

## **THE IMPACT OF INTERNET PENETRATION ON POLITICAL PARTICIPATION ACTIVITY IN LITHUANIA**

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**Abstract.** Active political participation in the process of democratic governance provides citizens with an opportunity to influence elections and control the work of politicians. However, results of the surveys during last few years display that the activity of citizens' political participation in elections is declining significantly. As a result, new ways to encourage activity of citizens are looked for while taking into account the rapidly changing environment. One of such possibilities is rapid development of information and communication methods which allow citizens' participation via internet and proper information gain in networks. The aim of the article is to identify the impact of internet penetration on political participation activity in Lithuania. The authors analysed tendencies of internet penetration and activity of citizens' participation in election. Furthermore, causal relations between political participation in elections which happened from 2007 to 2014 and factors of internet penetration (households with internet access and individuals, who used internet daily or at least once per week) were analyzed in this article. According to this study the authors found a relation between activity of voters in the before mentioned elections and factors of internet penetration. There were not identified statistically significant differences between counties where the most part of the population are from rural areas and those, where prevailed urban population. The regular usage of internet has impact on voters' activity in the rarest settled counties. It was identified that individuals who use the internet more frequently find information about elections in websites. The hypothesis was raised that this information encourages them to participate in elections more actively.

**Key words:** political participation, internet penetration, activeness of voters, election.

**JEL code:** O330, R200.

### **Introduction**

Political participation is considered as one of the main topics while talking about contemporary representative democracies (Teorell J., Torcal M. and Montero J. R., 2007). Different measures are applied for political participation in modern democratic countries. One of them is information and communication technologies (ICT). It is related with e-participation,

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e-voting possibilities development. While applying ICTs citizens can better inform representatives of authority on their interests and needs, put pressure trying to get response to their opinion, find information about political parties, offer their opinion during elections, etc. Social network sites, blogs, specific websites have allowed individuals to participate in activities aimed at influencing government and policy. It is stated that finding information in internet is relatively low cost compared to finding information through other measures (such as the television, in person etc.).

The surveys of citizens' participation are noticeably developed in Western democracies during last few years. Plenty of articles can be found where phenomenon of citizens participation is examined, its typologies are presented, and which analyses the shift of citizens' participation forms. J. Gaventa and C. Valderrama (1999), H. J. Abs and R. Veldhuis (2006), R. Dalton (2009), D. Held (2002) and others can be mentioned among the authors who have analyzed citizens' participation in Western countries. In Lithuania, this issue was analyzed by A. Krupavicius (2004), M. Damkuvienė and R. Tijunaitienė (2010), P. Ragauskas (2004), R. Riekasius (2011) and others. The issues of e-democracy, e-participation, e-voting are analyzed widely in scientific literature and they are directly related with the rapid ICT development (Blumler J. G. and Coleman S., 2001; Chappellet J. L. and Kilchenman P., 2005). But there is a lack of deeper surveys about influence of internet on political participation activity. Considering this the authors of article formulate the aim - to identify the impact of internet penetration on political participation activity in Lithuania. The concept of political participation is analyzed, the internet penetration and the activity of voters in Lithuania's is surveyed considering the rural and urban population, and the relations between voters' activity and internet penetration are identified in this article. The attention is given to impact of internet on voters' activity. The methods applied are: analysis of scientific literature, comparative analysis, logical analysis, correlation and linear regression analysis.

## **The concept of political participation**

The institutionalized methods of citizens' political participation in decision-making process distinguish democracy from other political systems (Dalton R., 2009). D. Held (2002) points out principles of democratic system which prevalence would determine political life as one of the most important part of citizens living: effective participation, conscious understanding, and equality of voting in critical moment, control of agenda, engagement. Institutions of authorities should assure possibilities of citizens' participation in order to practically implement these principles of democracy.

Scientists H. J. Abs and R. Veldhuis (2006) presented classification of participation conceptions the basis of which is active citizenship. With reference to four dimensions of citizenship (political, economic, social and civic) they point out four conceptions of participation: political participation, social participation, cultural participation and economic participation.

