E-governance in Lithuanian Municipalities: External Factors Analysis of the Websites Development

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Abstract. *E-governance is the public sector's use of information and communication technologies for communication. Thus the usability of public organizations websites' is a critical factor for this interaction. While the conceptual framework, technological innovation, services measurement, and management of e-governance have been studied extensively, its' driving factors have not been well understood. The aim of the article is to identify the external factors that influence development of Lithuanian municipal websites. There were investigated correlations between 25 external economic, social, geographic, cultural and political factors and development indexes of municipalities' websites in this study. Disparities of the external factors were analysed and compared in the groups of urban, rural and all municipalities.*

Keywords: *e-governance, municipal websites, urban and rural municipalities, Rutgers index, e-governance development factors*.

Raktažodžiai: *e. valdymas, savivaldybių interneto tinklalapis, miesto ir kaimo savivaldybės, Rutgerio indeksas, e. valdymo išsivystymo veiksniai*.

Introduction

E-governance is the public sector's use of information and communication technologies (ICT) with the aim to increase the efficiency of government operations, strengthen democracy, enhance transparency, and provide better and more versatile services to citizens and businesses. ICT are becoming increasingly important in the communication between local governments and stakeholders, which makes the usability of municipal websites a critical factor in the government–stakeholder communication. Municipal websites may be used for dissemination of information to stakeholders, delivery of public e-services, and participatory democracy (e-participation) implementation at local level. There were many international and national researches on municipal websites development assessment and ranking (considering the quality of the website itself) carried out.

The aim of the article is to identify the external factors that influence development of Lithuanian municipal websites. The tasks of the research: a) to identify the external factors of e-governance development; b) to find the correlation between the development indexes of websites and the external factors in Lithuanian municipalities; b) to compare correlations between the development indexes of websites and the external factors in the groups of urban, rural and all municipalities; d) to reason the external factors impact on municipal websites development. The research object is the external factors that have impact on the development level of municipalities' websites. Research methods used: the analysis of scientific literature, comparative and logical analysis, methods of induction and generalization and correlation analysis and Kruskal-Wallis H test using statistical program SPSS.

E-governance at local level: identification and exploration

E-governance is the public sector's use of ICT with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective [5]. ICT gives twenty-four hours a day, seven days a week availability interactions.

E-government encompassing information and transactions is evolving into e-governance – more complex interactions going to agenda setting and policy determination [9]. In some cases e-governance and the broader definitions of e-government are used synonymously as the broader definitions of e-government underline the change of internal and external government operations through technology, electronic public services and electronic participation [10; 14]. However e-government is the provision of routine governmental information and transactions using ICT means and e-governance are the ICT-mediated relationship between citizens and government for communication, policy evaluation and expression of citizen will [9]. Thus the governmental websites have evolved quickly to provide more sophisticated and complex administrative services, and furthermore, they began to expand beyond the mere delivery of government services and administrative transactions over the Internet to include functions that enable online communication between citizens and the government [1].

Local governments are close to citizens, and constitute for many the main representation of government as the relationship of citizens and local authorities tends to be based on proximity concerning public services, urban development, local politics, etc. Especially in countries with a federal government structure, most public services relevant to citizens are produced, offered and used at the local level [14]. It is at the local level that the impact of ICT on the relationship between governments and citizens can be most effective [5]. Thus municipal webpages become the main channel of government-citizens interactions.

While important issues of e-governance have been studied extensively, its driving factors have not been well understood. The findings of such research may be used twofold: to explain the differences and to provide the projections on public organizations   (e.g.   municipalities)   websites   development.

Theoretical framework for e-governance development factors analysis

E-governance encompasses three components expressing three main goals of public organizations websites (especially municipal) development: information provision (e-inclusion), public services delivery (e-government) and public consultation, decision making (e-participation) i.e. the ability of the government and stakeholders (citizens and businesses) to communicate to each other in an efficient and electronic manner as providing information, posting of forms and registrations, e-payment, e-voting, etc.

