Presumptions for E-leadership in Local Self-Government in Lithuania[1]

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Abstract:

Purpose and Originality: ICT usage in management processes became inseparable part of both private and public organizations' practice. E-leadership concept is quite new in public administration area. The purpose of this research was to explain main theoretical and practical presumptions for the e-leadership in the local self-government organizations in Lithuania. The value and the originality of the research are achieved by revealing theoretical elements of this concept in the local self-government (based on the Good Governance approach) and giving some evidences of e-leadership practical implications in Lithuanian municipalities.
Method: The research is based on the theoretical approach of Good Governance, which explains the need of better management in public administration organizations. Scientific methods such as the content analysis of scientific literature, presenting theoretical presumptions for e-leadership in local self-government in Lithuanian researches, as well as PEST analysis (the document analysis) of Lithuanian municipalities' practice are used.
Results: Theoretical insights about e-leadership in local self-government organizations in Lithuania are still missing the deeper understanding of this phenomenon; however, the practical presumptions (the legal basis, social readiness and technological instruments) were founded to be created strong and having the potential to grow. Therefore it can be stated that Lithuanian municipalities already using ICT for their daily activity are ready for the implementation of e-leadership tools, but they still need more clear vision (and guidelines) for strengthening e-leadership as an organizational practice.
Society: Results of this research are important for researchers of Lithuanian public administration, especially interested in local self-government looking for new directions for future researches. Moreover, they can be used by practitioners in municipalities understanding the value of ICT usage for management and leadership processes.
Limitations / further research: The research is the first phase of wider ongoing international research.

Keywords: E-leadership, local self-government, municipality, ICT usage.

1   Introduction

Lithuania got back the independence from Soviet Union just in 1990 (Hiden, Salmon, 2014). Now it is considered as young small (northern or central) European developed country (Nekrašas, 1998; International Monetary Fund, 2015), which has to follow well-developed European countries and to adapt organizations (including local self-government) to new standards of quality and efficiency.

The usage of information communication technologies (hereinafter referred to as ICT) in all activities and digitalization ideas are changing the perception of organization management, processes of control, accountability for results and the evaluation of the efficiency of activity. Leadership has the huge influence in organizations (on the behaviour and decisions of employees, the culture and the policy of the organization) and can implement norms, standards, expectations, and desirable outcomes during transformative (including ICT usage) projects, therefore, leaders are expected to have the ability to know when and how to adopt technologies and to implement them successfully (Sow & Aborbie, 2018; Schepers et al., 2005; Van Wart et al., 2017). And this is becoming one of the biggest challenges for modern leadership at organizational level. Therefore, it is important to investigate how digitalisation frames leadership processes and what kind of challenges emerge from it in local government organizations.

The aim of this research was to identify main theoretical and practical presumptions for the e-leadership in the local self-government organizations in Lithuania. *The objectives* of this research were: (1) to give the theoretical background for the e-leadership in local self-government organizations; (2) to explain how deep the e-leadership concept was already investigated by Lithuanian researchers; (3) to identify main political, economical, social and technological presumptions for the implementation of e-leadership practice in Lithuanian municipalities. *Scientific methods* were used for this research: the content analysis of the scientific literature helped to present theoretical presumptions for e-leadership in local self-government in Lithuanian researches, the PEST analysis (the document analysis) - to identify practical presumptions for e-leadership in Lithuanian municipalities.

2   Theoretical framework

2.1 E-leadership concept in the context of Good Governance

The digitalization is becoming a daily management practice of public sector organizations: human resources management, finance management and accountancy, control and monitoring, public relations and communication, etc. ICT-based tasks have become an integral part of the working life in local government organizations. Therefore, e-leadership (as the theoretical concept and the practice) has become important not only for private, but for public sector too (including local government organizations).

