estonia: e-Governance in Practice* (3rd edition updated), Tallinn: EGA.
- Avolio, B. J., Sosik, J. J., Kahai, S. S., Bradford, B. (2014), E-leadership: Re-examining transformations in leadership source and transmission, *The Leadership Quarterly*, 25(1), 105–131. DOI: 10.1016/j.leaqua.2013.11.003.

- Bajaba, A., Bajaba, S., Algarni, M., Basahal, A., Basahel, S. (2021), Adaptive managers as emerging leaders during the COVID-19 crisis, *Frontiers in Psychology*, 12, 661628. DOI: 10.3389/fpsyg.2021.661628.
- Bannister, F., Connolly, R. (2011), Trust and transformational government: A proposed framework for research, *Government Information Quarterly*, 28, 137–147. DOI: 10.1016/j.giq.2010.06.010.
- Bansal, M. (2010), *E-Leadership: A New Paradigm*, New Delhi: Gyan Publishing House.
- Boyne, G. A. (2002), Public and private management: What's the difference?, *Journal of Management Studies*, 39(1), 97–122. DOI: 10.1111/1467-6486.00284.
- Brooks, J., McCluskey, S., Turley, E., King, N. (2015), The utility of template analysis in qualitative psychology research, *Qualitative Research in Psychology*, 12, 202–222. DOI: 10.1080/14780887.2014.955224.
- Burger, A., Silima, T. (2006), Sampling and sampling design, *Journal of Public Administration*, 41(3), 656–668, retrieved from: <https://hdl.handle.net/10520/EJC51475> (accessed 12 April 2022).
- Dumpe, D., Arhipova, I. (2012), The e-government readiness in Latvia: Past and present, *Information Technology and Management Science*, 2012/15, 93–98. DOI: 10.2478/v10313-012-0012-9.
- Dwianto, R. A., Mutiarin, D., Murmandi, A. (2021), Assessing e-leadership in the public sector during the COVID-19 pandemic in ASEAN, *Jurnal Kebijakan dan Administrasi Publik*, 25(2), 90–111, retrieved from: <https://journal.ugm.ac.id/jkap/article/download/62831/32519> (accessed 11 March 2022).
- Elyousfi, F., Anand, A., Dalmaso, A. (2021), Impact of e-leadership and team dynamics on virtual team performance in a public organization, *International Journal of Public Sector Management*, 34(5), 508–528. DOI: 10.1108/IJPSM-08-2020-0218.
- Etikan, I., Musa, S. A., Alkassim, R. S. (2016), Comparison of convenience sampling and purposive sampling, *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. DOI: 10.11648/j.ajtas.20160501.1.
- European Commission. (2017). *Europe's Digital Progress Report (EDPR) 2017. Country Profile Germany*, retrieved from: <https://ec.europa.eu/digital-singlemarket/en/european-digital-progress-report-country> (accessed 12 April 2022).
- Fan, K. T., Chen, Y. H., Wang, Ch. W., Chen, M. (2014), E-leadership effectiveness in virtual teams: Motivating language perspective, *Industrial Management and Data Systems*, 114(3), 421–437. DOI: 10.1108/IMDS-07-2013-029.
- Franken, E., Plimmer, G., Malinen, S. (2020), Paradoxical leadership in public sector organisations: Its role in fostering employee resilience, *Australian Journal of Public Administration*, 79(1), 93–110. DOI: 10.1111/1467-8500.12396.
- Groysberg, B. (2014), The seven skills you need to thrive in the C-suite, *Harvard Business Review*, 18 March, retrieved from: <https://hbr.org/2014/03/the-seven-skills-you-need-to-thrive-in-the-c-suite> (accessed 4 March 2022).
- Hambley, L. A., O'Neill, T. A., Kline, T. J. B. (2007), Virtual team leadership: The effects of leadership style and communication medium on team interaction styles and outcomes, *Organizational Behavior and Human Decision Processes*, 103(1), 1–20. DOI: 10.1016/j.obhdp.2006.09.004.
- Hidden, J., Salmon, P. (2014). *The Baltic Nations and Europe: Estonia, Latvia and Lithuania in the Twentieth Century*, London, New York: Routledge.
- INSEAD eLab. (2012), *E-Leadership: E-Skills for Competitiveness and Innovation in Lithuania*, Research Report, retrieved from: https://e-skills-quality.eu/fileadmin/eSkillsVision/downloads/brochure/Insead.eLeadership_LT.pdf (accessed 2 March 2022).