Ahn (2011) defines factors influencing the adoption of e-service and e-communication applications [1]. E-service factors shaped the economic rationale are: the government's general capacity in providing services (government organizational capacity) and perceived demand for e-service applications (demographic factors). E-communication applications shaped the political rationale is influenced by three key factors: the nature of e-communication applications, political environment (influences the degree of demand for improved communication with the government from citizens), and government structural attributes.

The environment (stability of society, economy and government; ICT infrastructure, human capital), the attitude towards government (trust or distrust in government), and the government scope (the scope of government's services) are distinguished as the core dimensions [13; 15] and 'cultural diversity' and 'citizen involvement' are drawn as the most uncertain variables with the largest impact [16].

Summarizing the external e-governance development factors are:

• Geographic: an area, the status of the territory: urban/rural, special (the port, the depressed areas), the remoteness and population density;

• Social: the size of population and it's structure (by age / gender / education / family status; the number of recipients of social benefits, the birth rate);

• Economic: the level of economic development and it's structure (GDP per capita; the number of enterprises; GDP in the main economic sectors; foreign direct investment, the level of household income (the average wage), the unemployment rate);

• Political: the concentration of social elite; the level of political participation; the level of public trust in government;

• Cultural: the level of literacy and education (the literacy rate, the number of libraries and (higher) education institutions, the enrolment of students in (higher) education institutions), the customers'/citizens' view on the usefulness and success of public organizations websites (the cultural resistance);

• Technological: ICT infrastructure capacity (telecommunications and network infrastructure) and e-readiness (access to ICT and the computer literacy);

• Legal – regulatory: e-government legitimation (legislation on e-procurement, e-voting, e-survey, digital signature);

• Institutional – organizational: public administration structure (centralized-decentralized system and/or local government model), stakeholders binding to inter-

ests representing groups (such as business, environmental groups, communities, local action groups, etc.).

These factors are mutually dependent on each other, for example improved eServices will help to improve the efficiency of public administration and also make it possible to influence policy in areas where users can join together in virtual communities [10, p. 15]. The main external factors that exert pressure on e-governance development are the ageing population, the democratic deficit, global competition and convergence. These factors together determine the form and structure of e-governance in present. The critical change of these factors may effect e-governance development (by slowing down or accelerating) in the future.

Materials and methods

In January of 2012 Lithuanian scientists assessed the development level of municipal websites of the Republic of Lithuania on the basis of municipal websites survey instrument, developed by -Governance Institute at Rutgers University (USA) and the Global e-Policy e-Government Institute at Sungkyunkwan. Development level of municipal websites was estimated by using methodology as of 2011 Rutgers E-Governance Performance Index. Websites of all 60 Lithuanian municipalities were assessed according 104 factors. All factors were divided into 5 groups (privacy and security; usability; content; services and citizen participation) [3, p. 28].

Twenty five external factors that may have the impact on development of municipal websites in Lithuania were selected on the basis of the results of analysis of scientific literature. The factors applied in this research presents factors from 5 groups (see table 3). Other groups of factors aren't relevant as all municipalities operate in the same legal conditions. One of the main limitations in analysis of the development level of municipal websites is associated with the lack of data about municipalities. For example, there are no data about households that have personal computers and internet access and persons who use information and communication technologies (computer and internet) in each municipality. Therefore it is necessary to find compromises between present data about the external factors and the factors of the development of municipal websites. There was used data as of 2011 and 2012 on 60 Lithuanian municipalities from Lithuanian Department of statistics in this study [8].

Three-dimensional division of municipalities into the groups of rural, semi-rural and urban was applied in order to investigate external factors which may have the impact on the development of municipal websites. This division was made using the methods of Organisation for Economic Co-operation and Development [18]. These quantitative limits (see table 1) was applied: a) rural municipalities are those, in which more than 50 per cents of population live in rural type places; b) semi-rural municipalities are those, in which 15-50 per cents of population live in rural type places; c) urban municipalities are all residual municipalities [19, p. 170].