There are few definitions of e-leadership phenomenon, but in most cases it is explained as the social influence process embedded in both proximal and distal contexts mediated by information technology (Avolio et al., 2000; Avolio et al., 2014; Kahai et al., 2017; Van Wart et al., 2017; Van Wart et al., 2019). As e-leadership is considered as a complex phenomenon, Liu et al. (2018) recommended dividing the field of e-leadership researches into four quadrants to facilitate the research focus according to: e-leadership phases (the adoption of technology phase vs. the quality of use of technology phase), as well as the purposes (e-leadership as virtual communication vs. e-leadership as management of organizational structures). As differences of the meaning of the term "leadership" exist in local government systems in different countries (management vs. political leadership, supervisors vs. leaders), authors give the definition (appropriate for the context of the research): e-leadership is considered as a process by which a supervisor guides and motivates employees in a municipality through information technologies. This definition is closely connected with three dimensions: ICT usage for management processes in an organization, leadership using ICT phenomenon and the local level of the government. In this case, according to Van Wart et al. (2019) main elements of e-leadership would include such challenges: communication (miscommunication, communication overload, loss of informal interactions, loneliness and weakened sense of belonging); motivation (monitoring employees and milestone accomplishment, recognition, rewards, development of employees); and change management (positive attitudes toward changes more difficult in virtualized environments). All those challenges need to be dealt with to seek for the good governance in municipalities.

Good Governance is one of the most popular theories of Public Administration (hereinafter referred to as PA). As a theory it is based on the position of international organizations (in particular, such as the World Bank and the International Monetary Fund) that developing countries facing economic and social problems have to look for instruments and ways to seek for the good governance. Good governance is considered as "the new public management empowerment, which ensures the political, social and economic priorities justification under the inclusive public consensus, and the needs of the poorest and most vulnerable are respected in decision-making processes, with the regard to the allocation of development resources" (Juknevičienė, 2015). Accordingly some principles of Good Governance are highlighted: legal authority (rule of law), citizens' participation, responsiveness, consensus principle, justice and fairness, transparency, equity and inclusiveness, efficiency and effectiveness, accountability, the strategic vision (Drechsler, 2004; Šaparnienė & Valukonytė, 2012; Ekundayo, 2017). E-leadership would be closely connected to principles of efficiency and effectiveness (saves time and resources of tasks' accomplishment for both citizen and civil servants), equity and inclusiveness (makes services and information more reachable and accessible), transparency (gives more tools for the control and monitoring both for leaders (supervisors, managers) and citizens).

Good Governance concept emphasizes three main challenges for PA organizations (United Nations, 2006), which are closely connected with ICT usage:

1. Adequate and timely respond to citizens' needs together seeking for the greater cooperation. Citizens have to become the part of the problem-solving process. It may be encouraged by ICT tools provided to the communication between citizens and local self-government organizations (i.e. e-democracy, e-governance processes).

2. Operation and provision of high quality services with receding resources and limited operational capacities. It requires PA organizations to use resources and develop skills not only more creative and efficient. For example, using ICT for providing municipal public services or communication with citizens (i.e. e-government tools, e-services).

3. Increased accountability, responsibility, efficiency and orientations towards the needs of citizens in PA organizations. Publicity requirements are fulfilled by using ICT (anticorruption tools, watchdog's tools, websites, social media channels, etc.).

Local government organizations as PA organizations need to deal with all mentioned challenges, therefore, it can be stated that this concept gives the stable theoretical background for the e-leadership in local government phenomenon and its practical integration to the management processes in municipalities.

2.2 Features of local self-government in Lithuania

According to Junevičius & Ereminaitė (2012), the existing one-tier local government system has a great influence on the Lithuanian public administration system; however it has the executive role and has no enough freedom to act (i. e. the increasing functional responsibility of municipalities was not accompanied by correspondingly increasing discretion, which left the powers of Lithuanian municipalities limited despite the increased number of functions) (Burbulytė-Tsiskarishvili et al, 2018). Local governance is based on the territorial system where municipalities and neighbourhoods are acting. The profile of Lithuanian local self-government can be described by some features:

- Lithuania has 60 municipalities (7 of them are cities' municipalities);
- Municipality's functions are divided to two groups: a group of independent (autonomous) functions and a group of state (delegated by the State to municipalities) functions;
- The dual model of the organizational structure of the local self-government is applied;
- Mayors of municipalities are elected directly (from 2015);
- Municipal servants are divided into office managers, career servants and political (personal) trust servants (Astrauskas, 2015).