- Jameson, J. (2014), Distributed e-leadership and trust: The visibility/invisibility paradox in the ecology of online school communities. The 27th International Congress for School Effectiveness and Improvement, 2-4 January, 2014, Yogyakarta, Indonesia. DOI: 10.13140/RG.2.1.3724.2324.
- Jawadi, N. (2013), E-leadership and trust management: Exploring the moderating effects of team virtuality, *International Journal of Technology and Human Interaction (IJTHI)*, 9(3), 18–35. DOI: 10.4018/jthi.2013070102.
- Juknevičienė, V., Toleikienė, R., Rybnikova, I. (2021), E-leadership during Covid-19: challenges for municipal administration employees, *Proceedings from the 1st International Conference on Public Administration, Policy and Development (ICPAPD 2021)* (pp. 6–11), 10-12 December, 2021, The Africa-Asia Dialogue Network (AADN), Ganzhou Ai 'ODingNuo Education Consulting Service Co. LTD, Ganzhou, Jiangxi, China.
- Kahai, S. S., Avolio, B. J., Sosik, J. J. (2017), E-leadership, in: G. Hertel, D. L. Stone, R. D. Johnson, and J. Passmore (Eds.), *The Wiley Blackwell Handbook of the Psychology of the Internet at Work* (pp. 285–314), New York: John Wiley & Sons. DOI: 10.1002/9781119256151.ch14.
- Kahai, S. S., Jestire, R., Huang, R. (2013), Effects of transformational and transactional leadership on cognitive effort and outcomes during collaborative learning within a virtual world, *British Journal of Educational Technology*, 44(6), 969–985. DOI: 10.1111/bjet.12105.
- Kanawattanachai, P., Yoo, Y. (2002), Dynamic nature of trust in virtual teams, *Strategic Information System*, 11, 187–213. DOI: 10.1016/S0963-8687(02)00019-7.
- Kuhlmann, S., Wollmann, H. (2019), *Introduction to Comparative Public Administration*, Cheltenham: Edward Elgar.
- Lang, R., Rybnikova, I. (2014), *Aktuelle Führungstheorien und – Konzepte*, Wiesbaden: Gabler Springer.
- Lielpēters, E. (2019), Engaging citizens in the decision-making process. Opportunities of digital democracy in Latvia, *Regional Formation and Development Studies*, 29(3), 53–63. DOI: 10.15181/rfds.v29i3.1994.
- Liu, C., Ready, D., Roman, A., Van Wart, M., Wang, X., McCarthy, A., Kim, S. (2018), E-leadership: An empirical study of organizational leaders' virtual communication adoption, *Leadership & Organization Development Journal*, 39(7), 826–843. DOI: 10.1108/LODJ-10-2017-0297.
- Liu, Y., Keller, R. T., Shih, H. S. (2011), The impact of team-member exchange, differentiation, team commitment, and knowledge sharing on R&D project team performance, *R&D Management*, 41(3), 274–287. DOI: 10.1111/j.1467-9310.2011.00636.x.
- Meijer, A. (2015), E-governance innovation: barriers and strategies, *Government Information Quarterly*, 32(2), 198–206. DOI: 10.1016/j.giq.2015.01.001.
- Mergel, I. (2021), Digital transformation of the German state, in: S. Kuhlmann, I. Proeller, D. Schimanke, and J. Ziekow (Eds.), *Public Administration in Germany* (pp. 331–355), Berlin: Springer.
- Mollick, E. (2014), The dynamics of crowdfunding: An exploratory study, *Journal of Business Venturing*, 29(1), 1–16. DOI: 10.1016/j.jbusvent.2013.06.005.
- Northouse, P. G. (2015), *Leadership: Theory and Practice* (7th edition), Los Angeles: Sage.
- Orazi, D. Ch., Turrini, A., Valotti, G. (2013), Public sector leadership: New perspectives for research and practice, *International Review of Administrative Sciences*, 79(3), 486–504. DOI: 10.1177/0020852313489945.
- Paražinskaitė, G. (2014), *Application of information technologies for the innovative human resources management: analysis at the ministerial level in the Republic of Lithuania* (in Lithuanian), Doctoral dissertation, Vilnius: Mykolas Romeris University, retrieved from: <https://repository.mruni.eu/handle/007/14382> (accessed 1 December 2021).
- Roosna, S., Rikk, R. (2019), *E-Estonia. E-Governance in Practice* (3rd edition updated), Tallinn: EGA.

