

DEVELOPMENT EGOVERNANCE INSTRUMENTS IN PUBLIC ADMINISTRATION LOCAL INSTITUTIONS IN BIHOR COUNTY

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Abstract: *In our paper we focus on a broadly debated topic regarding the need of public administrations to improve their processes using new ICT technology. This topic can be analyzed in the light of adherence to e-governance instruments. Developing websites and the usage of different online resources are both tools for a better public management as well as legal conditions for transparency and public accountability. International comparisons place Romania on an average classification of e-governance tools development, however Romania is considered to have a very good (high speed) internet access. In our paper we analyze the existence and level of development of the websites of all 101 Mayor's Offices from Bihor County. The data was gathered in March 2014 in order to assess the development of e-governance instruments at local level. The grid for the data collection was constructed on consistent literature review as well as on previous similar analysis of the authors. The main hypotheses tested in this paper were: (1) 90% of Mayor's Offices at local level from Bihor County are at the first stage of development of e-government instruments; (2) 70% of these websites respect the legal regulations of transparency regarding the information posted; (3) less than 30% of Mayor's Offices reached a two-way communication level of e-governance instruments development. The paper starts with a brief outline of the theoretical framework of this topic, and reviews the most important recent findings regarding e-governance, especially in Eastern Europe and Romania. The empirical section highlights our main results, testing the above formulated hypothesis. There is a significant improvement in the existence of websites at local level public administration institutions; nonetheless in most cases we found one-way communication development level. All of our hypotheses were refuted by our data, as the level of development of online tools is lower at local level in Bihor County. The concluding section proposes both some explanations regarding the current state of affairs regarding e-governance instruments development in Romania, as well as proposals for future research and policy improvements.*

Keywords: e-governance, public administration, transparency, public accountability, online processing of public affairs.

JEL classification: D73, H80, H83, L38

1. Theoretical background

1.1. Why do we talk about e-governance? E-governance instruments and their measurement

The use of ICT is proved to increase the efficiency of many processes due to access to more information, rapidity, and flexibility. More and more governments, national and local public institutions, use ICT in their processes with long-term positive effects (Colesca & Dobrica, 2008).

e-Government is a concept referring to the use of ICT in the delivery of the public services, while e-governance involves also the dimension of digital democracy (Carrizales et. al, 2011). While we acknowledge the significant difference (Godse & Garg, 2007) between the two concepts, we consider that to a greater extent our article reflects both aspects and thus we will refer to e-governance. We are looking to several facets of the interaction of the public authorities with the citizens using ICT, specifically internet.

e-Governance instruments are proven to the strengthening of governance processes, since it is considered to ensure transparent information for the public and consequently to increase public's competence. However, as the UN synthesis shows, citizen involvement still varies across countries (UN Report 2010: 25-27).

The most common measurement scale for e-government instruments is developed at world scale by United Nations, Department of Economic and Social Affairs in 2003. This index is a wide spread methodology used in assessments at both national and local (municipal) levels. As Moura e Sa reports (2011) the scale for evaluating the different levels of web site development for governmental institutions as follows:

- 0 level – the absence of a web site for the public,
- level 1 – information: the website provides the information necessary for fulfilling procedures,
- level 2 – one-way interaction: the website offers the possibility to download forms,
- level 3 – two-way interaction: the website offers the instruments to initiate procedures, fill in forms on-line, apply for certificates and check taxes payment and make on-line payments,
- level 4 – transaction: full electronic procedures (Moura e Sa 2011).

One must note that evidence shows that these levels are intertwined in practice, it is possible that a website includes components that are characteristic for a specific level, yet the previous levels are not fully developed (Stoica & Ilas, 2009).

The development of e-government instruments as well as their usage, are influenced by several factors: national and regional policies or programmes (Pandzo & Taljanovic, 2012; Carrizales et. al, 2011), the transparency and friendliness of the available data (Grimmelikhuijsen, 2012), citizens' positive experiences increase trust and readiness to use such instruments (Colesca & Dobrica, 2008), level of development and size of the locality (Abrudan et. al, 2012). In the following section we will focus on Romania's position at a global scale regarding e-government.

1.2. E-governance in Romania

The United Nation's 2012 e-Government Report reveals the discrepancies between different regions of the world, using a four-stage online service development scheme (UN Report, 2012 pp. 123): emerging, enhanced, transactional and connected. The e-government development index, measured repeatedly since 2003, is based on the thorough analysis of national governmental websites for the following dimensions: e-participation, e-Governance, human capital development, on-line services provision and national infrastructure.