The development of websites of Lithuanian municipalities is influenced by various factors. The correlation analysis is useful method which can help to reveal relations between the factors that may determine the differences in the development of

municipalities' websites and Rutgers indexes. The aim of correlation analysis was to find relation between the development index of municipal websites and 25 external factors. Statistical analysis was performed with „SPSS Windows 13.0"and „Excel 2003". Methods of statistical analysis were selected after performance of Kolmogorov-Smirnov test. It showed that the data was nonparametric. Consequently Kruskal-Wallis H test was applied for comparison of the Rutgers E-Governance Performance Index between municipal groups. Kruskal-Wallis H test shows the mean rank but not means of concentrations. The Spearman coefficient was estimated using correlation analysis in order to find relations and their strength. P value of <0.05 was considered as statistically significant.

Table 1. **Typologies of Lithuanian local municipalities by rural-urban dimension**

No.	Groups of local municipalities	Number
1.	Rural	35
2.	Semi-rural	16
3.	Urban	9
	Total	*60*

Source: formed by authors according to [8; 19, p. 170].

First of all the Rutgers E-Governance Performance Index was compared between three municipal groups – rural, semi-rural and urban municipalities. Afterwards all correlations between the development indexes of websites of all municipalities and 25 selected external factors were estimated. These relations were also analysed separately in three municipal groups. This analysis helped to find particularities of the external factors impact on the development level of municipalities' websites.

Results

Using Kruskal-Wallis H test no significant differences between the Rutgers E-Governance Performance Index in the groups of municipalities were found (see table 2).

Table 2. **Mean rank of Rutgers E-Governance Performance Index in groups of local municipalities according Kruskal-Wallis H test (p>0,05)**

No.	Groups of local municipalities	Mean rank
1	Rural	29,39
2	Semi-rural	30,88
3	Urban	34,17

Source: formed by authors according to [3, p. 34].

Kruskal-Wallis H test shows the mean rank but not means of Rutgers indexes, therefore means of these indexes are presented in figure 1. The mean of the Rutgers E-

Governance Performance Index in urban municipalities (36,42%) is only 4,02% higher than the mean in rural municipalities (32,4%). Difference of the mean of the Rutgers E-Governance Performance Index is particularly small (0,32%) between rural and semi-urban municipalities.
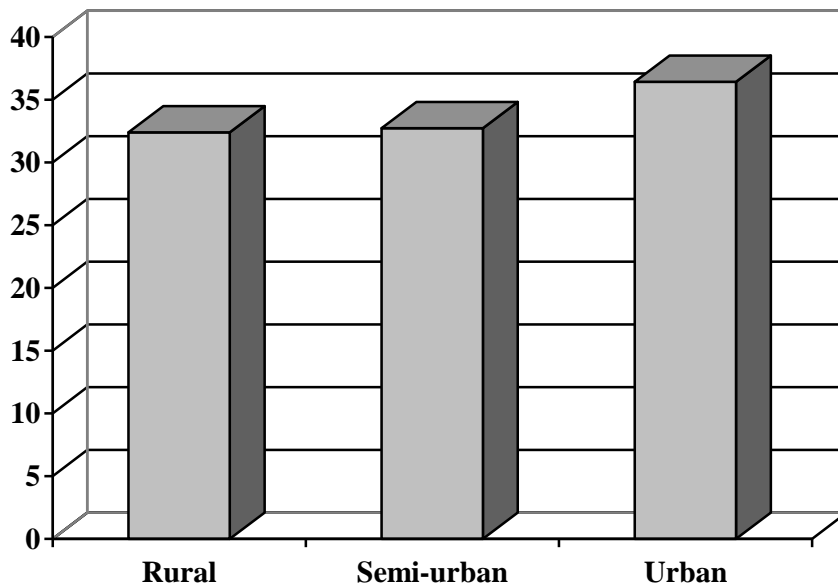

Figure 1. Means of Rutgers E-Governance Performance Index in groups of local municipalities
Source: formed by authors according to [3, p. 34].

