

Social innovation in the Romanian context – case study on the country’s city halls

Tîrziu A.M.¹, Iordache L.¹, Vrabie C.¹

¹ *National University of Political Studies and Public Administration (ROMANIA)*
tirziu.andreea@yahoo.com, iordache_luminita19@yahoo.com, cataloi@yahoo.com

Abstract

In recent decades, computers and the Internet have led to a new era – the digital one. Along with this period, a transition process has also occurred, therefore the industrial society of yesterday has become the information society of today. In this context, Romanian public authorities should be able to keep up with the rapid manner in which modern society develops itself and also to meet the challenges that it raises. The purpose of this article is to present the specific framework in which the relationship between the Romanian information society and the public sector’s authorities takes place, a relationship that surely leads to social innovation, beneficial for both citizens and the state as a whole. The methodology that we considered for achieving our goal is based both on a bibliographical research on the most representative scientific papers written on social innovation, and on an analysis at the level of all 320 Romanian city halls – analysis that targeted the measurement of the city halls’ interest in developing communication with citizens through specific tools of IT&C. In our article, social innovation in the public sector must be understood, on one hand, as an instrument that can be used by local communities in order for them to meet current measures of austerity and, on the other hand, on the long-term, as a tool necessary for a sustainable development, based on achieving the public administration’s general objective, which is to satisfy the citizens’ needs and requirements.

Keywords: information society, public sector, social innovation, Romanian city halls, e-communication

1 Introduction

Two elements that, over time, have made significant improvements on the manner in which individuals in a society can have access to services provided by the public administration are computers and, undoubtedly, the Internet [1].

Information technology is continuously developing in a rapid manner, which leads to changes of society overall, but also regarding each individual – by impacting his/her daily life – and, of course, of the national economy and, hence, the global one [2]. The new digital era presents the world economy as being in a process of transition, from an industrial society to the information society [3], transition which finds its place in the concept of social innovation.

The strong dynamics of the new economy – framework in which information is accessed, processed, stored and transmitted in a much cheaper, quicker and easier manner – sets out the phases of the “traditional” society transformation into a society based on information. Inside this type of society, digital information obtains value from an economic and social point of view, leading to changes in the existent industries and creating new ones, thus having major effects on citizens. All these changes are inevitably possible because of the innovations that take place in both the public sector and the private one, leading to innovations’ creation in the society – social innovations [3]. Thus, we can understand that the interdependence relationship between information society and social innovation is one of major importance, making it possible to obtain a stronger state, whose component elements become more cohesive, this leading to the successful achievement of public administration’s general objective, namely to satisfy citizens’ needs and demands.

Moreover, it must be noted that, in order to develop itself in an appropriate and effective manner, the public system needs to develop its own informational component, and for this to happen it is necessary for the actors involved to benefit from a proper training [4]. Therefore, because information and communication technologies are used today by a large number of individuals, they no longer being an exclusive attribute of professionals in the field, we can understand that the need to have specific skills to use these technologies has become a challenge of modern society, formed both by citizens and businesses, and also by the public sector’s officials [2].

2 Background

Information society represents a natural extension of the democratic society, which requires information of public interest in order to function, being characterized by a high level of information use by the citizens in their everyday life activities, in most of the organizations and institutions [5]. Within this type of society, common technology is used or just a technology compatible with a wide range of personal, social, educational and business activities, it also having the ability to receive and send, in a rapid manner, digital data among the parties of the process, regardless of the distance which may stand between them [5].

In this context, we can observe that the information society is beneficial to social innovation, the latter being seen as a learning process, a modality through which new services are developed in order to make possible the application of technology, to come up with changes regarding organizational structures, and also to adopt and put into motion new management approaches, all these being of help for satisfying citizens and businesses' needs, and also to meet the requirements of the knowledge-based society [6]. Thus, innovation appears as a response to a new social problem or it represents an approach to improve the already existing solutions [7].

One of the main pillars of social innovation is the electronic government, this being a part of the electronic administration's domain which emphasizes the need to implement these digital practices so to fulfil the conditions necessary for achieving the electronic services' development while motivating citizens to use them. Both e-government and e-democracy have a clear contribution in achieving social progress, though these methods being mostly capitalized the irreversible resource that is represented by the time of accomplishment of the principal administrative operations [8].