The dual model of the organizational structure of the local self-government means that municipal institutions are responsible for the implementation of the right to self-government in the interests of the municipal community and are divided to two groups:
- *a representative institution of the municipality* - the municipal council that possesses the rights and duties of local government and public administration, which is governed

by a member of the municipal council (directly elected in a single-member constituency according to the procedure established by the Law on Elections to Municipal Councils) - the mayor. The mayor is the head of the municipality, exercising the powers provided by laws;

- *an executive institution of the municipality (executive institutions)* - the director of the municipal administration, deputy director(s) of the municipal administration (if this/these position(s) is/are set up and if the powers of an executive institution are delegated to this/these position(s)), who possess the rights and duties of public administration (LR Vietos savivaldos įstatymas, 2019).

Therefore, the municipal administration is the bureaucratic apparatus executing decisions and tasks formulated by the political municipal structure (municipal council) and implementing programs of municipal territory development and public administration (Astrauskas, 2011). This research is oriented to local government organizations (municipalities) and even more focused on the municipal administration as a body responsible for internal management processes (needed e-leadership tools), provision of public services and communication (ensuring the engagement of citizens to problem solving and decision making processes).

Researchers (Šaparnienė & Lazauskienė, 2012; Gaulė & Žilinskas, 2013; Astrauskas, 2015, Bučaitė-Vilkė & Žilys, 2016; Lazauskienė, 2016) has founded that various measures have been implemented to promote the engagement of local community (citizens) to local affairs in Lithuania: introduced direct elections of municipal mayor and other forms of direct participation (excluding local referendums, decision-making meetings, but including e-government tools), simplified procedures for conducting surveys, legitimated representatives of local communities living in the area (known as "elders"), encouraged creation and operation of local (territorial) community organizations, etc. Seeking to ensure the appropriate citizen participation and the institutional efficiency of e-government tools and the usage of information and communication technologies (hereinafter referred to as the ICT) for daily work become the inseparable part of Lithuanian PA practice both at national level and local self-government.

3   Method

Scientific methods used for this research were selected according to objectives of the research.

The content analysis of the scientific literature was chosen to present theoretical presumptions for e-leadership in local self-government in Lithuanian researches. It was chosen because the research needed a method which would focus on the characteristics of language as communication with attention to the content or contextual meaning of the text (Hsieh & Shannon, 2005). It needed to reveal what kind of researches have been conducted in Lithuania to present the status qua of e-leadership in local self-government. Main keywords as "e-supervision" ("*e-vadovavimas*"), "e-leadership" ("*e-lyderystė*"), "leadership" ("*lyderystė*"),

"ICT usage" ("*IKT naudojimas*"), "ICT development" ("IKT vystymas"), "ICT skills" ("*IKT įgūdžiai*") were combined with another keywords as "government" ("*valdžia*"), "local self-government" ("*vietos savivalda*"), "municipality" ("*savivaldybė*") for the search of scientific literature in the Google Scholar. Both languages (English and Lithuanian) were used to find needed resources. 20 scientific publications (presenting results of researches) closely connected to the topic of the research were founded. All of them were analyzed using a matrix based on three main pillars (ICT usage, leadership, government), which was prepared after the theoretical analysis of the research object.

The PEST analysis (*the document analysis*) helped to identify practical presumptions for e-leadership in Lithuanian municipalities. The PEST analysis is considered as the precondition (presumption) analysis which allows the identification of the environment within the organization operates and provides information that will enable the organization to predict situations and circumstances that it might encounter in future (Yüksel, 2012). It reveals political and legal, economic, social and technological preconditions for e-leadership in local self-government organizations. The PEST analysis is based on the *document analysis*. It is a systematic procedure for reviewing or evaluating documents, it requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008; Bowen, 2009). It included the analysis of legal acts and strategic documents of Lithuania, analysis of data of several indexes, the analysis of other resources, presenting Lithuanian context.