According to the correlation analysis (see table 3), the development indexes of websites of all municipalities (N=60) and the major external factors were statistically significantly related. The development indexes of websites were closely associated with 15 factors (p<0,05). Furthermore, the correlation between the Rutgers index of municipal websites and even 13 factors were highly statistically significant (p<0,01). All of these correlations, except one (rural population), were positive.

The economic and social factors were found to be the most common factors that have impact on the development of websites. The development level of municipal websites is higher when the number of foreign direct investment (rs=0,55, p<0,01), employed (rs=0,57, p<0,01) and unemployed persons (rs=0,55, p<0,01), operating economic entities (rs=0,59, p<0,01), the number of tourists (rs=0,48, p<0,01) and the average net monthly earnings (rs=0,31, p<0,05) increase. It is noticed middle strong positive correlation between all economic factors and the development indexes of websites, and weak positive on the average net monthly earnings and the number of tourists. No relations between the investment in tangible fixed assets and investment in tangible fixed assets into information and communication and the development of

Table 3. **Correlation between Lithuanian Municipal Website Development Factors and Rutgers E-Governance Performance Index as of January 2012 (Spearman coefficient)**

No.	Factors groups	Website development factors	Rutgers index in local municipalities			
			Rural (N=35) 1	Semi rural (N=16) 2	Urban (N=9) 3	Total (N=60) 1-3
1.	Economic	Foreign direct investment (2010)	–0,31	–0,46	0,77*	0,55**
2.		Employed persons (2011)	–0,36*	0,04	0,81**	0,57**
3.		Investment in tangible fixed assets (2011)	–0,19	0,13	0,42	0,04
4.		Investment in tangible fixed assets into information and communication (2010)	0,01	0,06	0,45	0,09
5.		Registered unemployed (2011)	–0,32	–0,08	0,83**	0,55**
6.		Average net monthly earnings (2011)	–0,19	0,11	0,63	0,31*
7.		Operating economic entities (2012)	–0,34*	0,03	0,81**	0,59**
8.		Tourists (2011)	–0,30	–0,21	0,68*	0,48**
9.	Social	Population (2012)	–0,33	0,10	0,81**	0,56**
10.		Working age population (2012)	–0,34*	0,09	0,82**	0,56**
11.		Population aged 15–29 years (2011)	–0,35*	0,25	0,52	–0,03
12.		Retirement age population (2012)	–0,21	0,13	0,81**	0,58**
13.		Males (2012)	–0,33	0,10	0,81**	0,56**
14.		Females (2012)	–0,33	0,09	0,82**	0,58**
15.		Recipients of social assistance benefit (2011)	–0,27	–0,07	0,82**	0,48**
16.		Live births (2011)	–0,39*	0,15	0,52	–0,06
17.	Geographic	Population density (2012)	–0,36*	0,07	0,39	0,35**
18.		Area	0,03	0,12	0,76*	–0,12
19.		Urban population (2012)	–0,07	0,10	0,81**	0,60**
20.		Rural population (2012)	–0,34*	0,08	0,68*	–0,29*
21.	Cultural	Colleges and universities (2011)	–0,16	0,27	0,72*	0,54**
22.		Libraries (2011)	–0,02	0,14	0,39	0,09
23.		Cultural centres (2011)	–0,09	0,11	–0,05	–0,05
24.		Museums (2011)	–0,10	–0,05	0,44	–0,02
25.	Political	Voter turnout to local councils (2011)	0,10	–0,19	–0,03	–0,03

* Correlation is significant at the 0,05 level.
** Correlation is significant at the 0,01 level.

Source: formed by authors according to [3, p. 34; 8].

websites were found. Middle strong positive correlation is observed between the development level of websites and some of the social factors: the number of population (rs=0,56, p<0,01), working age population (rs=0,56, p<0,01), males (rs=0,56, p<0,01) and females (rs=0,58, p<0,01). The number of recipients of social assistance benefit (rs=0,48, p<0,05) affects the development level of websites weakly. The number of persons aged 15–29 years does not have significant impact on the development of websites.

