E-DEMOCRACY PROJECTS IN THE REGIONS OF LITHUANIA: EVALUATION ASPECTS

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Abstract

**Purpose**—the purpose of the article is to analyse and evaluate e-participation projects in Lithuanian municipalities on the peculiarities of involving different social technologies.

**Design/methodology/approach** is based on analysis of scientific literature, projects reports and comparative analysis of websites under new index for assessment of e-democracy projects.

**Findings**—the paper presents an original overview of municipalities’ e-participation projects and its peculiarities on the support of different tools and technologies.

**Research limitations/implications**—this research deals only with documents and opinions of municipalities and is limited to one side of the e-participation process. In order to generalize the research findings, further investigation should include empirical surveys of citizens’ opinions concerning the effectiveness of e-participation projects.

**Practical implications**—the results can be used to improve collaboration of citizens with public servants in e-participation projects that are important to Lithuanian institutions.

**Originality/Value**—evaluation of e-participation projects in the new index for assessment in Lithuanian municipalities has not yet been examined deeply enough.

**Keywords**: e-democracy, e-participation, e-participation tools, e-participation technologies, e-government.

**Research type**: research paper.
1. Introduction

The European Commission approved the Operational Programme “Economic Growth” for 2007–2013 on July 30, 2007. The programme is co-funded with resources from the European Regional Development Fund and involves Community support for the whole of Lithuania within the framework of the Convergence objective. The purpose of this EU investment was to speed up economic growth in the long term so as to close the development gap between Lithuania and the EU average.1

The programme was structured according to five priorities. According to the priority “Information Society for All,” it was planned to develop electronic solutions to increase efficiency of public sector institutions and to enforce e-business initiatives. One of the possible activities under this priority has been named “Electronic Democracy: Regions.” Properly used information and communication technologies can be tools of e-democracy, allowing citizens to know more about government decision-making and participation in their preparation. Projects “Electronic Democracy: Regions” were carried out during the years 2009–2012 and were expected to be 19.5 million LTL.2

Though most of these projects have already been completed, there is a lack of deeper generalizations and performance assessment. The purpose of this article is to analyse and evaluate e-democracy projects in Lithuanian regions on the peculiarities of involving different information and social technologies.

This objective requires deeper discussion of the electronic democracy terms, definitions and concepts and evaluation of the completed projects.

2. Theoretical Background

Effective functioning of democracy depends on the citizens’ trust in public institutions and the willingness to recognize the rules of democracy. Participation of citizens in public governance is an essential condition for ensuring the development of democracy.

2.1. E-democracy terms, definitions and concepts

In the 21st century information and communication technology has become a powerful tool for transforming the way governments interact with citizens. The internet presents amazing new possibilities beyond the established model of more democratic government.

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The internet does not change people. It just allows them to do the same things the other way and only gives new possibilities for interaction and participation. It is an attractive space, which helps to realize their needs and interests, organize themselves into interest groups, and participate in various projects, which help people to develop their civic participation skills.

The use of information and communication technologies (ICTs) for enhancing a country’s democratic processes and empowering its citizens often is defined as e-democracy (Parvez, 2003, Macintosh, 2004). It aims to provide citizens with the opportunity to engage efficiently in democratic processes with the aid of new information and communication technologies. E-democracy is an important development which has been globally accepted as a democratic revolution in terms of citizen’s participation in democratic activities.

A lot has been written and said about e-democracy. Yet, there is a clear lack of a commonly agreed definition. But a lot can be inferred by restating a few basic “truths” (Goulardis, 2004).

E-democracy is:
- not about technology per se;
- not yet another e-government service;
- not just about electoral e-voting (although it embraces it);
- not “push-button” democracy; there are no miracles here;
- not an “alternative” democracy; it strengthens the democratic processes that already exist;
- definitely not a panacea.

E-democracy encompasses fundamental notions:
- it is about peoples’ right on the access to information and the means to obtain it;
- it is about consultation and deliberation;
- it is about accountability;
- it is about peoples’ voices being heard and respected.

E-democracy is first and foremost about democracy itself, whether direct, representative, deliberative or participatory.