The Internet has had a huge impact on both the way in which people connect with each other and the way that they gather and share information (Dalton R., 2009). It allows communication with little regard for geographical boundaries (so long as those places have Internet access), and significantly reduces the obstacles to communication presented by time and language restraints (Whiteley P., 2013).

Political participation is identified with a common participation in elections. On the basis of democracy principles citizens have to control those who are making decisions; the main way of this control – society`s possibility to elect political elite during competitive elections periodically (Blumler J. G. and Coleman S., 2001). Pre-election period is also very important because during it a lot of discussions, debates are organized, candidates and parties present their election programs etc. This time is assigned for the information retrieval, collection, analysis, and assessment.

Just like other countries, Lithuania is confronted with a big challenge – ICT development and its impact on democracy and participation (Riekasius R., 2004). As such, the terms of “e-democracy”, “e-voting” etc., provide new forms of participation, new possibilities of information spread, new possibilities for communication with political elite and representatives of public administration institutions.

## **Materials and methods**

This study is based on secondary statistical data and summary and interpretation of the results of scientific research about internet impact on voters` activity. Regional statistics about ICT from Statistics Lithuania and data about voters` activity from the Central Electoral Commission of the Republic of Lithuania (CEC) are the main sources of this study. From 2005 to 2014 regional statistics about household with internet and persons, who used internet daily or at least once per week were used in order to analyze internet penetration in Lithuanian counties (Official Statistics, 2014). Analysis of citizens` activity in elections is based on the CEC data about voters` activity in the Local Government Councils` election in 2007 and 2011, the Parliament (Seimas) election in 2008 and 2012 and the President election in 2009 and 2014 (Lietuvos Respublikos Vyriausioji rinkimu komisija, 2014). Data of scientific articles from databases of Essential Science Indicators and Virtual Library of Lithuania were used in this article.

