

Online availability and accessibility of public services: solutions for improving the e-readiness indicators in Romania

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The informational society and e-readiness

The Romanian public services have to face new challenges resulted from the social and economical evolutions, the necessity of the institutional changes and the powerful impact of the new technologies. The impact of these factor is increased by the fact that the public services sector has an essential role for a durable development, especially in the context of the economic, social and environment objectives set-up by the Lisbon strategy. In this context, the information and communication technology can have a significant role, especially regarding the improvement of these public services based on e-Administration technologies. The benefits of these technologies are well known and are indicated in the European benchmarking studies achieved in the last six years: the increase of the public services quality, the increase of their accessibility level, elimination of some physical barriers regarding the supply of certain public services, the development of the public institutions transparency level in the relation with the citizens etc.

It has to be taken into consideration the fact that the implementation of the E-Services technologies represents a long and difficult process, not easily accepted by the staff of the public institutions. This process requires the elimination of the bureaucratic processes and information available for each level of the local and central public administration. It involves structural and organizational modifications. This is the reason why the specialists consider that it is also necessary to develop a process of taking-over new methods and techniques regarding the changes management. The implementation costs are also very important, especially when the electronic services have to be implemented at local level, inside a regional or national network.

If, for the European Union specialists, the e-Government concept represents 'the use of communication and information technologies in the public institutions and also organisational modifications and development of new skills, in order to improve the public services and the democratic processes and to ensure the necessary support for the public policies implementation', we can consider that the competitive development of the electronic services will ensure and accelerate the evolution of the candidate countries, as well as the increase of the structural and cohesion funds effect.

The main question is: **is Romania able to assimilate all these technologies and to ensure the fast integration in the European informational society?** This assessment regarding the Romanian level of e-Readiness based on the European specific indicators becomes necessary. An adequate analysis of this issue can be achieved based on the Network World technology, elaborated by the Harvard Centre for International Development, regarding five groups of main indicators of the eEurope 2005 program: the access of ICT, education and research resources, ICT utilisation by citizens, the ICT use by public institutions, business area and legislative area.

Starting from this set of indicators, the e-readiness technology regards the dynamic assessment of the ICT technologies integration capacity, as well as comparative analysis among different countries in order to identify and take-over the best practices. For the countries in which the e-Administration implementation has just begun, as Romania, it is best to use quality approaches, able to indicate the ICT development annual graphic

The present situation in Romania

The capacity of Romania to integrate informational and communication technology infrastructures in the economical and social development process is mentioned in the latest annual report for e-readiness, published by The Economist Intelligence Unit. Romania is placed on the 49th place at international level and on the first 10 in the world for the ICT sector dynamic. Romania's efforts for training specialists and the increase of software production were also noticed. There were also indicated some negative aspects, such as: the low level of availability for the ICT instruments, the strong resistance against change for public institutions staff, the population lack of confidence in accepting and using new communication technologies.

A SWOT analysis for the e-Administration technologies in the Romanian public institutions indicates the following positive aspects:

1. The legal framework regulating the electronic services supply and the secure access for the citizens to these services:
 - Law no. 544/2001 regarding the free access to the public interest information
 - Methodological Norms from 2002 for the appliance of Law no. 544/2001 regarding the free access to the public interest information
 - Law no. 365/2003 regarding the e-commerce, published in the Official Gazette no. 483/2002
 - The Government Decision no. 1259/2001 regarding the approval of the Technical and Methodological Norms for Law no. 455/2001 concerning the electronic signature
 - Law no. 455/2001 regarding the electronic signature, published in the Official Gazette no. 429/2001
 - The Decision no. 1085/2003 regarding the appliance of certain provisions of Law no. 161/2003 for measures concerning the implementation of the National Electronic System.

2. The legislation for the payment instruments with distance access, meaning the BNR Regulation no. 4/2002 and the Order no. 218/2004 regarding the approval procedure for these instruments
3. The national implementation of the public auction electronic system, finalist at the e-Europe Awards 2005 competition, set-up by the European Institute for public administration and sustained by the European Commission, where it was selected from other 234 projects.
4. The development of the online public services project based on the portal: www.e-guvernare.ro, set-up by the Ministry of Communications and Informational Technology in 2002, having as main purpose the facilitation of online access to the governmental services. The electronic public services available on the Unique Application are the following: the ANOFM declaration, the CNAS declaration, the declaration of the payment obligations for the social insurance budget, the declaration regarding the payment obligations for the state budget, the declaration regarding the profit income, the reduction based on the tax added value.
5. A strategy for the public administration development based on the information technology (e-Administration strategy – H.G. no. 1007/2001, the National Strategy for the new economy promotion and the implementation of the Informational Society – H.G. no.1440/2002)
6. The existence of qualified specialists and an international system of adequate training

As for the existing disadvantages, an e-readiness analysis indicates the fact that Romania is deficitary in the following areas:

1. The lack of an integrated vision for the development of Internet platforms, based on the fact that, although there has been a national informatic strategy since 2002, it has never been improved by implementing local or regional policies, which led to a low level of efficiency for the applications developed.
2. The bureaucratic barriers in the implementation of projects able to develop the e-Services sector, even though there are financial and technological resources available. A clear example is the project of a national virtual database (www.ghiseul.ro), which has been stopped because the entity that would have to pay for the electronic transactions could not be indicated.
3. The lack of an unique system for the citizens authentication, based on smartcards and digital signature, in order to offer online services from Level 4, according to the Capgemini benchmarking methodology.
4. The low number of internet users. It is estimated that 25% of the Romanian population uses the internet and a great part is represented by occasional users.
5. The number of web areas is 120000.00, representing 50% from the level achieved in Hungary and 1.5% in Germany. The statistics indicate the fact that in Romania the modifications are made twice a day on domenii.ro, unlike the others .com (in a few minutes) or .pt (Portugal – in 20 minutes)
6. The low training level of the IT staff from the public institutions, based on the fact that the best of them work in the private sector for higher salary offers.
7. The high level of resistance of the public institutions staff against the implementation of new technologies, due to the fact that there is no efficient changes management.

8. The low level of the legal provisions application for the IT author rights, with impact on the software piracy
9. The low level of development for the national infrastructure, especially in the rural area. It is estimated that only 20% of municipalities are connected to the internet.

Obviously, the positive and negative aspects mentioned so far determine certain opportunities for the e-readiness level in Romania, especially because the communication and information sector is considered very dynamic, and also some threats, such as the migration of the IT specialists in other European countries, the lack of strategic partners for the development of informational infrastructures regarding the public administration and the differences related to the present European market.

Solutions for the increase of the Romanian capacity to assimilate ICT technologies

The amendment of the regional policies according to the European Union provisions and the orientation of the structural funds towards areas regarding the implementation of communication and information technologies in the Romanian public administration should concern **an action plan** for the local and central public administration.

1. The implementation of the informatic data exchange and the assurance of the regional platforms efficiency

According to the European Commission, the informatic data exchange is defined as an electronic transfer for data structured as normalized messages among the informational systems of the public institutions. It is necessary for the public administration authorities to establish the data types, the methods of data consolidation, the functioning of the e-Services platforms, the procedures and standards regarding the data setting-up. The efficiency and the integration in the European informatic networks will be very important. First of all, there has to be set-up an Internet platform able to offer electronic services, such as: the electronic vote, statistics, the payment of local taxes, information regarding the local investments, cadastral information etc.

2. The software applications development for the supply of electronic services

The public administration should decide whether it intends to implement certain applications open source or other solutions and to conduct costs/benefits analysis. There is also necessary the systems standardization in order to set-up the software applications, in order to ensure their efficiency under Internet platforms.

As regards the open source platforms, it is necessary to take into consideration the fact that there is a great number of personal and confidential data in the public administration system. The citizens should know that the transfer of these information is secure. For this reason, the software producers have promoted certain solutions for the public administration sector, named FLOSS (Free/Libre Open Source Solutions).

In order to consolidate the e-Services platform, it is necessary to identify the categories of services and to define the following elements:

- the service properties involve general information, as the identification data, information regarding the access to the service as the URL location, the maximum time for the conversation between the service and the user, the signature type necessary for the authenticity etc.
- the service costs: the costs estimated for the service utilization or for the information provided by the service
- the ways of the service payment
- the actors: the physical persons or the economical agents who use the service
- the authorization/security/visibility: the rights of accessing, editing and visualizing of the service content and functions
- the service content: the service structure, meaning the attributes and objects contained and the existing restrictions regarding its utilization
- the possibilities to customize the service content, in order to implement new functionalities.

3. Developing the public administration in order to offer integrated electronic services

In the present, at the level of the Romanian public authorities providing electronic services, the information are sent by individual communication channels, due to the fact that there is no regional or national vision. This issue requires the new administrative procedures and standards, in order to provide unitary electronic services, even though this process has certain restrictions, such as the organizational culture or technical factors (problems in the users registration, lack of digital signature and secured electronic transactions). The existence of a national e-services platform represents an objective which can only be achieved if the administrative re-engineering is doubled by the implementation of training programs and bench-marking technologies.

The modernization of the public administration in order to implement the e-Services technologies offers the following opportunities:

- on short and medium term: the improvement of the services efficiency and financial savings achieved by daily transactions made electronically
- the capacity to update the existing services, according to the individual consumers requirements, especially at the level of the local administration
- the implementation of electronic techniques able to ensure the public institutions transparency.