E-Democracy consists of all electronic means of communication that enable/empower citizens in their efforts to hold rulers/politicians accountable for their actions in the public realm (Trechsel et al, 2003). Depending on the aspect of democracy being promoted, e-democracy can employ different techniques:

- for increasing the transparency of the political process;
- for enhancing the direct involvement and participation of citizens;
- for improving the quality of opinion formation by opening new spaces of information and deliberation.

In e-Democracy, activities should fall into any of the three categories: information acquisition, formation of opinion and decision-making. Based on the above statement, e-Democracy can be divided into two main subareas: E-participation which encompasses information acquisition and formation of an opinion, and E-voting which deals with the decision-making process (Macintosh, 2004). E-participation is seen as participation using ICT, either as the only channel or alongside with other non-ICT channels.
E-participation relates mainly to input to policy and decision-making for political or public policy purposes, both within formal systems and through informal systems where these can have a real impact at any level (this will include agenda setting, legislation, policy forming etc.). E-participation is embedded in different governance systems within the European context, rather than directly related to democracy (i.e. can look at participation in institutions, like the EC, which are not designed to be democratic).

E-participation could be seen in the context of different political and governance cultures across Europe and will have direct impacts on, and relations to, other countries and EU policies like democracy, inclusion, accountability, better (and cheaper?) legislation, trust, cohesion, legitimacy, etc., which should also be examined, although participation will not be understood only in the context of any one of these other policies.

It can be distinguished by three levels of participation (Macintosh, 2003): e-enabling, e-engaging, e-empowering.

**E-enabling** is about supporting those who would not typically access the Internet and take advantage of the large amount of information available. The objectives are concerned with how technology can be used to reach the wider audience by providing a range of technologies to supply the diverse technical and communicative skills for citizens.

Technology also needs to provide relevant information in a format that is both more accessible and more understandable. These two aspects of accessibility and understandability of information are addressed by e-enabling.

**E-engaging** with citizens is concerned with consulting a wider audience to enable deeper contributions and support deliberative debate on policy issues. The use of the term ‘to engage’ in this context refers to the consultation between citizens and government.

An **e-empowering** citizen is concerned with supporting active participation and facilitating bottom-up ideas to influence the political agenda. The previous top-down perspectives of democracy are characterized in terms of user access to information and reaction to initiatives led by the government. From the bottom-up perspective, citizens are emerging as producers rather than just consumers of policy. Here there is recognition that there is a need to allow citizens to influence and participate in policy formulation and decision making.

In the case of e-participation there are a growing number of examples of government organizations innovatively using technology to provide access to policy information and request comment on it. These examples demonstrate how technology is emerging as a tool to provide people with the capacity to participate and influence decision-making.

The term **e-Participation tool** is used to describe an ICT application which supports active participation in the democratic process. There are many different types of tools, ranging from simple applications of email, to custom-designed and programmed applications. Some e-Participation tools have been designed as online versions of traditional or current democratic processes (such as e-petitions systems). Other tools have evolved from Internet applications, modified to fit a democratic purpose (like discussion forums). It is worth noting that there are also readily available internet tools,
which are adopted by citizens and politicians and are used in e-Participation without modification (e.g. social networking tools and blogs) (Tambouris at al 2007).

E-Participation tools can be described in two different ways (Aichholzer at al 2007):
1. The democratic function of the system (e.g. e-Consultation systems), referring to what the system enables within the political process.
2. Their technical functions (e.g. e-Voting systems, GIS and Map-based tools), referring to how users interact with the system.

In some systems, these two aspects are closely related (e.g. e-Petition systems). Recognizing this, we group tools together into categories using their most prominent characteristics i.e. those generally used to define the system. In some cases these characteristics stem from the democratic function of the system, while in other cases from their technical functionality. Some applications could fit into more than one of the following categories:

1. e-Petition systems; which host petitions using interactive media. Users can sign the petition online, where a list of signatories is usually available. The systems may be aligned with the processes of a specific governing body (e.g. a Parliament or Local Authority) and be “owned” by this body. They may include information about the petition’s subject, a discussion forum, feedback about responses to the petition. Signature verification checks should be chosen so as not to impede accessibility.