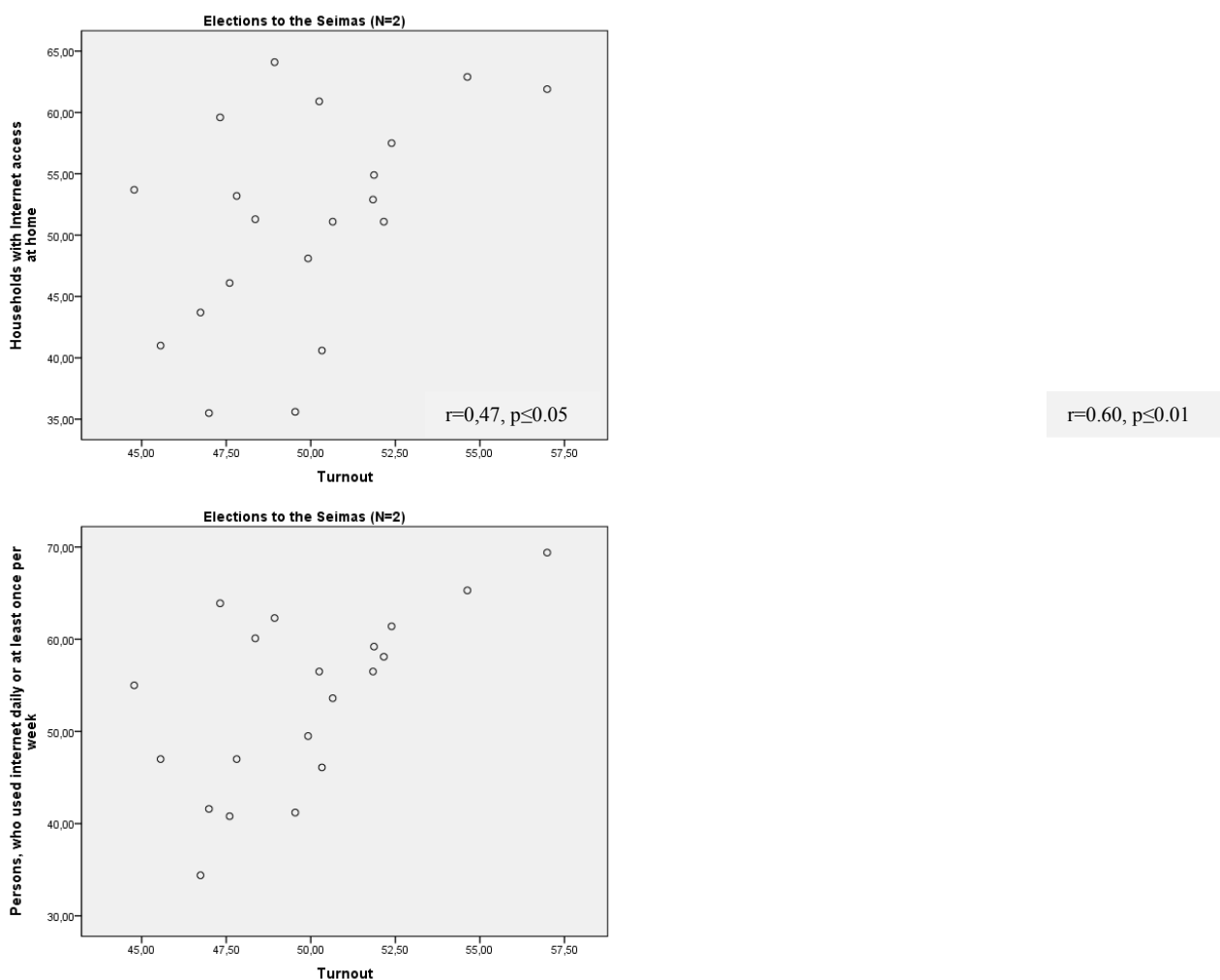
The authors used comparative analysis method to analyse data and scientific articles. Quantitative and holistic approach was applied in order to find essential quantitative relations. Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS 13) and Excel 2003. Relations between internet penetration and voters` activity were investigated using Pearson correlation coefficient and linear regression analysis. Two indexes which show internet penetration were used in this analysis: a) household with internet access (HIA) and b) persons, who used internet daily or at least once per week (PUI). Causative relations between these indexes and voters` activity were analyzed in six elections. Moreover,

the analysis was performed according to the type of election and county. A p value of  $\leq 0.05$  was considered statistically significant.

## Results

Correlation analysis showed (Figures 1 and 2) that voters' activity was significantly related with both indexes of internet penetration – HIA and PUI ( $p \leq 0.05$ ) in all elections during 2007–2014 ( $N=6$ ) and the Parliament election separately ( $N=2$ ). This correlation was especially significant in three cases ( $p \leq 0.01$ ). All these correlations were positive.

Relation between voters' activity and PUI is significantly more stronger than relation between voters' activity and HIA in the Parliament election. Individuals who use the internet more frequently find information about elections in websites. The authors can hypothesize that this information encourages them to participate in elections more actively.