4. Development of Competence Centers for e-Administration technologies

These centers of competence will be set-up at regional level, in order to prepare the adequate e-Services specialists and to inform the representatives of the local public administration. It has to be mentioned the fact that the functioning of these centers can be done online, based on the e-Learning systems. The use of this training method offers more specialists in the public administration, a better monitoring of their performances, as well as the development of the organizational learning process. In this way, the following benefits would result:

- reduction of the training expenses by eliminating the transport and accommodation costs for the administrative staff
- modern informatic technologies used in the educational process

- monitoring of the training process and of the results achieved
- reduction of the un-necessary period of time for the participation at various courses
- achievement of the training exactly when it is needed
- increase of the educational process efficiency by improving the capacity of learning new information
- possibility of a further development for a knowledge management system
- lack of a maximum number of participants for a single course
- reduction of the training costs for the administrative staff
- higher level of the self-training processes efficiency
- Increase of the organization knowledge level by permanent up-dating of the information offered to the students.

5. The implementation of the management regarding the persons identity, the digital signature and the secured transactions

The problem of the public information security is very important and should be seen in the European Union context. The main ways of action are the following: promoting qualified electronic signatures, developing standards and procedures for the citizens registration and the electronic transactions, using secured instruments for the data stoking process, as the cryptographic devices (smartcard and reader or e-Token).

Although the digital signature is partially used in the Romanian public administration, in this moment we cannot take into consideration the existence of security standards, especially because, in most of the cases, the un-qualified digital certificates and conventional stocking devices are being used. The achievement of high security standards for the e-Services platforms can only be done by using qualified digital certificates, issued by the competent authority, according to the legal provisions.

6. Promoting certain measures able to increase the e-Services beneficiaries satisfaction.

The providing of e-Government services should be doubled by a users motivation system regarding the electronic services. In this context, the main way of action is the promotion of the systems regarding the relations with the clients in the public administration (CRM).

The specific elements for each electronic service are processed based on an informatic architecture which has the role to take over the information regarding the service beneficiaries, to insert them in a data warehouse, to process them using data mining techniques and to integrate them as e-Services technologies. It is necessary for the developed platform to include the following components:

- a. The **unique office** represents the entering point in the system for the citizens requirements and notifications, as various documents taken and processed inside the management system.
- b. The **contact center** (Call Center/ Contact Center/ Help Desk) represents the entity providing assistance to the citizens who require information regarding the electronic services. The development of such a component offers certain benefits: low number of lost calls by their adequate distribution, increase of the citizen satisfaction, monitoring the beneficiaries satisfaction level etc.

- c. The **e-CRM component** regards the use of the Internet technologies in order to improve the relations with the citizens and the business environment, based on G2C(Government-to-Citizens) and G2B (Government-to-Business) platforms and with specific instruments, such as: postal addresses lists, personalized e-mail services, chat services or interactive dialogues, forums etc.

If we take into consideration the fact that, once Romania will join the European Union, the European citizenship will determine the increase of the Romanian citizens mobility in the European space, it is necessary to develop new instruments able to allow a quick access to the E-Services systems, regardless of the user physical location. In this context, a modern European tendency is represented by the **mobile e-Services** technologies. More than that, the **mobile e-Government** becomes more and more important, replacing the old information centers with the mobile phones. Of course, a big part of the electronic systems can only be provided based on the classic e-Government systems, but new technologies are going to be discovered, able to answer to every European challenge regarding the free access of the citizens to the public services. This is why the e-Government and e-Services technologies implementation should be doubled by the promotion of new concepts, such as e-Participation or e-Democracy, all major factors for the integration of Romania in the European informational space.

References

1. www.europa.eu.int/information_society/index_en.htm (portal: Europe's Information Society Thematic Portal).
2. Anderson K., Kerr C. "*Customer Relationship Management*". Ed. McGraw Hill, New York, SUA. 2002.
3. Cap Gemini Ernst & Young. "*Online availability of public services: How does Europe progress*", European Commission DG Information Society, 2004
4. European Commissions. "*Information society benchmarking report*". 2005.
5. Faulkner M. "*Customer Management Excellence. Successful Strategies From Service Leaders*". Ed. John Wiley & Sons, London, England 2003.
6. Gaster L., Squires A. "*Providing Quality in the Public Sector: A Practical Approach to Improving Public Services*". Ed. Open University Press, New York, S.U.A. 2003.
7. Morley E., Scott P., Harry P.H. "*Comparative Performance Measurement*". Ed. Urban Institute Press, Washington, S.U.A. 2002.
8. Radu I., Ursăcescu M., Cioc M. "*Informatică și management*". Ed. Universitară, București, România. 2005.
9. Radu I., Vlădeanu D. "*Analiza diagnostic și strategia de dezvoltare a serviciilor publice de gospodărie comunală*". Ed. Tribuna Economică, București, România. 2004.

10. Reynolds J. *The Complete E-Commerce Book: Design, Build, & Maintain a Successful Web-based Business, Second Edition*. Ed. CMP Books, New York, USA. 2004.
11. Shah A. “*Public Services Delivery (Public Sector, Governance, and Accountability) (Public Sector, Governance, and Accountability Series)*”. Ed. World Bank Publications, Washington, S.U.A. 2005.