2. Online voting. These may be used to elect people or vote on a specific issue. They may be used as part of a statutory process or other decision-making process. Purpose: electing people or making decisions

3. E-Consultation; online discussion forums; e-survey systems.

Tools used to gather public opinion on a specific issue, usually via a discussion forum, online surveys or a combination of the two. E-Panels are a subset of these systems including a group of people chosen for specific reasons. E-Consultation systems usually include background information. Multimedia (e.g. video) can be used as part of information or enabled for submissions; a blog-like format could also be used.

4. Online polling systems used to measure opinion. The use of selected samples to get representative opinions. Quick polls use self-selecting sample to get a “snapshot” of opinion (as in a quick poll).

5. Online communities, local forums—systems that enable groups of people with a common interest (issue or locality-based) to work together to influence change. They usually involve content management systems and discussion forums. Often, they include quick polls, and may also exist as e-mail lists.
Threaded forums may be difficult to follow. Registration procedures (if used) may limit accessibility.

6. **GIS (Geographical Information Systems):** map-based tools; locality-based tools are systems which have centre on geographical information (usually in the form of an interactive map). To this purpose they may use satellite data. They are used for participation in planning and in environmental consultations. They are also used for citizens to inform local authority of specific problems. Purpose: focus issues/participation on geographic locations.

7. **Online meetings:** chat rooms are a virtual space for people to meet with representatives, using real-time chat, asynchronous technology, or also web-casting. Groups of people meet/question one or more representatives.

8. **Combined collaborative systems:** deliberative polls; participatory budgets. Combinations of tools support a group to complete tasks together. The purpose may vary. E.g. involve citizens in budget, involve citizens in long-range planning, collaborative drafting of policy or legislation.

The possible online methods and tools for citizens’ participation with respect to the above mentioned levels of interaction:

- **Information level:** websites, webcasts, podcasts, e-mail newsletters, online registers and indexes.
- **Consultation level:** online-questionnaire, e-Surveys, e-Panels, e-Polls, e-Petition systems, GIS and map-based tools, email online-forum, e-Consultation systems.
- **Empowerment level:** e-Referenda, e-Voting, collaborative systems.

3. Research Methodology

The research methodology used in the paper encompasses the content analysis of the scientific literature, projects applications and reports, comparative analysis of websites and survey on the opinions of some municipalities. Research methods are used in accordance with recommendation in Lippa et al (2007).

Quantitative and qualitative content analysis (more focused on explicit meanings), as well as document analysis (more concentrated on the way contents are packaged and on the suggested meanings) are important unobtrusive research techniques, based almost exclusively on the activity of the researcher. There is a great variety of sources (offline and online) that can be analysed. These sources are inherently qualitative, but can be analysed either quantitatively (counting messages or words, rating responses on predetermined scales etc.) or qualitatively (develop themes, cluster issues etc.).

Web analytics refer to the tracking of different metrics such as total website usage, pages reviews, how many users contribute actively (posts and comments), trends in usage over time, type of users and so on. Where internet-based tools are in use, some kind of quantitative data about users and their activities on the website can be collected during registration procedures or through web server log files. Also the results of usage, such as comments sent, messages posted, questionnaires completed can easily be counted as
they are well documented by the tools themselves. Testing is possible while carrying analysis of the tools in real settings, selection and availability of users, selection of tasks-users’ interaction with e-Participation tools, their expectations and needs.

Usability testing describes a range of methods that can be used to gather data about how (easily) users interact with a tool and to what extent the tool meets user expectations and needs. Which method is to be applied depends on the stage in the tool development cycle and can include more standardized instruments such as questionnaires or more in-depth approaches.

Direct observation can be conducted by adopting a quantitative and passive approach (researcher enters a situation and records the status of a set of predefined variables). Nevertheless, this technique is generally used in qualitative research where the researcher immerses himself or herself in a situation in order to comprehend the situated interactions within a specific spontaneous or artificial group in a specific frame and along a certain period of time (the principle here is to understand human conduct and describe it in a valid way is in principle to be able to participate in the practices which constitute, and are chronically reproduced by, that conduct).

For evaluation purposes, it is possible to adapt the evaluation framework suggested by Whyte and Macintosh (2008) and further elaborated by Aichholzer and Westholm (2009) as a reference model and adapt it to the specific objectives, contexts and target groups of projects. In the case of the democratic perspective, the evaluation design could be translated into the following criteria:

**Engagement and empowerment:** the project needs to enable and support civil society groups to understand and link into the wider decision-making processes on the issues they are concerned about.