This study showed that, as far as the level of development of e-Government instruments is concerned, Romania ranks 62 out of the over 193 nations included in this research, a lower position than the one reached in 2010. Nonetheless most of Eastern European countries have a lower index, consequently Romania is ranked third in this area (after Moldova, world ranked 69 and Ukraine, ranked 68). Romania's mean score is 0.55, a little higher than the 0.44 world mean score. When referring to Romania's position in Eastern Europe, we consider the following figure relevant as it details the scores obtained at each analyzed dimension (Figure no. 1), for all Eastern European countries.

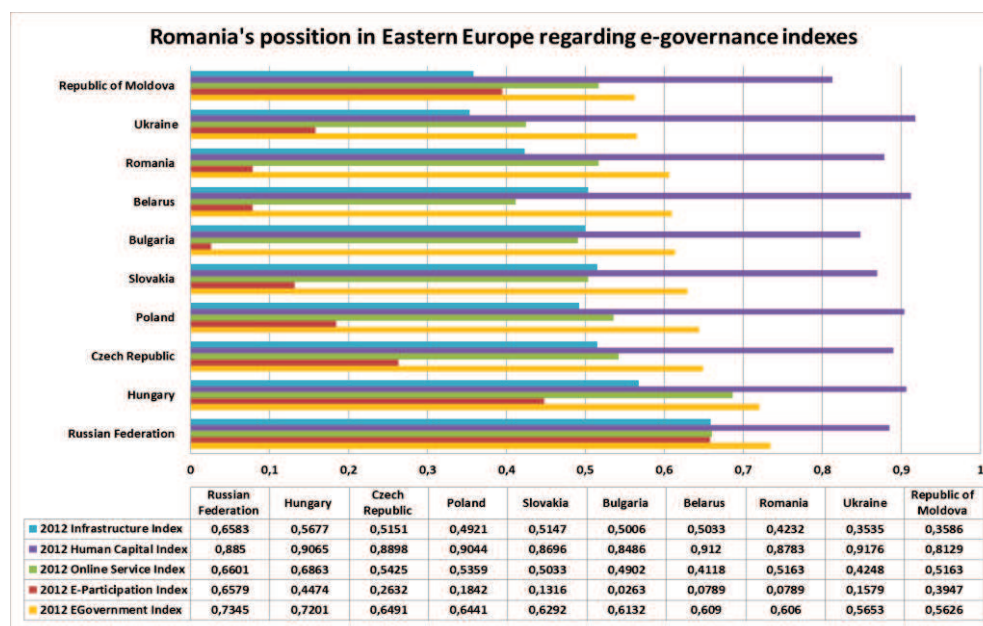


Figure 1. Indexes of e-Governance development in Eastern Europe 2012, based on UN E-Governance data downloaded from <http://unpan3.un.org/egovkb/datacenter/countryview.aspx> – own analysis

Romania has a weak point in e-participation, an index that covers e-information sharing (provision of information to citizens), e-consultation (online interactions) and e-decision making. In the light of general analysis on this topics (Bratu & Nastase, 2007) we would argue that Romania should improve its participative decision making processes and after that to make efforts in using ICT in these processes.

The following figure (no. 2) shows the evolution of different indexes in Romania. The surprising fact is that after a slow increase in most measured dimensions, 2012 shows a decline in two of them: e-participation and human capital index. This may be the consequence of adjustments done by the researchers, yet the low score gained for e-participation raises important questions regarding the utility and importance attributed to this dimension. The e-participation measures how well the government prepares and makes use of e-information sharing, e-consultation and e-decision making.

As shown in figure no. 2, the scores for human capital index, though one of the highest for Romania, is in 2012 the lower. In this particular case it may be the effect of changes in measurement procedures. Human capital index is a composite measure with two dimensions: adult literacy and school enrolment at different levels. Nonetheless policy makers in this field should pay attention to such negative trends.

