THE INFORMATIONAL SYSTEMS IN THE PUBLIC ADMINISTRATION

Răzvan Ion CHIȚESCU
Valahia University,Târgoviște

ABSTRACT
The proposed theme wishes to identify the main problems that appear in the correct and efficient implementation of the informatics systems in the local public administration from Romania. Issues as the creation of an IT infrastructure that matches better to the real needs of the local administration, the selection and perfection of the involved human resource in this process, the efficient use of the available data resources, the improvement/ continuous adaptation of the internationals' systems strategic planning, are analyzed through the evolutionary lines of the technology, of the social-economical frame of the period to which is referred and of the applying of a management that belong to the public institutions that align to the European demands. Therewith, these problems are analyzed in an interdependent relation.

Keywords: local public administration, key problems, informational systems management
JEL Classification: L32 , L 39

Introduction

The public institutions' management has a complex character thanks to the transformation evolutionary model, required by the social and economic dynamic of the last two centuries overlapped to a very large sphere by the delimitation of the public sector. So, by the complexity of the problem that it is required to approach, it is individualized through the particular characteristics that give to it multidimensionality and specific. Integrated to a paradigm whose limits are imposed by each state, the current public management features are the result of the requirements imposed by the transition from a traditional, conservative system, to one in which adaptation is an essential component. Also, these features allow the establishment of management types who have individualized contemporary reality at certain times of its

transformation, understanding the nature of the balance between change and efficiency. A perform ant management in the public sector is based on flexibility, assuming the changes, the efficient handling of an increasing flow of information and optimal optimization of information technologies and accelerated under continuous development. In this context, the management of the information system has emerged as a necessity and is continuously developing as one of the most important directions in the management of public institutions adopting solutions, with direct impact on improving way of life of citizens. It is required by the development dynamics of information at all levels and involves substantial changes in the Romanian public administration reform approach.

Amid Romania's status as a member of the European Union structural changes in the public administration are influenced by many external and internal factors that generate a number of problems in the implementation of various management systems. The management of the information systems, ensuring continuous optimization of work procedures having a positive impact on the quality of services and thus increase on the activity of the final beneficiaries in the public domain, of solving problems duplication of administrative and communication between public institutions, has become a challenge for public authorities. It thus requires new ways of thinking, new ways of doing business, new alliances and a new technology. (www.e-guvernare.ro).

In the last 20 years, modernizing local government based on information technologies through several stages of the type of the information system varied as a main role, by *Lupu, V. - Types of Information Systems in Public Administration, p.27.*

1. *Transaction Processing System* (TPS) → transaction processing (basic facts), storing data in files and databases;

2. *Office Automation Systems/Office Information Systems* (OAS/OIS) → ensures the processing of texts and images, electronic meetings, teleconferencing and video conferencing, electronic mail, document management, etc.;

3. *Management Information Systems* (MIS) → supports the management process by providing structured form of reports;

4. *Decision Support Systems* (DSS) → Provide support for decisions based on semi-structured and structured data models at all levels of the organizations

5. *Group DSS* (GDSS) → Supports group decision making with communication and negotiation facilities (DSS extension)

6. *Organizational DSS* (ODSS) → Assists the staff and supports decision making process for many subdivisions of the organization, providing information required in various activities.

7. *Electronic Meeting Systems* (EMS) → Support working groups to conduct electronic meetings (providing the infrastructure necessary)

8. *Executive Information Systems* (EIS) → Support the upper echelons of leadership in strategic planning decision making simulation possibilities, contouring critical factors etc.

9. *Executive Support Systems* (ESS) → Support the planning, analysis and communication in all phases of the decision making process by integrating DSS and EIS facilities

10. *Expert Systems* (ES) → Support solving decision problems by using a set of programs capable of reproducing the reasoning of an expert in a given field

11. *Intelligent Organizational Informational Systems* (IOIS) → Provide broad organizational requirements (intelligent assistance in planning, communication, negotiations, learning, parallel activities distributed processing etc.

Information Society had as first two major events, concerted by the US and Europe. In 1992, Al Gore, vice-president of the US, prefigured the concept of the Information Highway (Highway Information). Europe's reply to this challenge came in 1994, as the Bangemann Report (Europe and the global information society. Recommendations to the Council of Europe). It was created for the *Information Society Council*, which developed the first European Action Plan for the Information Society - *Europe's way to the Information Society*.