**Transparency:** the project needs to make these processes more transparent and contributions traceable.

**Conflict and consensus:** the project needs to recognise that divergence of opinion may be inherent in enhanced citizen engagement and tools should provide opportunities for negotiation, mediation and consensus building.

In the case of the socio-technical perspective, the following additional criteria could be included:

**Social acceptability:** the project should build trust in the process and accuracy/reliability of the information provided, and to be relevant to the needs and purposes of users.

**Usefulness:** the project should be responsive to their questions/suggestions, and provide content clarity and good orientation.

**Usability and accessibility:** the project platform should be easy to navigate, have a clear structure and flat hierarchy, and offer efficiency and flexibility, error tolerance and recovery.

One of the most comprehensive indexes for Assessment of Municipal Websites in practice for e-governance research is the Rutgers-SKKU E-Governance Survey Instrument (Holzer and Manoharan, 2009). This instrument for evaluating city and municipal websites consisted of five components: (1) Privacy/Security; (2) Usability;
(3) Content; (4) Services; and (5) Citizen & Social Engagement. For each of these five components, the research applied 18-20 measures, and each measure was coded on a scale of four-points (0, 1, 2, 3), or a dichotomy of two-points (0, 3 or 0, 1). In this instrument for assessing Citizen & Social Engagement, an attention was paid to whether citizens can electronically submit proposals and what they can comment on the authorities work. It also assesses whether the sites are pages where visitors can submit proposals on issues of whether the published survey is online, or held e-meetings or other e-forums.

An evaluation framework was used to assess the municipalities’ projects and the following methods were employed:

- Desk review of projects information;
- Technical review of municipalities’ website statistics and content analysis of a sample of messages;
- Desk review of comparator e-democracy literature and examples;
- Interviews with some stakeholders and the local community.

4. Findings


An influence of electronic governance allows for the public sector reform of interaction with the community and other governance institutions analysed (Limba, 2004). The advantage of electronic governance usage in the cases of the creation of public value and the elimination of negative factors in the public administration sphere is discussed too.

Žilionienė (2004) has stated, that the e-Government projects help to involve citizens in electronic communication, make them familiar with new technological solutions and channels, make public institutions closer to them—and it is presumable that in adequate political culture and civil motivation these people would be more ready to use information technologies to express their views and suggestions to authorities as well. In this way, projects of public institutions that are directed simply to providing services and information online, are directly related to a broader process—electronic democracy, as they set the ground to change the way in which local residents communicate with the authorities, and help to involve new partners—citizens and businesses—to governance processes, and to open up new avenues for the expression of public will.

Results of the research “Quality of Communication between Citizens and Governance using the Internet” are analysed in detail and some comparisons are made on the bases of similar surveys conducted in other countries on a topic of electronic governance (Petrauskas and Limba, 2004). Different information evaluation criteria were used in the survey describing the communication between citizens and every
government institution’s group (ministries, local authorities). Those criteria were set in accordance with international and Lithuanian legal acts. Internet websites of Lithuanian governance institutions, communication between citizens and governance via e-mail were also analysed in the article.

On the basis of the assumption that the internet is the main measure for e-Government in delivering information services for the general public tendencies of e-Services and public information delivery via the internet sites are analysed in Domarkas and Lukoševičienė, (2006). Results of the recent content research of the internet sites of Lithuanian ministries and self-government institutions are analysed in detail and some comparisons are made by using results of similar surveys conducted by Petrauskas and Limba (2004). It is shown, that during the last period information delivery by these internet sites was changing very positively, and it is a good presumption for farther e-Government development in Lithuania.

The article of Domarkas et al (2012) presents a variety of e-Government assessment methodology and level of municipal websites of the Republic of Lithuania. Municipalities were ranked by the E-Governance Performance Index (Holzer and Manoharan, 2009), which was determined as the sum of partial indexes of five measures. By comparative analysis of results of that evaluation with results of other evaluation where websites were evaluated by the point of view of how websites meet requirements to websites of State and municipal institutions, determined by decree of the Government of Republic of Lithuania, is shown, that these results differ essentially. It confirms that results of e-Government assessment are determined by the system of parameters of evaluation, and assessments of different investigators sometimes can be incomparable.

