

## FOUNDATION AND DESIGN OF THE INFORMATIONAL SYSTEM IN LOCAL PUBLIC ADMINISTRATION

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### ABSTRACT

*In this paper the authors present a solution for improving the information management in local public administration. Following the SWOT analysis that we made, we proposed the improvement of the informational system by implementing at local government level a computerized integrated system of information and communication technology. The modernization of the institutional communication by introducing information technology has resulted in increased efficiency of public administration, elimination of bureaucracy and increase in public service quality.*

**Keywords:** public administration informational system; SWOT analysis; integrated informational system.

### INTRODUCTORY NOTIONS

There have been lately observed a series of major changes in information technology, leading to the creation and development of a new type of society, that of the informational age.

Information Society represents a new stage of human civilization, a new way of living, of higher quality, which involves the intensive use of information in all spheres of human activity and existence, with a major social and economic impact. The essence of this information society is to use integrated, massive and generalized information and communication technologies in all areas of economic and social life, including public administration (The Central Unit for Public Administration Reform).

Computerization of the society can be successful only if a well-organized and efficiently directed information infrastructure is set up.

The information system must be the implementation support and must simplify the rules and administrative procedures, to ensure a broad and non-discriminatory public access to public services.

The public service is the means by which administration provides citizens with services of general interest, in a political power regime.

Information itself is a symbol of our time that requires specific tools: computers, phones, copiers, faxes, etc, so it becomes one of the most important strategic resources for all types of organizations, including local government. The collection, processing, transmission and storage of data are essential to the quality of decisions taken and their purpose. The modernization of public administration in Romania cannot be achieved without taking into account the need to improve the informational system.

### SWOT ANALYSIS

SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) is a method of auditing the organization and its environment.

Within public administration, the most efficient approach of the SWOT analysis is in terms of qualitative perspective, because it allows the identification of regional development strategies.

SWOT analysis is based on two dimensions:

Analysis of internal factors, i.e. strengths and weaknesses . Analysis of external factors, represented by the opportunities and threats which the organization faces. SWOT analysis forces managers to better understand and respond to those factors that are of most current and potential importance for organizational performance. SWOT value is that it is an intuitive method of organizing the large amount of information and data, aiming to identify the strategic issues in a relevant way (strengths, weaknesses, opportunities, threats).

### **A. Strengths**

Among the strengths of a local government we include:

- a. Adaptation of the chart of their specialized Council organizational unit, focusing on the departments that manage areas of current major interest;
- b. Training of the institutions subordinate to local government and its apparatus for implementing a system for quality management and obtaining ISO 9001 certification;
- c. Use of a modern hardware infrastructure, based on smart, fault tolerant computers network which will ensure efficient activity and quality work to serve the citizens;
- d. Collaboration with educational structures for the continuous training of civil servants;
- e. Reviewing, modernizing and simplifying methods and procedures of issuance and certification of documents by using dedicated software (Geographic Information System - GIS, which contains digitized city map);
- f. Existence of an Information and Public Relations Department as the main interface between the institution and the citizens, the Stop Office will be the only place where citizens come into contact with public officials;
- g. Establishment of a well-organized internal control by improving the flow of documents through workflow applications. By these methods we achieve a reduction and efficiency of the data, information or documents search activity, of approximately 90%.
- h. High-speed Internet connection (fiber optic) and the existence of an extranet that is a private network connectivity with other public institutions with whom local government comes into contact: Police, Education, Culture, Environment, Hospitals, other subordinate institutions;
- i. Existence a coherent and stable legal framework for free access to public information and transparency of the administrative act;
- j. Initiates partnerships with various organizations to create common databases in GIS;
- k. Starts the elaboration of procedures for background studies on sustainable development in the locality;
- l. Establishing "e-government", "e-administration" information portals - a real support for local governments across the country in the implementation of "counter reform"
- m. Adoption of local strategies on the equal access to education for disadvantaged people, social care and child protection;

### **B. Weaknesses**

A weakness is a limitation, a mistake or a defect that prevents the organization to achieve its objectives. Is what is not good for the organization or the points where the capacity or resources are lower in comparison with the competition. As weaknesses identified in a local public government unit we include:

- a. Non-correlation of the decentralization policy (transfer) of public duties by county public authority with its financial capacity to support them without affecting other areas of county interest;
- b. Legislative density and fluctuations, sometimes contradictory, in a given field of activity;
- c. Mismatch between government programs and real needs of the business community;
- d. Insufficient awareness of the concepts of efficiency, cost effectiveness and transparency in managing public and private property of the community;
- e. Internal communication difficulties between different functional departments and between local government structures;
- f. Insufficient staff able to use the computer at the level required by current County Council and local councils – there are not set positions in local councils organizational charts to be filled by specialized personnel;
- g. Insufficient staff to know and speak a European language or large use;
- h. Resistance to change of officials or others' inability to adapt to changes and perceptions of routine, in some cases, as a mode of action;
- i. There is still a sense of frustration of officials (civil servants and contract employees), motivated by the low pay system, promotion, and maintaining a negative public image of officials from government, financial;
- j. Fewer opportunities to motivate staff and to attract highly qualified people in the structures of civil servants; • differences between public functions that civil servants were reinstated on and wage levels;
- k. Limited financial resources to support the training program;
- l. Insufficient training of potential beneficiaries - local authorities, public institutions - for creation and implementation of projects through the external financing;
- m. Reduced ability of citizens - the ultimate beneficiaries of government services - in using informational means;
- n. Inappropriate use of various computer applications leading to difficulties in handling, blocking applications, perhaps even loss of certain information;
- o. There is a certain risk regarding the data integrity and security (misuse, viruses);
- p. Lack of interest of citizens to be actively involved in the local decision making;
- q. Limited degree of transparency of decision making and cumbersome procedures (bureaucracy).