The impact of geographic factors on the development level of websites is not as clear as impact of economic and social factors. Middle strong correlation is noticed between the development level of municipal websites and living place: higher number of urban population in municipalities is related with higher development indexes of websites (rs=0,60, p<0,01). On the contrary, as less the number of rural population are in municipalities, as higher development index of websites is (rs=-0,29, p<0,05). Though, this relation is very weak. Population density (rs=0,35, p<0,01) is weakly related with the development of websites: when population density is greater, then the development index of municipal websites is higher. These results revealed that the development of municipal websites was not related with their area.

Study showed that middle strong positive correlation was noticed only between one of he cultural factors – the number of colleges and universities – and the development level of websites (rs=0,54, p<0,01). This means that more colleges and universities in municipality have impact on higher development index of municipal websites. It is estimated that there are no statistical significant correlation between the development level of websites and number of libraries, cultural centres and museums. There are also no statistical significant relation between the development level of websites and the voter turnout to local councils (political factor).

After investigation of relations between the development of websites and 25 factors in rural municipalities (N=35), statistically significant correlation was found only with 7 factors. The development level of websites was related with two economic factors: the number of employed persons (rs=–0,36, p<0,05) and the number of operating economic entities (rs=–0,34, p<0,05). Three social factors had impact on the development level of websites. Relation was estimated between the development level of websites and the number of working age population (rs=–0,34, p<0,01), population aged 15–29 years (rs=–0,35, p<0,01) and live births (rs=–0,39, p<0,01). The number of population aged 15–29 years and the number of live births had impact on the development of websites only in rural municipalities. Population density (rs=–0,36, p<0,01) and the number of rural population (rs=–0,34, p<0,01) had impact on the development of websites in rural municipalities. These factors belong to group of geographic factors. Weak negative correlations were observed in all these cases: the development index of websites is higher when the number of employed persons, operating economic entities, working age population, population aged 15–29 years, live births, rural population and population density are lower. Statistically significant relations were not estimated between the development levels of websites and cultural and political factors in rural municipalities.

Correlation analysis was also applied in order to find relation between the development indexes of websites and economic, social, geographic, cultural and political factors in all semi-rural municipalities (N=16). Unfortunately, no significant relations were found.

Results of this study showed clear differences between the factors that have impact on the development level of websites in rural and urban municipalities. Statistically significant strong positive correlation was found between the development level of websites and these economic factors: foreign direct investment (rs=0,77, p≤0,05), the number of employed (rs=0,81, p≤0,01) and unemployed persons (rs=0,83, p≤0,01) and economic entities (rs=0,81, p≤0,01) in urban municipalities (N=9). Correlation between the number of tourists and the Rutgers index is middle (rs=0,68, p≤0,05). Social factors have stronger impact on the development of municipal websites. Strong correlation is noticed between the development level of websites and the number of population (rs=0,81, p≤0,01), working age population (rs=0,82, p≤0,01), retirement age population (rs=0,81, p≤0,01), males (rs=0,81, p≤0,01), females (rs=0,82, p≤0,01) and recipients of social assistance benefit (rs=0,82, p≤0,01). Analysis of the geographic factors showed significant strong correlation between the development of municipal websites and their area (rs=0,76, p≤0,05). This correlation is noticed only in the group of urban municipalities. The number of urban population (rs=0, 81, p≤0,01) has significant strong impact on the development level of municipal websites in this group. Relation between population of rural municipality and the Rutger's index is middle strong (rs=0,68, p≤0,05). Strong positive correlation is estimated only between the number of colleges and universities and the development level of municipal websites. Other cultural factors did not have impact on the Rutger's index. However there were no significant correlation between political factor and the development level of websites in urban municipalities. The same tendency is noticed in rural municipalities.