The analysis showed that most of this research is focused on assessment of websites on e-Government services and compliance with general requirements to state and local web sites.

Concluding on this part, we could formulate the next research questions for evaluation of projects:
• To what extent, and in what ways, can ICTs make policy information more accessible and e-democracy more understandable to citizens?
• Do ICTs contribute to more openness and transparency in policy-making?
• Will ICTs encourage and assist citizens to participate and facilitate consultation?

4.1. Preparation for Projects

According to Operational Programme “Economic Growth” for 2007-2013, the institution responsible for projects “Electronic Democracy: Regions” by the 3rd priority “Information society for all” was appointed to the Information Society Development Committee under the Government.

Project goals were:

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3 Currently Information Society Development Committee under the Ministry of Transport and Communications.
• To create the electronic means by which citizens can express a variety of local and regional life, to comment on legislation prepared by local government, access to readily available information about local authorities’ decisions, discuss, exchange views with each other and others.
• To support projects aimed at developing information and communication technology tools that will enhance public sector transparency, accountability, quality of decision-making, strengthen the sense of community and new forms of political expression.

Potential applicants: Municipal Administration. It was possible to implement individual projects for some municipality or common project between several municipalities in the same region.

To improve skills, the Information Society Development Committee (ISDC) was organized for municipal representatives’ lectures “Electronic Democracy—concepts, tools and opportunities” (prof. R. Petrauskas) and preparatory workshop. Information Society Development Committee has prepared examples of possible project activities:

• Legislative publicity in the electronic media, providing search capabilities;
• Develop tools to enable people to participate in decision-making process (e.g. to comment upon drafting of legislation, ensuring feedback to the citizen who submitted proposals);
• Promoting self-government institutions’ work in the process of electronic media (e.g. to allow monitoring of municipal councils, chambers, committee meetings in the electronic media, to publish reports on the activities of the members, and so on.)
• Create a more flexible communication with the local self-government tools (e.g. discussion forums, or other e-communication);
• Provide opportunities for citizens to inform local authorities about problems and provide suggestions for their solution and providing feedback;
• Other e-democracy tools relevant to the local community.

The measures developed in the project must be reflected in the implementation of internal procedures (e.g. describe how the captured citizens’ inquiries/offers and how they are reflected in the discussion and decision-making, the time a citizen has to get a response, etc.)

4.2. Implementation of Projects

In 2009–2011, 42 contracts were signed with municipal administrations in all 10 regions of Lithuania on financial support to “Electronic Democracy: Regions” projects: four regional projects and 38 municipality contracts (see Table 1). Up to 11 January, 2012, 3 regional and 37 municipal projects were completed.

Table 1. Number of municipalities, planned and ended projects till 1 November 2012.

### 4.3. Project assessments

For the assessment of e-democracy project a special index for evaluating city and municipal websites has been created. This index comprised of five components: 1) E-democracy; 2) Openness; 3) Interaction with citizens; 4) Interactive tools and 5) Usability. For each of these five components the measure was coded on a scale of three-points (0, 1, 2).

The following scale will be used for the assessment:
- **0** – Information about a given topic does not exist on the website;
- **1** – Poor information about a given topic exists on the website or a service does not work;
- **2** – Rich information or downloadable services are available on the website.

Key concepts for each of components of index:

1. **E-democracy** – are there e-democracy topics, information and project documents on the website, 3 measures, full score 6;
2. **Openness** – does municipal legislation and Council are open for citizens, 3 measures, full score 6;
3. **Interaction with citizens** – does the site allows users to provide comments or feedback, 4 measures, full score 8;
4. **Interactive tools** – does the site offers tools for online discussions, consultation and decision-making; 3 measures, full score 6;
5. **Usability** – is the usage counter on the site, do citizens use the proposed e-democracy tools; 3 measures, full score 6.

Total score of index for e-democracy project assessment is 32.

52 municipal sites were investigated with accordance with this methodology. Eight other municipalities’ e-democracy projects will be completed in a few months.
The research has shown index values ranking from very strong—from 26 to 3 in weakest municipalities. The e-democracy project assessment indexes of ten best municipalities are presented in Figure 1.