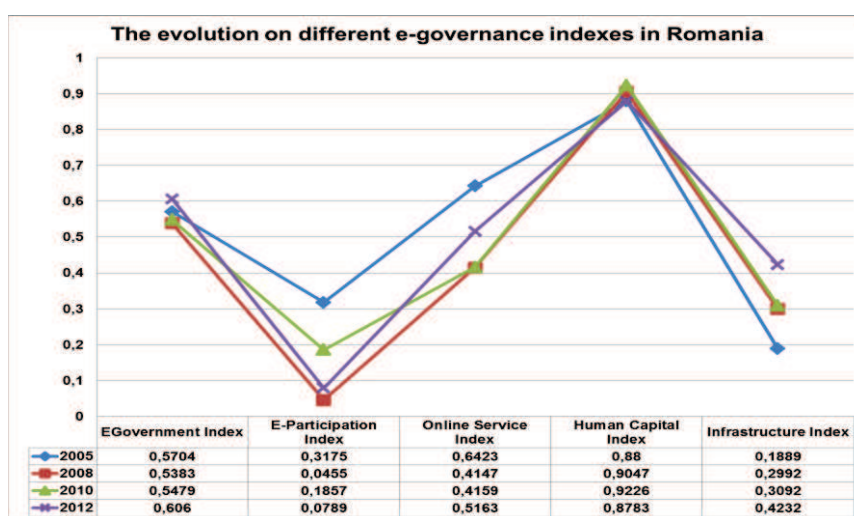


Figure 2. Evolution of indexes of e-Governance development in Romania, 2005-2012, based on UN E-Governance data downloaded from <http://unpan3.un.org/egovkb/datacenter/countryview.aspx> – own analysis

Several studies conducted on Romania, prove the improvement made in this field in last years (Stoica & Ilas, 2009; Glavan & Matusescu, 2012, Vrabie, 2011). The development of national e-government portals should (Banciu, 2009), in time, stimulate the adaptation of such instruments at local level as well. Yet, as Stoica and Ilas (2009) shows Romania still has to solve several problems related to data protection and security of website. E-democracy is still an underdeveloped dimension, both in terms of openness on behalf of public institutions and as actual participation from citizens. Transparency is a dimension showing improvements, as it is regulated by Law no. 52/2003, yet it is still lacking behind compared to other cities (Vrabie, 2011).

In our analysis we continue these efforts by analyzing the local websites, yet in a more concentrated area – Bihor County. We surpass the limits of the existent literature by looking also at the rural communities which have benefited of much less attention in this area of research.

We will explore the level of development of local public administration e-governance

instruments, expecting that: (1) 90% of Mayor's Offices at local level from Bihor County will have a web site at the first level of e-governance instruments development; (2) 70% of these websites respect the legal regulations of transparency regarding the information posted; (3) less than 30% of Mayor's Offices reached a two-way communication level of e-governance instruments development (level 3).

2. Research methodological framework

The data presented in this paper was collected in March 2014, following an improved structure then the one used in 2012 (Abrudan & Saveanu, 2012b). There are 101 localities as administrative units in Bihor County. For each we have searched an official website maintained by Mayor Offices. In the cases where there are websites, information was collected whether different type of information or services are available on the website. A dichotomous yes/no scale was used in most cases, nonetheless the data collector used also the "non-functional" response where a section exists yet no information can be downloaded, or the service was not actually available. In the analysis, in most cases we recoded the "non-functional" into the "no" category.

The data was collected by a volunteer, a MA student at our faculty. The gathered information was first introduced in an excel workbook, and then transformed in an SPSS data base. The SPSS statistical package was used by the authors of this article to analyze the data.

3. Analysis

3.1. Level of development of e-governance instruments in Bihor County

Since 2012, when we conducted a similar study, most Mayor's Offices developed websites (Abrudan et al, 2012a). While in 2012, 70% of all the 101 communities in Bihor County had an official website, in 2014 this percent increased to 96%, a total of 97 localities. With this information we would validate our first hypothesis that more than 90% of localities, both urban and rural, have an official website. All of the urban localities (large and small) have their official website.