For the transition to electronic administration, Romania follows the four levels proposed by the European Community (Colesca Sofia, 2005, p. 44) :

- Level I: public information dissemination by electronic means;
- Level II: unidirectional interaction;
- Level III: bidirectional interaction;
- Level IV: online transactions.

Government strategy for accelerating public administration reform and the Romanian Government Strategy for Public Administration Informatics led to widespread implementation of electronic document flow in the central and local public administration - **e-administration**. Implementation programs manifested differently, with significant differences from one stage to another, from one county to another, due in particular technical, technological, economic and human potential different. In October 2004, World Markets Research Center conducted a study on the state of implementation of the concept of electronic administration. Romania has achieved a rate of 30.7%, 57.2% against the US 57.2%, France 40.1%, Germany 40.6%, 47.1% England and Sweden with 29.4% (eEurope 2005). The implementation of the information system is accompanied by a number of problems, which varies depending on political and economic context and local particularities. Together, these elements generate a dominant type of problem. Thus, at the end of the 80s, strategic planning (Caudate, Gorr and Newcomer, 1991) ranks dominating, while in the 90s developing information architecture (Niederman, Brancheau and Wetherbe, 1991) and "building a responsive IT infrastructure" (Brancheau, Janz and Wetherbe, 1996) were in the top rankings. These problems persisted in lists of information management issues in the coming years, only that they appeared with the recruitment, training and retention of professionals. Whatever, these management issues are influenced by political, economic, cultural and technological factors (Deans et al., 1991).

The information system provides the link between decision making and operational system (Lupu, V. p.23), thus identifying problems and solving them is an important socio-economic development of Romania.

Methodology

Considering the main problems noticed in different countries with systems administration, various economic and social policies (US, Australia, China, Slovakia) and at different times, were selected a total of 10 issues that we consider with impact in implementing the information in Romania. So a questionnaire was conducted by closed questions, to provide data necessary for a classification from 1 to 10 (stringent-less important) of these problems. The questionnaire was distributed via email to 150 officials of institutions of central and local public administration. Selected institutions are spread throughout the country, especially in Bucharest (central institutions) and in the county capitals.

The following issues were systematically pursued by researchers:

Rang.	**Brancheau, Janz and Wetherbe, 1996 (US)**	**Watson, 1989 (Australia)**	**Dekleva and Zupanncic, 1996 (Slovakia)**	**D. Li, W. Huang and W. Sha 2005 (China)**
1.	Building a responsive IT infrastructure	Improving IS strategic planning	Inadequate appreciation of IS by executives and other users and their lack of involvement in IS development	Integration of Information technologies with enterprise business Practices
2.	Facilitating and managing business process redesign	Specifying, recruiting, and developing human resources	Education of IS professionals	Improving enterprise information system security
3.	Developing and managing distributed systems	Developing an information architecture	Lack of IS strategic planning	Enterprise Information Systems strategies

4.	Developing and implementing an information architecture	Improving the effectiveness of software development	Management of IS function	Making effective use of the data resources
5.	Planning and managing communicatio n networks	Aligning the IS organization with that of the enterprise	Organizational problems	The influence of CIO and IS organizations
6.	Improving the effectiveness of software development	Increasing understanding of the role and contribution of Is	Education of IS users	Business Process Reengineering
7.	Making effective use of the data resources	Using information systems for competitive advantage	Integration of subsystems into the comprehensive information architecture	The building of enterprise IS infrastructures
8.	Aligning the IS organization within the enterprise	Facilitating and managing end user computing –	Telecommunication infrastructure in Slovenia and its links to the world	Building a responsive IT infrastructure
9.	Improving IS strategic planning	Promoting effective use of data as a resource	Executive IS	The evaluation of ROI of IS
10.	Implementing and managing collaborative support systems	Facilitating organizational learning and the use of IS technologies	National and ISO-compatible IS standard	Integration of different suppliers' open system

Table 2. Top 10 problems of the information system implementation identified in different countries

Selected issues are the following: Building a responsive IS infrastructure, Telecommunication infrastructure in Romania and its links to the world, specifying, recruiting and developing human resources, facilitating organizational learning and the use of MIS technologies, organizational problems, implementing and managing collaborative support systems, using information systems for competitive advantage, improving MIS strategic planning, management of IS function, promoting effective use of data as a resource.