(source: created by the author)

**Fig. 1.** The e-democracy project assessment indexes of ten best municipalities

An average of municipalities’ indexes of e-democracy project assessments is shown for every region of Lithuania in Fig. 2.

(source: created by the author)

**Fig. 2.** The averages of indexes of e-democracy project assessments in every region.
Remark: e-democracy projects in Siauliai region are still not completed

The analysis of project objectives and the research on Municipality websites have shown, that projects implemented by Lithuanian local administrations allowed creation
and instalment of many tolls of e-Democracy and e-Participation that significantly increased municipal openness and transparency.

Even though all the projects were carried out simultaneously (in 2009-2012), the parallelly established evaluation index rate of municipal e-Democracy projects’ evaluation in local administrations was significantly different in those regions, where municipalities implemented different projects. However, in regional projects, the averages of municipality e-Democracy projects’ evaluation indexes are rather lower than of those municipalities that fulfilled individual projects.

The research of Municipal websites revealed, that the new e-tools for democracy has not been widely accepted by the citizens. Hence it is necessary to take additional measures to improve the situation, the directions of which to each local administration may be shown by the deeper analysis of measured e-Democracy projects’ evaluation index.

The proposed methodology of e-Democracy projects’ evaluation in accordance with municipality websites could be made more precise, and the analysis are to be repeated when all 42 projects will be accomplished.

4. Conclusions

1. The e-democracy projects in Lithuanian municipalities developed and implemented many successful e-democracy and e-participation tools, and significantly increased the municipal openness and transparency.

2. The research of Municipal websites revealed, that the new e-democracy tools has not been widely accepted by the citizens. In order to make e-participation strategy a success, one should make internal municipality changes in order to improve management of the new technology and at the same time to inform and instruct both the staff and society how to use it properly.

3. The use of new technologies, including ICT, leads to a new type of citizenship with well-informed and requesting citizens. Thus, the servants of municipality are induced to adjust to the changing needs of society and policy. They should follow current events and provide immediate online response to the citizens’ inquires.

Literature


Straipsnyje plačiau aptarti elektroninės demokratijos terminai, plačiau išnagrinėti piliečių elektroninio dalyvavimo ypatumai, e. dalyvavimo įrankiai. Remiantis mokslinės literatūros analize, buvo pasiūlyta nauja metodika elektroninės demokratijos projektams įvertinti, pagal kurią bendras projektų įvertinimo indeksas nustatomas remiantis pagal 16 savivaldybių interneto tinklalapių rodiklių, suskirstytų į 5 grupes: (1) sąsajas su elektronine demokratija; (2) savivaldybės politikų atvirumo ir teisės aktyvumo skaidrumo; (3) abipusio bendravimo su piliečiais; (4) interaktyvių e. bendravimo ir e. konsultacijų įrankių ir (5) tinklapio ir e. dalyvavimo įrankių naudojamo.


Nors visi projektai buvo atliekami beveik tuo pačiu metu (2009–2012 m.) lygiagrečiai, nustatytas savivaldybių elektroninės demokratijos projektų įvertinimo indekso dydis atšakio savivaldybėse labai stipriai skyrės tuose regionuose, kuriuose savivaldybės vykdė atskirus projektus. Tačiau dalyvavusių regioniniuose projektuose savivaldybių elektroninės demokratijos projektų įvertinimo indeksų vidurkiai yra kiek mažesni, negu savivaldybių, vykdžiustų individualius projektus.

Savivaldybių tinklalapių tyrimas parodė, kad naujais e. demokratijos įrankiais naudojasi dar palyginti mažai piliečių. Todėl reikia imtis papildomų priemonių padėtį gerinti, kurių kryptis kiekvienai savivaldybei gali parodyti gilesne išmatuotų elektroninės demokratijos projektų įvertinimo indeksų analizė.
Pasiūlytą elektroninės demokratijos projektų įvertinimo metodiką dar reikėtų tikslinti, o tyrimus pakartoti, kai bus užbaigtį visi 42 projektai.

**Raktiniai žodžiai:** elektroninė demokratija, e. dalyvavimas, e. dalyvavimo įrankiai, demokratijos projektų vertinimas.