E-government is considered to be one of the main objectives of the future. In recent years, we have witnessed a revolution regarding the provision of e-government services for citizens, which benefit both from access to information in a more simple, cheap and fast way, and also from an improved interaction with the state's authorities, mainly because of a more intense use of information and communication technology [9].

The new and realistic objectives and means of good governance are researched and implemented within the European Union, the United Nations and the USA, Romania also following this trend of modernizing the public administration with the help of opinions and practices made available at a global level, adapting itself to the pace of change as to achieve the standards of excellent results [10].

The European Union wants, as stipulated in the articles 179 and 180 of the Treaty regarding its functioning [11], to promote the development and spread of new technologies, to introduce a set of rules as to guarantee citizens and companies a fair and affordable access to networks and services, and also to dismantle barriers that may occur in the way of competition.

Within the Europe 2020 strategy [12], which aims to ensure inclusion growth in an intelligent, durable and favorable manner, the Digital Agenda for Europe [13] is one of the seven pillars, having the purpose to increase the benefits offered by the digital technologies.

The information society – a fundamental element in the process of social innovation, along with the electronic government, as mentioned before – has, in its overall European legal framework, the following acts (regulatory framework):

- Decision no. 626/2008/EC of the European Parliament and of the Council of June 30, 2008 on the selection and authorization of systems providing mobile satellite services (MSS) [14];
- Regulation (EC) no. 1211/2009 of the European Parliament and the Council of November 25, 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office [15];
- Directive no. 2002/19/EC of the European Parliament and of the Council of March 7, 2002 on access to and interconnection of electronic communications networks and associated facilities (Access Directive) [16, 17].

Regarding the national legislative framework in which social innovation carries out its activities, we consider necessary to mention the following elements [18]:

- Decision no. 929 of October 21, 2014 regarding the approval of the National strategy for research, development and innovation 2014-2020 [19];
- Decision no. 583 of July 22, 2015 on the approval of the National plan for research-development and innovation for the period 2015-2020 (NPRDI III) [20];
- Law no. 206 of May 27, 2004 on good conduct in scientific research, technological development and innovation [21].

The central public administration's specialized body with the role to realize the government's policy regarding the domains of postal services, communications in an electronic manner, IT and information society is constituted by the Ministry of Communications and Information Society [22]. Subordinated to this ministry, there can be found the National Centre for Information Society Management, the National Centre „Digital Romania” and the National Centre of Supercomputing, having a direct coordination with the National Centre of Response to Cybernetics Security Incidents (CERT-RO) and with the National Institute of Research-Development in Informatics (ICI) [22].

The institutional framework in which social innovation can be enclosed is the one represented by the Ministry of National Education and Scientific Research which, as a state authority for scientific research, technological development and innovation, has the following main responsibilities: to define the strategic objectives specific to this domain; to define, implement, monitor and evaluate the policies necessary for the achievement of these objectives; to ensure the consistency of the governmental policies in the field and to harmonize them with the policies for sectorial development and also with the ones for regional development [23]. Also, we consider important to mention the National Council for Science, Technology and Innovation Policy, a government's advisory body with the task to coordinate and link policies of the research-development and innovation field with the ones for sectorial and regional development, within a national innovation system; the Consultative College for Research-Development and Innovation, this one being the main advisory body of the Ministry of National Education and Scientific Research; and also the National Council of Scientific Research which, such as the college mentioned before, has the aim to formulate recommendations and proposals regarding the specified domain [23].

3 Social innovation from the information society's perspective

As Francis Bacon said in his book *Meditationes Sacrae* (1597), "ipsa scientia potestas est [information itself is power]" [24], citizens' access to it represents the fundamental condition of creating and developing a society of informational kind, thus being outlined the adequate framework in which modern society can create and help in the creation of innovations that will be beneficial for citizens, governments and administrations [25]. As a result of these social innovation processes, the services that the public sector offers to individuals will become more transparent, efficient and rapid, this way the public administration being able to better meet the needs of the persons who benefit from those services, and also with lower costs [6].

Considering the fact that information technology is practically the foundation of the development processes in all activity areas of a society – the same being true for this context, we can understand that both the concept of social innovation and the one of information society are in a closely interdependence [26]. Therefore, investing in the IT's domain means determining the percentage of innovation met in a knowledge-based society, mainly due to the dissemination of technological equipment, software applications and, last but not least, public services [27]. In the public sector, social innovation can be seen as an intelligent acquisition, services focused on citizens' needs, digital platforms, new or updated healthcare systems, it being able to take many other forms [6].