4   Results

4.1   Theoretical presumptions for e-leadership in local self-government in previous Lithuanian researches

As authors could not find previous studies with the exact topic of the research they decided to make an analysis and to show what kind of theoretical presumptions for e-leadership in local self-government organizations are revealed already by previous Lithuanian researches. Using the specific matrix, based on three main pillars (ICT usage, leadership, government) they have made a content analysis and showed how different researches touched the topic of e-leadership in local self-government organizations (see Table 1). As the research was following the definition of e-leadership as a process by which a supervisor guides and motivates employees in a municipality through information technologies, main important aspects for the research were ICT usage for management processes in an organization, e-leadership mentioning and the level of local government (municipalities).

It was found that e-leadership is quite new concept and almost unused by Lithuanian researchers. Majority of Lithuanian scientists analysed such objects as the ICT usage in public administration, e-government, e-services, and the common leadership aspects on the national level (not focusing on local specifics). Authors found just few researches which could significally contribute to the e-leadership conception in Lithuania.

Firstly, the analysis of e-leadership concept and its implementation in the practice in European Union (in Lithuania too) was provided by INSEAD (INSEAD eLab, 2012). This report emphasized that every e-leader should have the T-shape skill' set: vertical set of skills, showing the expertise or in-depth knowledge in a certain area (e.g., science, engineering, ICT, social sciences); horizontal set of skills, which refers to universal skills (e.g., negotiation, critical thinking, design and systematic thinking, entrepreneurship, etc.), allows different areas to be aligned. It provided recommendations for the development of e-leadership: to develop and apply e-leadership program guidelines and quality labels (brands); to create new forms and partnerships for the training and acquisition of e-leadership skills; to align actions of promoting the entrepreneurship for e-leadership development across the EU; to build awareness of the relevance of e-leadership skills for innovation, competitiveness, and employability (INSEAD eLab, 2012). However, this research did not revealed features of local self-government.

Table1. Matrix of previous Lithuanian researches in the field of e-leadership in local self-government

Dimensions *Resources*	ICT usage					Leadership			Government		
	ICT in PA	Social media in PA	E-government	E-services	Organizational management	Common leadership	E-leadership	ICT skills of leaders	National level institutions	National and local level institutions	Local level institutions (municipalities)
Šarkiūnaitė (2004)					✓	✓		✓			
Šarkiūnaitė & Krikščiūnienė (2005)					✓	✓		✓			
Domarkas & Lukoševičienė (2006)	✓		✓								✓
Kažemikaitiene & Bilevičiene (2008)	✓		✓						✓		
Butkevičienė & Rutkauskienė (2008)	✓			✓						✓	
Guogis et al. (2008)			✓	✓							✓
Ožalienė & Šaparnienė (2009)	✓		✓								✓
Gatautis et al. (2009)	✓		✓						✓		
Jurkėnaitė & Paliulis (2010)			✓	✓							
Domarkas et al. (2012)			✓								✓
INSEAD eLab (2012)					✓		✓	✓			
Petrauskas (2012)	✓		✓								✓
Gaulė & Žilinskas (2013)	✓		✓								✓
Milė & Junevičius (2013)				✓						✓	✓
Jokūbauskienė (2013)					✓			✓			✓
Paražinskaitė (2014)	✓				✓			✓	✓		
Rybnikova et al. (2015)	✓		✓			✓		✓			✓
Pivoras et al. (2017)	✓				✓					✓	
Aurylaitė (2017)		✓									✓
Vengrienė (2017)	✓					✓			✓		

Conducted by authors, according to mentioned resources.