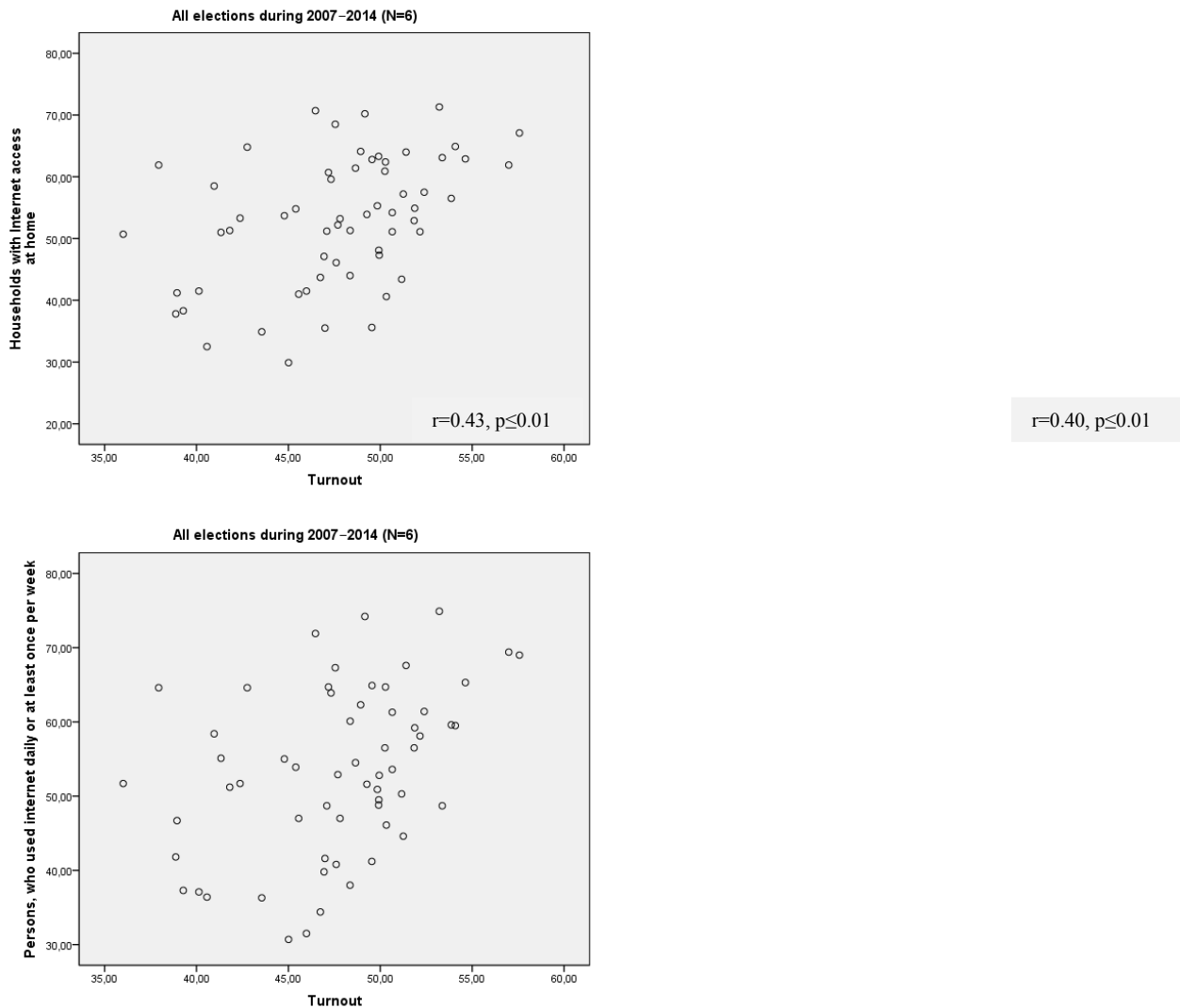


Source: authors' calculations based on the Statistics Lithuania data

Fig. 1. Analysis of correlation between voters' activity and indexes of internet penetration in the Parliament elections of 2008 and 2012 (Pearson coefficient)

This study shows weak positive correlation between voters' activity and PUI and HAI in elections which happened between year 2007 and 2014 (Figure 2). These findings suggest that

higher number of persons who use internet and household with internet access increased voters' activity in the above mentioned elections and Parliament election separately. However, according to this study, voters' activity in the President election and Local Government Councils election is not related to indexes of internet penetration.



**Source: authors' calculations based on the Statistics Lithuania data**

**Fig. 2. Analysis of correlation between voters' activity and indexes of internet penetration in elections between year 2007 and 2014 (Pearson coefficient)**

After analysis of correlations between voters' activity and indexes of internet penetration according to different counties, the authors found only two statistically significant correlations (Table 1). Voters' activity is related to PUI only in Alytaus and Utenos counties. This correlation is significant and strong. However, correlations between voters' activity and indexes of internet penetration in other counties were not statistically significant.