4 Innovation of Romanian cities – Official Web portal analysis

This section of the paper wants to present an analysis conducted in December 2015 by the authors, for which all the 320 cities of Romania have been investigated in terms of their presence in the online environment, as well as one of the best practices found on one municipality among the researched ones. Such a study is even more necessary if we consider the fact that modern society is formed by individuals who want to always be informed, here becoming important the relationship between citizens and the state's authorities, as for the latter have the obligation to accomplish the public administration's main objective, namely to meet the citizens' needs and demands.

Through this research, we have found that of the 320 cities only 305 (95.31%) had, at the time of the analysis, an active Web site and, among these, only 99 (30.93%) were active on social media networks (such as: Facebook, Twitter, Instagram, Tumblr, Flickr etc.), which are a very important element in the relationship public institution-citizen [28].

Table 1. Electronic public services available on the country's city halls' Web sites

| <i>Electronic public services</i> | <i>No. of cities</i> | <i>%</i> |
|---|----------------------|----------|
| The existence of an official Web site for the city hall | 305 | 95.31 |
| The social commitment of citizens: | | |
| - on discussion forums | 99 | 30.93 |
| - on the official profiles within the social media networks | 52 | 16.25 |
| The citizen's possibility to open an account on the Web site | 73 | 22.81 |
| The existence of electronic forms on the Website | 206 | 64.37 |
| Online tracking of submitted applications | 30 | 9.37 |
| Online petitions | 48 | 15.00 |
| The citizen's possibility to subscribe to a newsletter | 39 | 12.18 |
| The possibility to make online payments | NA | NA |

Table 1 displays prevalent personalized public services delivered by the 320 cities in Romania at the end of 2015. We can see here that, in an overwhelming proportion, their presence on the city halls' Web sites is very low. This item shows that the authorities' interest is not necessarily to respond to the citizens' needs, but rather to meet legal regulations in force (ex. Law no. 52/2003 [29] regarding decisional transparency in the public administration) and technological and social pressures to have an official presence on the Internet.

The final scores show that only five cities were able to achieve scores higher than 4.00, 47 cities obtained scores between 3.00 and 3.99 and 78 cities – scores between 2.50 and 3.00. This means that a total number of 130 cities (40.62%) passed the test of providing electronic services on the Internet (Table 2. presents the overall situation).

Table 2. Level of Web portal development in the cities of Romania

| <i>Mark</i> | <i>No. of cities</i> | <i>%</i> |
|---|----------------------|----------|
| Very good (score between 4.01 and 5.00) | 5 | 1.56 |
| Good (score between 3.01 and 4.00) | 47 | 14.69 |
| Satisfactory (score between 2.01 and 3.00) | 162 | 50.63 |
| Poor (score between 1.01 and 2.00) | 80 | 25.00 |
| Very poor (score between 0.00 and 1.00) | 26 | 8.13 |

Looking closely to the cities that have achieved the highest scores, we have found Brasov as being one of the most developed in terms of social innovation. The municipality has come up with several innovative projects, one of which helping citizens report their problems easier and, by that, encouraging public officials to act promptly and efficiently. This project, called “Integrated Technical Dispatch for the Municipality of Brasov – Geospatial Electronic Services”, is aiming at extending the computerization initiatives of Brasov’s city hall by delivering electronic services to both citizens and the business sector [30]. There have been implemented software programs for the Dispatch subsystem as well as for the Customer Relationship Management subsystem, Geoportal subsystem, Geospatial Electronic Services Delivery subsystem and for the Business Intelligence Reporting subsystem.

The Dispatch subsystem, together with its hardware and software infrastructure, is an operational environment which conducts integrated information analyses by examining data provided from different software and technical equipment operated by the city hall’s departments. It provides an alternative to citizens for accessing public services (for example the Geoportal subsystem – Fig. 1.) by simply accessing the city hall’s Web portal, available at <http://www.brasovcity.ro/>.



Figure 1. The Geoportal subsystem of Brasov’s city hall.

Source: The Web site of Brasov’s city hall, <http://www.brasovcity.ro/>, accessed on March 10, 2016.