Secondly, Paražinskaitė (2014) studied ways how with the help of the Government to Employee framework to investigate what organizational and environmental issues influence application of information technologies in the process of human resources management. She founded that a positive leader's approach to IT and a well-presented benefit of the innovation may promote a positive employee's attitude; presented benefit of the technology before application, the opportunity to consult together with learning is very important. However, the

field of the empirical research was the national (ministry) level of Lithuania (not municipalities).

Finally, the international scientific research "Leadership in Public Administration: Case Study of Lithuania and Germany" (Rybnikova et al, 2015) (funded by the Baltic-German Office, the Baltic States and German High Schools Office through the German Academic Exchange Service (DAAD), the Federal Ministry of Foreign Affairs of the Federal Republic of Germany) was very important for the development of the leadership concept in local self-government in Lithuania. It gave very important insights connected to the e-leadership in municipalities. The research has revealed that the document and process management system "Beehive" ("AVILYS") which was implemented in local governance institutions enabled the control of task performance of employees by the heads of the departments (i.e. checking if a deadline for completing the task is approaching, if the task is completed on time and if the answer is prepared properly). Leaders, who participated in this research, were quite optimistic regarding "Beehive" since they considered it as a great relief enabling digital communication with their subordinates to assign tasks and to give feedback, notes and comments without explaining the issues personally. Leaders believed that formal communication with the staff only through the system "Beehive" leaves a lower risk and creates a higher ability to control and punish the employee for irresponsibly or untimely prepared task. Research showed that the technology system reduces the role of the leader and becomes a substitute for leadership. Professional expertise and results of this research suggested that "Beehive" cannot run without managerial interventions. An additional concern expressed by the informants regarding "Beehive" referred to the reduced face-to-face communication in the department as an effect of the system. The second critically perceived aspect of less face-to-face communication regarded the issue of less control over employees by reduced direct communication. The heads of departments have seen the risk in the fact that employees can change their minds and accuse them for unclear described or untimely assigned tasks. However, this research was focused on a broader aim of the research, so the aspect of e-leadership was more contextual rather than essential.

The content analysis of previous researches in Lithuania, directly connected with main dimensions of e-leadership concept, revealed that scientists are interested in the problematic of leadership and ICT usage in PA. However, despite of quite good insights from previous researches, the development of e-leadership concept in local government organizations still requires deeper understanding and empirical researches of the practice in the Lithuanian context.

4.2 Practical presumptions for e-leadership in Lithuanian municipalities

4.2.1 *Political and legal presumptions*

Organizational processes (in a municipality) are heavily influenced by information systems as they involve complex software processes and information flow (Vengrienė, 2017). Therefore,

it is very important to find out what is the status quo of using ICT-systems in Lithuanian local self-government.

The Programme of the 17th Government of the Republic of Lithuania (LR Seimo nutarimas dėl…, 2016) supports ICT usage in public administration (e-democracy, e-services) to ensure the sustainable state governance and he provision of qualitative and accessible public services.

There are several legal acts providing guidelines for ICT development in PA institutions (including municipalities) in Lithuania:

- The most important document is *the Information Society Development Programme for 2014-2020 'Digital Agenda for the Republic of Lithuania'* (2015), which has the purpose is to define the goals and objectives of the information society development with a view to maximising the economic advantages provided by ICT as a very important tool for economic, social and cultural activities, enabling the circulation of advanced electronic services, work, access to entertainment, social interaction and free expression of opinion.

- Second legal act important for ICT usage in public administration is *the General Requirements of state and municipal institutions and agencies websites and APPS* (LR Vyriausybės nutarimas dėl Bendrųjų reikalavimų..., 2019), which regulates the right to receive information from state and municipal institutions and bodies, ensures greater publicity of activities of state and municipal institutions, obliges state and municipal institutions (providing public services) to publish documents of activity planning, activity reports, information related to open data protection and personal data protection on their websites.