**Analysis of correlation between voters' activity and indexes of internet penetration in elections between year 2007 and 2014 (Pearson coefficient)**

No.	Counties	HIA	PUI
1.	Vilnius	0.44	0.64
2.	Klaipeda	0.39	0.39
3.	Kaunas	0.53	0.54
4.	Panevezys	0.52	0.40
5.	Telsiai	0.64	0.51
6.	Siauliai	0.72	0.60
7.	Utena	0.46	0.87*
8.	Alytus	0.69	0.84*
9.	Marijampole	0.69	0.44
10.	Taurage	0.71	0.79

\* Correlation is significant at the 0.05 level.

\*\* Correlation is significant at the 0.01 level.

**Source: authors' calculations based on the Statistics Lithuania data**

Linear regression analysis was performed to find if internet penetration had impact on voters' activity. Voters' activity was chosen as dependent variable. HIA and PUI were independent variables. According to the linear regression analysis, HIA and PUI did not affect voters' activity in any of election. However, higher UI had significant impact on voters' activity in Alytaus county ( $\beta=0.93$ ,  $p\leq 0.05$ ). Significant relations were not found in other counties.

## Discussion

This study analyzed relation between voters' activity and indexes of internet penetration (HIA and PUI) and proved the impact of internet on voters' activity, which is the main finding. Results showed that HIA and PUI had significant affect on voters' activity in Lithuanian elections between year 2007 and 2014, especially in the Parliament election. Research argues about impact of internet on political participation: some of them state that internet use decreases political responsibility while others maintain the idea that internet increases political participation (Lusoli W., 2005; Schmitt H., 2004; Sylvester E. D. and McGlynn A. J., 2010; Stanley J. W. and Weare Ch., 2004).

Authors' study agrees with H. Schmitt's and W. Lusoli's studies results, which show that internet has mobilizing affect on voters' activity. Both scientists analyzed impact of internet in the European Parliament elections. H. Schmitt investigated the role of internet use in receiving the pre-electoral information of the 1999 European Parliament election and concluded that internet users take part in elections more actively than individuals who are not using it despite the causal structure. Moreover, the study revealed that the internet was almost as popular as public meetings which were one of the most typical forms of electoral campaigning of European political parties previously (Schmitt H., 2004). Analysis about internet has mobilizing affect on voters' activity. Both scientists analyzed impact of internet in the European Union citizens' internet use in finding the information about internet has mobilizing affect on voters'

activity. Both scientists analyzed impact of internet in the 2004 European Parliament election showed that internet goes hand-in-hand with citizen-centred campaigns, where the individual takes a more active role in information gathering, in taking part to political discussion and in attending public electoral events (Lusoli W., 2005). Authors' findings are in agreement with D. E. Sylvester's and A. J. McGlynn's study, where they show that people who used internet more often in their homes were more likely to contact the government whether by phone, e-mail, or letter. For example, the probability of political participation through letter writing or phone calls is increased by 15–17% for someone who uses internet at home multiple times per week as compared to someone who does not use internet at home. Moreover, the probability of sending an e-mail to government rises by 35% for the same change in the frequency of internet use at home. These results demonstrate that individuals who do not use internet at home whether because of inadequate knowledge or lack of access are less likely to be politically active and this has significant and negative consequences for political participation (Sylvester E. D. and McGlynn A. J., 2010).

However, J. W. Stanley and Ch. Weare present the opposite results. According to their studies, internet has a lacking impact on democratic participation. Findings that internet access does not mobilize individuals politically, suggests that many of the web-discussion participants were already politically active and were attracted by the opportunity to exercise their political voice in another areas. So the affect of internet access on mobilizing non-active individuals is hardly probable (Stanley J. W. and Weare Ch., 2004). Though the authors found the significant relation between voters' activity and HIA and PUI, this relation is weak. Indexes of internet access and usage increased rapidly in Lithuania, whereas voters' activity significantly decreased. Rapid internet penetration had very small impact on voters' activity.

Results of this study show that PUI has very strong impact on voters' activity only in Alytaus and Utenos counties. It is interesting that PUI indexes are the lowest in these counties. Moreover, these counties do not distinguish from others according to voters' activity. On the contrary, relation between PUI and voters' activity was not found in counties, which are leaders according to the PUI indexes. This confirms the results of studies which present controversial data about impact of internet use on voters' activity. There is the need to perform the more comprehensive studies in order to find these differences between counties.