Results and discussion

Of the 150 questionnaires sent were received 83 completed, a percentage of 55.33%. Justifications found for this small percentage of respondents were indifference and non-manifested willingness of respondents to not disturb superiors thus to maintain job, if they are somehow choices made in the questionnaire, although these were anonymous, the e-mail address used was the official one of the institution, and there was no question form that would be the one who completes the questionnaire function. Most responses came from institutions in the province. The quantitative data collected through the questionnaire allowed us to make a top of management problems of the information systems in public administration. The hierarchy from 1 to 10 is as follows:

Rang	Percent	Problem
1.	81,2%	Building a proper infrastructure system implementation
2.	*79%*	*High costs*
3.	71%	Organizational problems. Data Resource Management
4.	67%	Recruitment and human resource development
5.	60,3%	Facilitating organizational learning and the use of MIS technologies
6.	48,7%	MIS Strategic Planning
7.	48,34%	Telecommunication infrastructure in Romania and its links to the world
8.	34%	Using information systems for competitive advantage
9.	27,87%	Management of IS function
10.	22,3%	Promoting effective use of data as a resource
11	14%	Implementing and managing collaborative support systems

In the whole group of people surveyed was found that the answer to an additional question rose in the questionnaire, **other issues raised by you**, a 78% of respondents passed the high costs that this process requires. Not enough funds are accessed by proposing and winning projects for this type of investment projects implemented several projects aiming the infrastructure - roads, water and sanitation, planning recreation places, etc.

Data analysis in terms of gender respondents did not lead to a significant difference between the sexes (greater percentage of women is because there was a greater number of a female respondent, this is a consequence of the higher women working in public administration). The age of those who participated to the study. **The age** of those who participated in the study led to the shaping of the two categories, in amounts exceeding 80% supported different hierarchies for problems located between the 3rd and 7. These results are supported by the reluctance of the public servants older than 45, the novelty that involves computerization of certain services and often is done by reducing the number of employees.

Regarding the **working environment** in which people surveyed activate, the respondents from provincial cities counties with economic power associated to small and medium economic power showed a higher level of support on human resource issues, the management and information system interconnection (81%), to those of the central government that aim more problems as *Using information systems for competitive advantage* (63%).

In terms of **level of education**, respondents that are graduated students and post-graduate level, ranged issue of data management and efficient handling of benefits from these resources (68%). We believe that these results are due to the fact that this type of respondent has a different point of view on the prospects offered by organizational changes. People with secondary education chose "specialization at work" highlighting this trend characteristic to public sector institutions in the economic conditions that Romania is experiencing (91%). Bias respondents in this matter falls normality because it comes from the fears or personal aspirations caused by transformation processes of these institutions.

For all questions, a rate between 1.4-2.1% of respondents chose to lie in the neutral zone with the answer (not considered a problem).

Conclusions

The problems identified are not the result of a cyclical situation, but are realities of the administrative system in Romania. They can lead to short-term disruptions in the activities with business area and with citizens and their interrelation makes statements that are generated to stress, to multiply. The results also highlight the modern manager profile, complex and multidimensional, faced with numerous problems, both technical and non-technical management, internal or external.

By comparison with the problems faced or are facing other countries in implementing the management of the information system were determined both similarities and differences. Therefore, some of the main issues facing the institutions are universal, while others are specific to certain sectors and national contexts.

Results of the study is only a step in a more elaborated research and highlights a number of issues that must be interpreted taking into account that they come exclusively from urban areas where the public administration, with financial and

logistical possibilities, different then the rural areas, making progress in implementing the informational system by applying projects largely funded by European funds. However, we must remember that in these administrations the implementation of the system was made more in the Finance Division and Population Records.

Based on the feedback resulted from the questionnaire used to obtain the results employed in this study, the next step will be to revise/ improve the questionnaire (Romanian administration to introduce specific issues) and changing the way its distribution. It also requires correlating data collected through the questionnaire, integrated and coordinated with those obtained by interview and direct observation.

It was important that the respondents, without excluding normal degree of subjectivity manifested by them, realize the need to implement this type of system important for the advantages it entails.

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