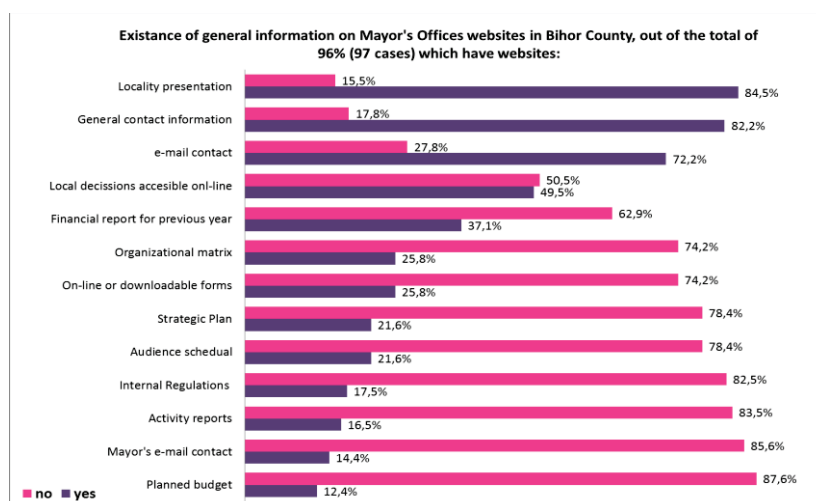


Figure 3. General information available on Mayor's office websites, own analysis

As shown in figure no. 3, most of the Mayor's Offices have on their websites merely general information such as the presentation of the locality and contact information

(including e-mail contact). This type of information has little relevance for the online management of the public affairs. Having access to local official decisions is one of the relevant information; however it is accessible online in 49% of the Mayor's Offices which have websites. Relevant data both for transparency of the decisional process and for the understanding of the public regarding the management of the public affairs are less present online. We consider that the official decisions, the planned budget, the financial report, along with activity reports are more important yet less accessible online especially at rural level. All this information reflects the transparency dimension. We would consider that the difference between level 0 and 1 of development is not merely observed in the existence of an official website but also on the relevance of the information available. *We can conclude that even if 96% of localities of have a website, only 72% have one or more of relevant information as defined above.*

If one looks solely at the urban localities, as presented in table no. 1, may note that even in this case, we cannot say fully that 90% of the communities have developed a site to level 1. Consequently we will refute our first hypothesis.

Table no 1. Information available on websites on type of locality, own analysis

	Urban		Rural	
no. of cases	no	yes	no	yes
Local decisions	1	9	45	42
Planned budget	6	4	79	8
Financial report	6	4	55	32
Activity reports	5	5	76	11

3.2. Transparency

The second hypothesis stated that, as long as transparency related aspects re clearly regulated by Law no. 52/2002, we would expect that this type of information would be available in at least 70% of the cases. As shown in figure no. 4, this hypothesis can be also refuted.

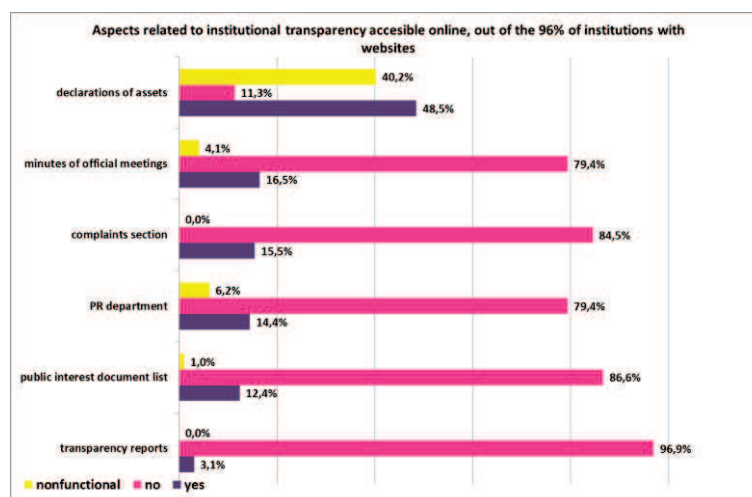


Figure 4. Online transparency at local level, own analysis

Even looking at the urban communities, this percent does not rise to the expected 70%. The municipalities (large towns with higher administrative responsibility) we can talk of a high transparency level (all four have access to declaration of assets, complaints sections and local meetings minutes; three of them have transparency reports online as well as the list of public interest documents; while two have the PR department visible online).

This data suggest that more effort should be made in promoting online instruments as tools to increase transparency of the institutions. This lack may be linked to both understanding, on behalf of public officials, of the importance and usefulness of such tools, as well as the acknowledgement of the importance of transparency per-se, independent of the communication tool used. Better monitoring and enforcement of existent legislative frame may help in improving this aspect.

3.3. Development of e-government specific instruments

Turning to the last aspect analyzed in this paper, as expected we can hardly talk of the two-way communication level of development (level 3). Surely these aspects should be taken into account in the light of the usage of such instruments, information that was not accessible in our study. Nonetheless, the mere existence of such instruments online proves the readiness and interest of the public institution in using them. However, as shown in Figure no. 5, in 32% of the Mayor's Offices websites there are online forums, and 22% offer the possibility of checking and payment of taxes online. With this information we can refute the final hypothesis of our analysis.