The main aim of the project is to build an application that will be able to bring under the same umbrella all problems encountered by Brasov city. Therefore, the city’s management view was to integrate all the subsystems in a complete Web portal through [31]:

- improving citizens' access to the dispatch system by the use of electronic means;
- increasing the number of services already provided, by adding new ones such as monitoring the performance of the service providers: lighting, sanitation, street maintenance and so on;
- increasing accountability of the public administration by growing the level of transparency of those services.

This system consists in an interactive map – made with the accuracy of ten centimeters – for citizens, so that they can pin the urban problem they're facing, and also display the problem's status. It properly informs citizens on the urban problems, allowing them to report any malfunction or any delay in the service delivery.

Another factor we must not ignore is that the software provides a transparent communication channel environment throughout Brasov's citizens by showing them short notices about the repair, replacement or any other work activity needed for solving the issue.

The Geospatial Electronic Services Delivery module is building successful utility companies with other partner institutions by allowing a fast endorsement for problem troubleshooting and intervention on the public domain. The requests are filled in online and sent to all the actors involved, together with all the information needed for a prompt intervention (e.g.: specific geographical position). In fact, this is the most complex module of the system, which:

- solves citizens' request faster and with an increased accuracy;
- correlates the information regarding urban problems with the resources acquisition plan;
- builds a common plan for both repair and maintenance of infrastructure networks;
- involves partners in updating and maintaining an efficient database, with the help of the public intervention;
- cuts or reduces costs needed for updating data at the municipality level;
- reduces the time consumption for the city hall's officials engaged in entering the data and validating it for a proper management;
- allows an information standardization at the municipality level.

5 Conclusions

Information society has a high potential to be an innovative society, with more active, better informed and more interconnected communities. The need to provide opportunities for increasing the level of awareness and access to multimedia and online technologies is constantly growing and must be met in such a way that no individual will be disadvantaged.

The knowledge society can and must empower individuals and, therefore, the state, but this cannot be possible without the development of strategies related to communities' engagement and building of basic technological skills of groups that form that specific society.

Essential information, used both for society participation and also to receive support when needed, should be available for free at the level of their delivery. Here, local authorities have an important role in helping community organizations to prepare and publish their own materials.

Finally, it should be noted that an informed society means a strong society, one that is capable of producing social innovations which, through the use of information techniques (as those presented in this paper), will bring benefits to both the city halls and its officials, as well as to private partners, contractors and other stakeholders, such as autonomous utility companies that ensure a sustainable development of the metropolitan area. Unfortunately, Romania is still far from being close to the modern solution of developing social innovation, but there were made steps (as the ones presented in the case study) that show us that we are on the right track.

REFERENCES

- [1] Vrabie, C. (2015). E-Governance in Romanian municipalities – Impact study no. 2. Pro Universitaria. Bucharest, pp. 5.
- [2] Baltac, V. (2011). Information technologies – Basic notions. Andreco Educational. Bucharest, pp. 8-16.
- [3] Stoica, M. (2000). Premises of transition to information society. Economic Informatics Journal – Revista Informatică Economică 4(16), pp. 42-43.
- [4] Vrabie, C. (2014). Elements of IT for the Public Administration. vol. 2. 2nd Edition. Pro Universitaria. Bucharest, pp. 5.
- [5] Hellawell, S. (1997). The Net Result – Social Inclusion in the Information Society. Report of the National Working Party on Social Inclusion (INSINC). IBM United Kingdom Limited. London, pp. 7-9.