Those two main legal acts are supported by some strategic documents and their provisions:

- *National Progress Programme for Lithuania for the period 2014-2020* (2012). The 5th priority in this programme is "Meeting needs of society and advanced public governance". Objectives of this priority are closely connected with ICT usage in public administration: to strengthen strategic competences in public administration institutions and to improve performance management there, the openness of management processes and active civic participation; to improve the quality of services and their accessibility to the society.

- *Public Governance Improvement Programme for 2012-2020* (LR Vyriausybės nutarimas dėl Viešojo valdymo…, 2015). The 2nd aim of this programme is to ensure the delivery of services meeting needs of society, thus, it is followed by the objective: to improve the quality of services for individuals in public administration institutions and to increase the accessibility of services to the society. One of measures is the growth of the delivery of e-services and the development of its accessibility.

- *Lithuania's progress strategy "Lithuania 2030"* (2015). One of three main dimensions of this strategy is Smart Governance. It is planned to seek for strategically

powerful government (one of objectives is to develop leadership and management competencies in central and local authorities and communities) and for governance meeting public needs (the objective is to ensure effective provision of services and to use the latest technologies, including electronic service delivery).

These main documents are followed by other legal acts and documents at national, local and organizational levels. Authors would like to emphasize that there are enough legal preconditions for the development of e-leadership in local self-government organizations (municipalities) in Lithuania.

4.2.2 Economic-social presumptions

Every year *Lithuania invests in projects*, oriented to the development of information society and public governance. In the period of 2014-2020 10 big projects of information society will be implemented by using EU funds (around 236 billion Euros). 12 projects of development of public governance in the same period will require around 146.5 billion Euros from EU funds (majority of them are directly connected to the digitalization of public administration via the transfer of services and channels to the electronic platform or starting using some ICT systems or tools) (Patvirtintos priemonės, 2014). It is planned to spend 174 billion Euros (majority of them – 129 billion Euros will be covered by EU funds) for the development of information society in Lithuania in 2019-2021 (Informacinės visuomenės plėtrai..., 2018).

According to international indexes *Lithuanians are informed about possibilities to use e-services and e-democracy tools and tend to use them more often*.

In 2018 according to the Electronic Government Development Index (EGDI) Lithuania was ranked in 40th position among 193 countries in the world (even Lithuania's position in the global ranking has fallen 17 positions down since the last evaluation in 2016) - the Lithuanian EDGI was 0.7534, and Lithuania was classified as having "very high e-government development index" in the group of countries with an index above 0.75 (United Nations, 2018). In 2018 according to European Commission Lithuania was among 11 best European countries according to the efficiency of e-government and the accessibility of e-services for citizens (Tinholt et al., 2018). According to the data of the Information Society Development Committee (Informacinės visuomenės plėtros komitetas, 2018), the share of Lithuanian population using electronic public and administrative services continues to grow and in 2018 50.8 percent of Lithuanian population used these services (respectively, 44.9 percent in 2016 and 48.4 percent in 2017), E-Government Gateway was visited 16.9 billion times (respectively, 8.2 billion in 2016 and 10.9 billion in 2017), E-Government Gateway was visited and e-services were used by 773 thousand inhabitants (respectively, 517 thousand in 2016 and 630 thousand in 2017). However, just 19 percent of Lithuanian population has participated in e-democracy processes: 19 percent of them were looking for the information about decisions made or planned to make by public administration institutions, 4 percent have expressed their opinion about such decisions, 1 percent has submitted projects for such

decisions and 2 percent have submitted suggestions for the improvement of such decisions. Most active part of the population in e-democracy processes are young and medium age citizens, living in cities and more wealthy.

In 2019 according to the Digital Economy and Society Index (DESI) (which evaluates Connectivity, Human Capital/Digital Skills, Use of the Internet by citizens, Integration of Digital Technology by businesses, Digital Public Services, and Research and Development ICT in the scale of 0-100 points), Lithuania is the 14th of 28 European Union states (52 points, the average of EU - 52.5 points). In the field of digital public services, Lithuania is ranked as 8th among all EU countries (73.3 points). E-government services were used (various fulfilled e-forms were submitted to institutions) by 81 percent of Internet users in Lithuania - according to this indicator Lithuania is ranked as 9th in the EU. According to the supply indicator, access to pre-filled e-forms from institutions is highly evaluated (88 points, 3rd place in the EU), but there is still challenging areas such as open data (46 points, 24th place in the EU). In terms of completeness of e-services Lithuania is ranked in the 5th place in the EU (96 points), while in terms of digital public services for business Lithuania is taking the 4th place in the EU (97 points) (European Commission, 2019a).