Discussion

UN (2012) research shows that countries endowed with a high income per capita, a small population, established ICT and education infrastructures and high level of human capital can easily utilize advantages afforded by ICT and face fewer challenges. Lithuania meets these criteria partly and has the 29th rank of 193 of E-government index [5]. Lithuania has Internet penetration of almost 70 per cent in e-service usage but two thirds (66 per cent) of the country's residents have never used e-government services [12].

The results of the comparative analysis show that there are sharp differences in the groups of urban and all municipalities and rural municipalities. Statistically significant influence of much larger complex of external economic and social factors observed for the development of municipal websites in groups of urban and all municipalities compared to the rural municipalities. The impact social and economic factors on the development level of rural municipalities' websites are much weaker and it is negative compared to the groups of urban and all municipalities. The impact

of economic and social factors on the development of municipal websites is much stronger and positive in the group of all municipalities and especially strong in the group of urban municipalities. The weak impact of the economic and social factors on rural municipal website development level may be explain by the fact that the economic and social indicators of rural municipalities are much lower than of urban ones. The results of the research show that the impact on the development of municipal websites of geographical factors is less significant compared with economic and social ones.

Geographic factors – the number of population and its' density, the level of urbanization – have controversial impact on e-governance development. Individuals in urban locations and highly populated areas are more likely to use the Internet than those in rural and low populated areas, but somecross-country studies find a non-significant or negative effect of urbanization and population density on ICT adoption [18]. The controversial impact of population density on the development of municipal websites observed in this study too: the correlation is negative of the group of rural municipalities while positive correlation is of the groups of urban and all municipalities. This can be explained by economic factors impact. The income gap in ICT penetration are noticed on the rural-urban divide as most of the world's poor live in rural areas, and most of the world's rural populations tend to be poor [5]. Seeking for local economic development growth provision of information and e-services is used to crate business friendly environment and reduce the bureaucratic burden thus factors – the size of foreign direct investments and the number of operating entities – have high impact on websites' development. This conclusion is supported by the results of research in the groups of urban and all municipalities.

Social factors impact is controversial. A country with a very large population should provide many more online access points to its citizens than a country with a small population [5]. The bigger number of people in vulnerable groups (number of unemployed, retirement age population, recipients of social assistance benefit) should encourage the development of municipal websites' as these people are users of many public service. Result of this research confirms this especially in the group of urban municipalities.

Results of this research confirms that only one cultural factor – the number of educational institutions – has high impact on ICT penetration as they were the first organizations connected to Internet [11]. This research results confirms the impact of higher education institutions on the development of municipal websites. Evidence of other cultural factors impact is weak because of data limitations [18]. This was confirmed by this research too as other cultural factors impact was not observed.

Political factors impact is limited as the focus of the ICT applications concentrates technologies on the management and delivery of public services rather than on other areas. The democratic potential of e-government is mostly underutilized [1] as the internet is not yet running as effective medium facilitating democratic inputs into the policymaking process [17]. This can be presumed that the dominant stakeholder in the development of municipal websites is the bureaucratic administration rather than citizens or politicians (as in Norway) [6]. Citizens perceive

moderate value in e-government for knowledge acquisition and communication, but little as a vehicle of democratic engagement (as in UK) [7]. However USA municipalities analysis show that the greater political competition as well as high level of citizen involvement and interest in politics increases e-governance development as enables online communication with the elected officials and allows citizens to oversee the council activities [1].

A major challenge for policymakers and managers remains not only to increase the overall level of e-service usage but go for the more complex transactions such as e-consultation. In Lithuania (as well as in Australia) the greater attention to social and economic inclusion and equity (i.e. providing access to infrastructure, training and capacity building) especially in rural municipalities is needed as the lack of participation in the information society are by those groups in the population who are the primary users of governmental services [4]. Horizontal and vertical e-government linkages among various institutions and nodal points can create opportunities for greater participation and social inclusiveness [5].