- [6] Matei, A., & Săvulescu. C. (2014). Enhancing the capacity for innovation of public administration. An exploratory study on e-Governance. ICT. knowledge management in Romania. *Theoretical and Applied Economics – Economie teoretică și aplicată* 21(11) (600), pp. 8-11.
- [7] Matei, A. (2009). Social innovation – a thematic map. *Social Innovation Journal – Revista Inovația Socială* 2, pp. 86-87.
- [8] Matei, A., & Grigorovici. I. (2011). Electronic Governance. Premise for Implementation of Electronic Democracy. NISPAcee Conference Public Administration of the Future. Varna, pp. 1.
- [9] Matei, A., & Săvulescu. C. (2011). E-Government in the Balkans: Comparative Study. *National and European Values of Public Administration in the Balkans – Valorile naționale și europene ale administrației publice în Balcani* 4, pp. 25.
- [10] Bălan, E., Iftene, C., Varia, G., & Văcărelu, M. (2008). Contemporary Administrative Law: Towards a unitary conception in the Romanian doctrine and practice. *Comunicare.ro*. Bucharest, pp. 8-12.
- [11] Official Journal C 326 of October 26. 2012. available on the Web site of the European Union. <http://eur-lex.europa.eu/legal-content/ro/TXT/?uri=CELEX:12012E/TXT>. accessed on March 10, 2016.
- [12] The Web site of the European Commission. http://ec.europa.eu/europe2020/index_ro.htm. accessed on March 10, 2016.
- [13] The Web site of the European Union. <http://eur-lex.europa.eu/legal-content/RO/TXT/?uri=URISERV:si0016>. accessed on March 10, 2016.
- [14] Entered into force on February 7. 2008. published in the Official Journal of the European Union L 172 of February 7. 2008.
- [15] Official Journal of the European Union L 337 of December 18. 2009, pp. 1-10.
- [16] Official Journal of the European Union L 108 of April 24. 2002, pp. 7-20.
- [17] EU Official Journal L 337 of December 18. 2009, pp. 59-68.
- [18] The Web site of the Executive Unit for Financing Higher Education. Research Development and Innovation. <http://uefiscdi.gov.ro/articole/2350/Legislatie-CDI.html>. accessed on March 10, 2016.
- [19] Official Monitor of Romania no. 785 of October 28. 2014, pp. 1-26. <http://www.cdi2020.ro/wp-content/uploads/2014/10/HOT%C4%82R%C3%82RE-nr-929-din-21-octombrie-2014-privind-aprobarea-Strategiei-na%C5%A3ionale-de-cercetare-dezvoltare-%C5%9Fi-inovare-2014-2020.pdf>. accessed on March 10, 2016.
- [20] Official Monitor of Romania no. 594 of August 6. 2015, pp. 1-36. http://uefiscdi.gov.ro/userfiles/file/legislatie/2015/HOT%C4%82R%C3%82RE%20nr_%20583%20din%2022%20iulie%202015.pdf. accessed on March 10, 2016.
- [21] Official Monitor of Romania no. 505 of June 4. 2004, pp. 1-7. <http://cne.ancs.ro/wp-content/uploads/2012/03/legea-206-din-2004-actualizata.pdf>. accessed on March 10, 2016.
- [22] <http://www.mcsi.ro/Minister/Despre-MCSI/HG-12-din-16-01-2009>. accessed on March 10, 2016.
- [23] National Authority for Scientific Research and Innovation. (2014). National Strategy for Research. Development and Innovation 2014-2020, pp. 34-37, http://www.research.ro/uploads/politici-cd/strategia-cdi-2014-2020/strategia-cdi-2020_-proiect-hg.pdf. accessed on March 10, 2016.
- [24] Bacon, F. (1597). *Meditationes Sacrae*. Londini: Excusum impensis Humfredi Hooper, pp. 79.
- [25] European Commission. (2013). COM (2013) 350 final. pp. 19-20. http://ec.europa.eu/europe2020/pdf/nd/2013eccomm_en.pdf. accessed on March 10, 2016.
- [26] Drăgănescu, M. (1973). Scientific-technical revolution and how to innovate a society. *Romanian Academy*. Bucharest, pp. 1-10.
- [27] Agency for West Regional Development. (2007). Regional Development Plan 2007-2013 West Region. pp. 3-5. <http://www.oirposdru-vest.ro/Documente%20utile/pdr/Capitolul%20IX%20Societatea%20Informationala.pdf>. accessed on March 10, 2016.
- [28] Tapscott, D. (2011). *Grown Up Digital: How the Net Generation is Changing Your World*. Publica Publishing House, Bucharest, pp. 405-446.
- [29] Official Monitor of Romania no. 70 of February 3, 2003. pp. 1-5. http://www.dreptonline.ro/legislatie/lege_transparenta_decizionala.php. accessed on March 10, 2016.
- [30] <http://www.brasovcity.ro/>. accessed on March 10, 2016.
- [31] Vlad, G. (2014) – IT department managing director of Brasov municipality. Public speech held at the “Integrated Technical Dispatch for the Municipality of Brasov – Geospatial Electronic Services” project start-up Conference.