Statistically significant differences were not found between counties with higher number of rural population (Taurage and Marijampole) and counties with urban population. Though major part of the population of Utena and Alytus consists of urban inhabitants these territories are rarely settled. Population density is internet has mobilizing affect on voters' activity. Both scientists analyzed impact of internet in the lowest in Utenos county (19.8 people per km<sup>2</sup>) and population density in Alytaus county is in the third place (27.6 people per km<sup>2</sup>) of all counties. Correlation between voters' activity and UI is observed in these counties. Moreover, UI has impact on voters' activity in Alytaus county. The authors can hypothesize that active

internet users from these counties get information about elections in websites easier and with less expense. Thereby this has impact on their participation in elections.

No electronic vote is available in Lithuania at this time. Despite this fact, internet is efficient device which helps individuals easily and voluntarily participate in Lithuanian elections. Moreover, it helps in choosing different ways of political participation with small financial and time input. Previously, enthusiastic internet users were only young people who did not have the right to vote. On the contrary, nowadays more older people become involved in the activity related with elections on the internet.

Firstly, the only one role of internet in elections was to provide access to the various information sources, especially to the websites of political parties. Nowadays a person who has open internet access at home or at work can create a diary, write a comment about elections in social networks or micro-websites, show his/her support by videos, pictures, photos or uploaded status, join the election campaign by creating views or sharing them. Different persons can be involved in commonly created advertisement campaign on the internet.

Broadband internet connection access should be expanded in the areas which do not have this connection. This could support the use of internet abilities to increase voters' activity. It is also important to explain advantages of internet for people, to show how internet can help solve their problems, contact with national institutions, political parties and non-governmental organisations and get the information from them. This could defeat their hostility. Moreover, people should get financial support and training service. The essential thing is to provide necessary knowledge and skills for the old people, rural inhabitants, those who get lower incomes and disabled people who do not use computer and internet (Lietuvos Respublikos Vyriausybės..., 2011). However, the very important factor, which has the impact on application of internet and other modern technologies in mobilizations of voters, is national institutions, political parties and non-governmental organisations intention and ability to adapt to the forms of communication, collaboration, information and mobilization and to apply them in the conditions of electronic democracy. Firstly, these organisations should actively use internet and its opportunities to contact and communicate with electors and to mobilize them for the political activity. Electronic vote should be introduced in Lithuania.

Statistical analysis of data let to find only the main general tendencies of relations between internet usage and voters' activity and this conditioned the restriction of this study. The main restriction is related to the lack of data, especially about internet penetration according counties. Statistics Lithuania began to publish data about household with internet access and persons, who used internet daily or at least once per week according to the counties from 2005. Because of this reason the article analyzes voters' activity only from 2007. This study is important primary contribution to solution of this problem. However, further research which should analyse activity level, participation forms and content of different groups of voters (according to the living place, gender, age, etc.), would increase probability to evaluate impact of internet on voters' activity more accurately.



## Conclusions

1. Political participation refers to activity by ordinary citizens that has an intent or power to influence political decision making. Rapidly increasing internet penetration has a significant impact on broadening political participation by lowering the cost of involvement, creating new mechanisms for organizing groups and opening up new channels of information.
2. The authors found a relation between voters' activity in the elections between year 2007 and 2014 and households with internet access and people who used internet daily. The relation is observed only in the Parliament elections. There were no statistically significant differences found between counties where the most part of the population are from rural areas and those, where prevailed urban population. But the regular usage of internet has impact on voters' activity in the rarest settled counties.
3. The authorities in Lithuania cooperating with telecommunication companies have to develop further internet access and to provide flexible training services for the persons who are digitally excluded. The forms of electronic democracy should be actively applied by authorities, political parties and non-governmental organizations. These efforts will create wider possibilities for political participation, and voters will have access to plenty of information on internet.

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