Wilson, J. M., Straus, S. G., McEvily, B. (2006), All in due time: The development of trust in computer mediated and face-to-face groups, *Organizational Behavior and Human Decision Processes*, 99, 16–33. DOI: 10.1016/j.obhdp.2005.08.001.

Yilmaz, R., Karaoglan Yilmaz, F.G., Keser, H. (2020), Vertical versus shared e-leadership approach in online project-based learning: a comparison of self-regulated learning skills, motivation and group collaboration processes, *Journal of Computing in Higher Education*, 32, 628–654. DOI: 10.1007/s12528-020-09250-2.

Yukl, G. E. (2013), *Leadership in Organizations*, Boston: Pearson.

Irma Rybnikova is a professor in Human Resource Management and Organisation at Hamm-Lippstadt University of Applied Sciences, Germany. Irma's research interests include leadership theories, gender and leadership, organisational democracy and resistance as well as workplace integration of refugees and migrants. ORCID no. 0000-0002-1162-755X.

Vita Juknevičienė is an associate professor in Business and Public Management at Šiauliai Academy of Vilnius University, Lithuania, and a visiting associate professor in Public Management at the College of Business and Economics, University of Johannesburg, South Africa. Vita's research interests include the modernisation of the public sector, good governance at local self-government level, and innovation management for regional and local development. ORCID no. 0000-0001-5910-3010.

Rita Toleikienė is the assistant professor in Business and Public Management at Šiauliai Academy of Vilnius University, Lithuania. Rita's research interests include leadership in the public sector, good governance at local self-government level, ethics management and anti-corruption policy. ORCID no. 0000-0001-9930-9777.

Nora Leach is currently a doctoral researcher at the School of Politics and International Relations, University of Nottingham, UK. Her work is funded by the Economic and Social Research Council (ESRC) of the UK. Nora's research interests include, but are not limited to, public administration, the politicisation of bureaucracy, islands of excellence in the context of Central and Eastern Europe, democratisation and Europeanisation. ORCID no. 0000-0002-4890-8064.

Inese Āboliņa is an assistant professor and post-doctoral researcher in the Faculty of Business, Management and Economics at the University of Latvia, Latvia. Her research interests include leadership, decision-making, network governance, business development and sales in aviation. ORCID no. 0000-0003-0511-9476.

Iveta Reinholde is a professor of Public Administration in the Department of Political Sciences, University of Latvia, Latvia. She has considerable experience in conducting policy evaluations, working in multi-national teams and international setting on such areas as public administration reform, internal audits, human security and public services. In addition, her research fields include EU public policy, public policy evaluation and analysis, public sector organisations and organisation theory. ORCID no. 0000-0001-9052-4227.

Janika Sillamäe is a doctoral student at the University of Tartu, Estonia. Her research interests are related to organisational behaviour and ethical workplace management. ORCID no. 0000-0001-7859-1718.