Therefore, it can be stated that Lithuanian population (social environment) is ready (favorable) for the development of ICT usage in public administration as well as local government institutions, including e-leadership processes.

4.2.3   Technological presumptions

The accessibility of PA in Lithuania is mainly increased by implementing various initiatives for the delivery of *electronic services and using the principle of one-stop shop*.

Under the request of the Information Society Development Committee the information system - *E-Government Gateway* (*Elektroniniai valdžios vartai*, in Lithuanian) was created in 2008 and it was possible to get 421 public service online (Butkevičienė & Rutkauskienė, 2008; Barcevičius, 2008). From 2015 all municipalities may deliver public e-services for citizens and business using the E-Government Gateway (Per Elektroninius valdžios vartus..., 2015). Moreover, Lithuanian municipalities are using ICT for citizens' engagement processes, i.e. e-democracy tools are provided by municipalities' websites: e-notifications, e-complaints, e-initiatives, e-petitions, e-requests, e-content dissemination, e-services monitoring, e-consultation, e-surveys, e-forums, e-meetings (broadcasting of councils' meetings), etc.

Moreover, some other national ICT systems are enabling municipal organizations to work more efficient (European Commission, 2019b):
- The System for Interoperability Among Public Administration Institutions' Information System' (*PASIS*) enables state and municipal institutions, establishments and companies to provide electronic public services under the one-stop-shop principle. It furthermore allows centralised authentication of a person and subsequent payment for the delivered service using a secure inter-institutional data exchange.

- The State Information Resources Interoperability Platform (*SIRIP*) was created and managed by the Information Society Development Committee. It is a system that delivers centralised access to public services. System users can connect using a mobile or electronic signature, EU identity card or electronic banking systems. Solutions enable the heads of legal entities to authorise their employees to perform certain actions in the electronic space. SIRIP created the structure and transferred into electronic space the 65 most important services provided by the country's municipalities and 29 services and 111 electronic applications for provision of services to 14 state institutions.
- The Register of Legal Acts (*TAR*) is used for registering and publishing legal acts, their consolidated versions, depersonalised rulings, and international treaties. The users of systems are State and municipal institutions, and other legal bodies involved in legislation. Once a legal act is registered and published on the TAR, it is considered officially promulgated. A legal act reaches the TAR in the form of eDocument with an eSignature.

Currently *municipalities apply the following information systems* for internal organizational management processes as well as for the implementation of functions (Eurointegracijos projektai, 2015; Urbšaitytė & Veikutis, 2010):
- Financial Management System (FVS) is important for finance and accounting, involving all economic activities of the municipality (accounting, budget allocation, reporting, financial flows, human resources and other management);
- Document Management System (DVS) is used for preparation, registration, management and storage of documents (one of the most used systems is AVILYS);
- Strategic Planning and Monitoring of the Implementation of the Strategic Plan System allows the coordination of different municipal planning documents (strategic development plan, general plan, strategic activity plan, etc.) and ensuring the timely monitoring;
- Geographic Information Management System (GIS) is used by municipalities for mapping, collecting and disseminating geographic data. GIS is a very important tool for municipal spatial planning, agriculture and property management, especially giving important data for environmental departments or companies exploiting engineering networks. It allows making decisions related to municipal property management, territory management, and development analysis, etc.

These all systems are connected, at least in part, to the Website Content Management System (TVS) because the municipal website is a key tool for providing electronic public administration services.

According to opportunities provided by various information systems, municipalities have the capacity to encourage digitalization and e-leadership processes.