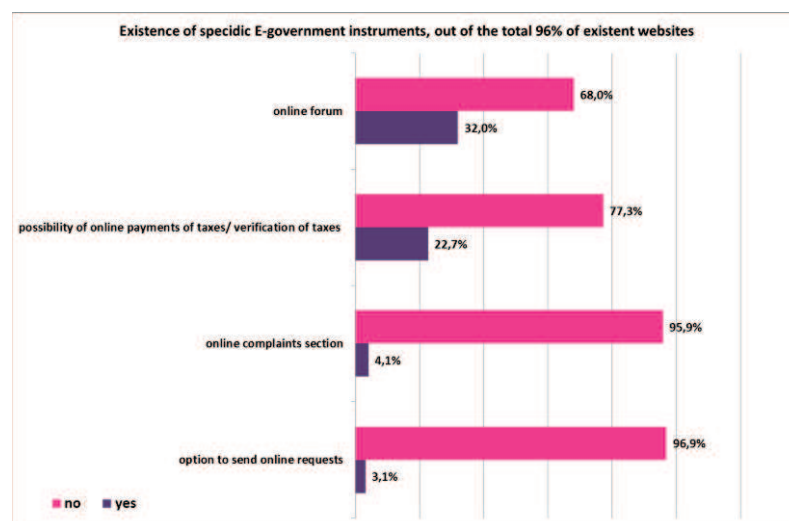


Figure 5. E-government instruments development at local level, own analysis

Looking at these differences on type of rural or urban locality, we may note that the situation of municipalities and town is not much more developed. The data is presented in table no. 2 below. One interesting aspect is the integration of web forums on such

large number of website, yet this is an aspect that needs further investigation regarding the topics discussed on these forums.

Table no 2. e-government instruments on type of locality, own analysis

	Urban		Rural	
no. of cases	no	yes	no	yes
Online forum	5	5	59	28
Online complaints section	9	1	84	3
Possibility to send online requests	9	1	85	2
Check and pay taxes online	8	2	67	20

The interesting aspect related to these results derive from the fact that, while two of the urban Mayor's Offices website offer the possibility of verification and payment of taxes online, 20 of the rural ones have this function suggesting a better development in rural areas. Nonetheless, this can be explained by the fact that most rural websites are developed by a few web development companies, using the same format for each of them. In this case these websites are developed by one company (SITCO Plus) which integrated this service to all their websites.

We must also note that, as Stoica and Ilas (2008) noted, the development levels should not be seen in an evolutionary manner. As seen by our data, even if most of the websites do not have downloadable forms, which mirror the second level of development, some do have online forums which would be specific to the third level. Integrating different components in websites is done by companies developing these websites in a more opportunistic manner choosing from existent services. These do not necessarily use an integrated approach for all components.

4. Concluding remarks

Our paper investigated the level of development of e-government instruments at local level, both urban and rural, in Bihor County. This type of analysis fills a gap in the field mostly by looking at the rural level. Surely comparisons can be made solely between similar types of communities; consequently it would be interesting to compare rural Mayor's Offices websites between Romanian and other developed countries.

All of our hypotheses were refuted by our data, as the level of development of e-governance instruments are less developed at local level in Bihor County. It is true that 96% of communities have official websites, nonetheless the information available on this websites are no that relevant. In most cases the websites present the locality (historical, geographical and demographic perspectives) and have some contact information. The relevant information from a public management perspective can be noted in around 40% of the existent websites. The same can be noted regarding online transparency and the availability of e-government services. Improvements should be made in these directions both in enforcing the existent legislation and in the increase awareness on behalf of public officials regarding these aspects. Continuously efforts should be made in assessing the level of usage of these instruments by the citizens.

From this last observation derives the main limit of our analysis: these type of studies should include reflections regarding the users of online public administration services. Relevance, level of usage, and readiness to use such tools are important aspects that should be accounted for in order to fully understand this phenomenon

One interesting finding of our study refers also to the fact the development of these instruments is rather opportunistic and should not be seen in an evolutionary perspective. We have found that websites that lack components that define the second level, do have instruments specific to the third level. An integrated analysis of these instruments should note this observation, and maybe qualitative research approaches would account for the reasons for this state of affairs.

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