In order comprehensively understand the impact factors that determine the development of municipalities website internal factors should be identified and analysed too. Therefore, further research on relations of the development level of municipal websites and internal factors should be carried out.

Conclusions

1. E-governance encompasses ICT-mediated interaction between citizens and government used for information provision, public services delivering and citizens' participation in public governance. Such multidimensional nature determines the complex factors influence on e-governance development (including public organizations websites as the major channel of government – citizens interaction): geographic, social, economic, political, cultural, technological, legal-regulatory, and institutional-organizational.

2. The complex of external economic, social and geographic factors had significant impact on development of websites in all municipalities. Besides, only one cultural factor – the number of colleges and universities – has influence on the development of municipalities' websites. Other cultural factors and voter turnout to local councils (political factor) were not significant in the development of municipal websites.

3. Almost the same complex of factors as in all municipalities had impact on the rank of urban municipal websites development except the average net monthly earnings and population density. The development level of websites was associated with size of municipal area only in urban municipalities. The influence of factors that were significant for the development of websites was stronger in the group of urban municipalities than in the group of all municipalities.

4. The smaller complex of economic, social and geographic factors had impact on the development of rural municipal websites. As distinct from the groups of urban and all municipalities, these factors weakly and negatively influenced the develop-

ment level of websites in rural municipalities. Cultural and political factors were not associated with the development indexes of websites in rural municipalities.

5. Analysis of impact of external factors on local government websites development levels showed incomplete usage of municipal webpages as the interactions channel between local government and stakeholders, focusing more on information provision and public services delivery. Major challenge for policymakers and managers remains not only to increase the overall level of e-service usage but go for the more complex transactions of e-communication. The internal factors analysis is required for comprehensive driving factors impact evaluation.

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E-valdymas Lietuvos savivaldybėse: interneto svetainių išsivystymo išorinių veiksnių analizė

Anotacija

E. valdymas yra informacinių ir komunikacinių technologijų naudojimas viešajame sektoriuje siekiant valdžios ir interesantų sąveikos. Todėl viešųjų organizacijų interneto svetainių tinkamumas naudoti yra pagrindinis šios sąveikos veiksnys. Nors yra pakankamai ištirtos koncepcinės prieigos, technologinės inovacijos, įvertinti e. paslaugų teikimas ir e. valdžios diegimas, e. valdymą lemiantys veiksniai kol kas nėra suprasti. Šio straipsnio tikslas – nustatyti Lietuvos savivaldybių interneto svetainių išsivystymą veikiančius išorinius veiksnius. Tyrimo metu buvo analizuojami 25 išorinių ekonominių, socialinių, geografinių, kultūrinių, politinių veiksnių ir savivaldybių interneto svetainių išsivystymo indeksų ryšiai, nustatomi išorinių veiksnių skirtumai, turintys įtaką skirtingam interneto svetainių išsivystymo lygiui tarp miesto, kaimo ir visų savivaldybių. Tyrimų rezultatai rodo, kad visų savivaldybių ir miestų savivaldybių interneto svetainių išsivystymui reikšmingą įtaką daro išoriniai ekonominiai, socialiniai, geografiniai veiksniai. Šių savivaldybių interneto svetainių išsivystymui turi įtakos ir dar vienas kultūrinis veiksnys: kolegijų ir universitetų skaičius. Kaimo savivaldybių interneto svetainių išsivystymo lygiui reikšmingą, tačiau silpną įtaką daro mažiau ekonominių, socialinių ir geografinių veiksnių. Kiti kultūriniai veiksniai bei rinkėjų aktyvumo rodiklis

(politinis veiksnys) neturėjo reikšmingos įtakos interneto svetainių išsivystymui. Pagrindinis valdžios institucijų uždavinys yra ne tik padidinti bendrą e. paslaugų naudojimo lygį, bet ir siekti išvystyti e. bendravimą. Vidinių veiksnių analizė yra būtina siekiant išsamiai nustatyti veiksnius, lemiančius savivaldybių internetinių svetainių išsivystymo lygį.

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