5   Conclusion

The concept of e-leadership in local self-government organizations is influenced by ideas of digitalization and e-government, transformation of leadership and management processes, and specifics of local level of government in a particular country. Lithuania as young democratic country still has many challenges to deal with to implement the e-leadership idea in municipalities.

The content analysis of previous researches in Lithuania revealed that the focus on ICT usage in the public sector and e-government in local level were main theoretical presumptions to appear and to develop concept of e-leadership in local self-government organizations in Lithuania. However, researches still did not explain the phenomenon in a systematic approach, therefore, the deeper understanding of it is still missing. As the lack of the understanding of this concept exists, guidelines for its implementation are missing too. This situation opens the area for future researches.

This research revealed practical presumptions for e-leadership in local self-government organizations in Lithuania. The legal basis (laws, strategic documents and even government programme) support ideas of e-leadership. The readiness of Lithuanians for using ICT for getting public services is quite high. Lithuania invests every year to the development of ICT in the public sector organizations, including municipalities. Technological instruments (tools and systems) already used in the practice of municipalities are founded as creating strong potential to strengthen e-government processes as well as to implement e-democracy.

It can be summarized that Lithuanian municipalities even using ICT for their daily activity and being ready for the implementation of e-leadership tools, still lacks the understanding (the systematic approach, organizational policy guidelines) for strengthening e-leadership as the practice helping to achieve better results.

This research is based on the content analysis of scientific literature and document analysis (PEST analysis), therefore, it should be continued with the empirical research, giving some more evidences from municipalities' practice. The comparative analysis of different local government systems (countries) would be recommended as well.

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Povzetek:
Predpostavke E-voditeljstva v lokalni samoupravi Litve

Namen in izvirnost: Uporaba IKT v upravljalskih procesih je postala neločljivo povezn del upravljalskih praks v javnih in zasebnih organizacijah. Koncept E.-voditeljstva pa je precej nov na področju javne uprave. Namen te raziskave je predstaviti ključne teoretične in praktične prepdostavke e-voditeljstva v lokalni samoupravi Litve. Glavni doprinos je v prepoznavanju ključnih elementov e-voditeljstva (osnovano na podlagi koncepta kakovostnega upravljanja) ter zaznavanju le-teh v praksi litovskih občin.
Metoda: Raziskava temelji na teoretičnem pristopu "kakovostnega upravljanja", ki pojasnjuje potrebo po boljšem upravljanja v javni upravi. Članek temelji na metodah kot so analiza vsebine, predstavitev predpostavk e-voditeljstva v lokalni samoupravi Litve kot tudi PEST analizo dokumenov Litovskih občin.
Rezultati: Teoretični vpogled v e-voditeljstvo v organizacijah lokalne samouprave v Litvi še vedno ne zagotavlja podrobnejšega razumevanja tega pojava. Vsekakor pa praktične predpostavke (pravne osnove, družbena pripravljenost in dostopnost tehnologije) nakazujejo svojo močno prisotnost ter potencial za nadaljno rast. Na podlagi tega lahko trdimo, da Litovske občine že sedaj uporabljajo IKT na dnevni osnovi in so pripravljene za vpeljavo orofij e-voditeljstva. Še vedno pa potrebujejo jasno vizijo (in usmeritve) z namenom okrepitve e-voditeljstva kot organizacijske prakse.
Družba: Rezultati raziskave so pomembni predvsem za raziskovalce Litvanske javne uprave, s poudarkom na lokalni samoupravi, ki iščejo usmeritve za nadaljnje raziskovanje. Rezultati pa so zanimivi tudi za strokovnjake v lokalni samoupravi z namenom razumevanja pomena IKT v upravljalskih in voditeljskih procesih.
Omejitve/nadaljnje raziskovanje: Članek se omejuje na prvo fazo širšega mednarodnega projekta, ki je šele v teku.

Ključne besede: E-voditeljstvo, lokalna samouprava, uporaba IKT.