### C. Opportunities

Opportunities include any current or future situation favorable to the organization environment, such as a trend, a change or a need that has not been taken into account, which supports the demand for a product or service and allow the organization to improve its competitive position.

- a) As opportunities for local government we can include:
- b) Multiple opportunities to access external funds for modernizing public administration in particular;
- c) The possibility of extending extranet network connecting all the municipalities in the county and with the County Council;

- d) Development of strong links between the County Council and local authorities in the city of Campulung;
- e) Opportunities to develop multiple databases in a GIS;
- f) General urban development plans and related local planning regulations in digital formats that can offer possibilities for the training of personnel through various training programs funded by the EU (European certification in the operation of computers - ECDL (European Computer Drivers License));
- g) Increased citizen satisfaction through an efficient use of the integrated information system;

#### D. Threats

It represents a danger that may arise as a result of adverse developments or trends that, without a counter reaction or defense from the company, will cause damage in its work, reflected, for example, in the financial deterioration, reducing sales, reduced market share, etc.

##### *Threats:*

- i. Fear of risk taking, the inertia of public officials - especially in leadership;
- ii. Limited experience of the newly-elected mayors;
- iii. Centralized staffing establishment, under the conditions of supplementation of the responsibilities of county and local authorities;
- iv. High inertia regarding the involvement of responsible factors, but also of the community in development programs;
- v. Media tend to reflect in particular - and usually without checking - negative aspects of certain activities of the administration, often the information being misinterpreted or misunderstood;
- vi. Turnover of civil servants
- vii. The difficulty of strategies and action plans to resist political change;
- viii. Too frequent legislative changes to be treated effectively.
- ix. There are risks of corruption of public officials in particular those in leadership.

For the present analysis, fields where the strengths and weaknesses face opportunities and threats are important. Such confrontations will lead to finding *the central problem and possible solutions*.

In essence, the main feature of the strategic diagnostic model SWOT is taking into account for the strategy formulation the environmental opportunities and threats, in terms of strengths and weaknesses identified on the level of local government potential.

#### Foundation of The Informational System

The informational system includes the set of data, document included information, informational circuits, informational flows and means of processing the information, all of them involved in the foundation of administrative decisions, elaborated by institutions belonging to the public administration system and that contribute, due to their content, to satisfying the general needs of the population. (Andoniceanu, 2006).

The employment of information in the elaboration of norms and their transmission towards the local administrative authorities in order to be enforced implies an informational circuit and/or flow.

In order to meet the social needs of the members of society, to provide public services in certain conditions, just the human, material and technical resources are not sufficient; it is also necessary to have a permanent contact with the social environment evidence, which the public management serves.

Within a local public administration, the informational system performs the following functions (Verboncu and Nicolescu, 2008):

- a) *The decisional function*– means that the informational system must ensure the informational elements needed to fundament administrative documents and all categories of administrative decisions.
- b) *The operational function*– is ensuring the enforcement of administrative documents: laws, decrees, resolutions and all types of administrative decisions.
- c) *The documentation function*– expresses the system’s purpose of registering information needed by the dedicated personnel, in order to create the basis of the objectives and subsequently of the deriving administrative decisions.

Within a local public administration all official documents will enter the registry’s office, being forbidden to pass them to the specialised departments without the resolution of the competent decision makers that decide over their solving.

Assignments are accepted only through the hierarchical chain through the supervisor, proceeding similarly in the case of reporting on how to solve them.

The access to public information is made from the official position or upon citizen’s request, through the Public Relations department.

In the structure, function and performance of the management system of an organization, its decision-making component occupies a privileged position, having a huge impact in all areas of its activities and results.

Adapting the system of public institutions to the needs is done through the work of public managers and is the result of applying the rationale of administrative decisions. In public administration, administrative decisions are taken both by the representatives appointed and / or elected in the institutions of government, as well as by the leading public and / or execution officials of public institutions.

*The administrative decision* can be defined as a complex process of choosing a decision of several possible options, as to achieve an objective of public administration and / or institutions that influence the activity of at least one other natural or legal system, of the administrative system in its entirety or society in general.

At a local government level, administrative decisions are taken by:

- City Council (decisions)
- Mayor (provisions).

Local council decisions include legal rules by which they solve local issues and manifest their authority in administrative units. Decisions are the only administrative acts which the local council adopts in exercising its duties and which solves the problems of local interest. The methodology of a decision to be taken by the council, from opening phase until it enters into force, is presented below:

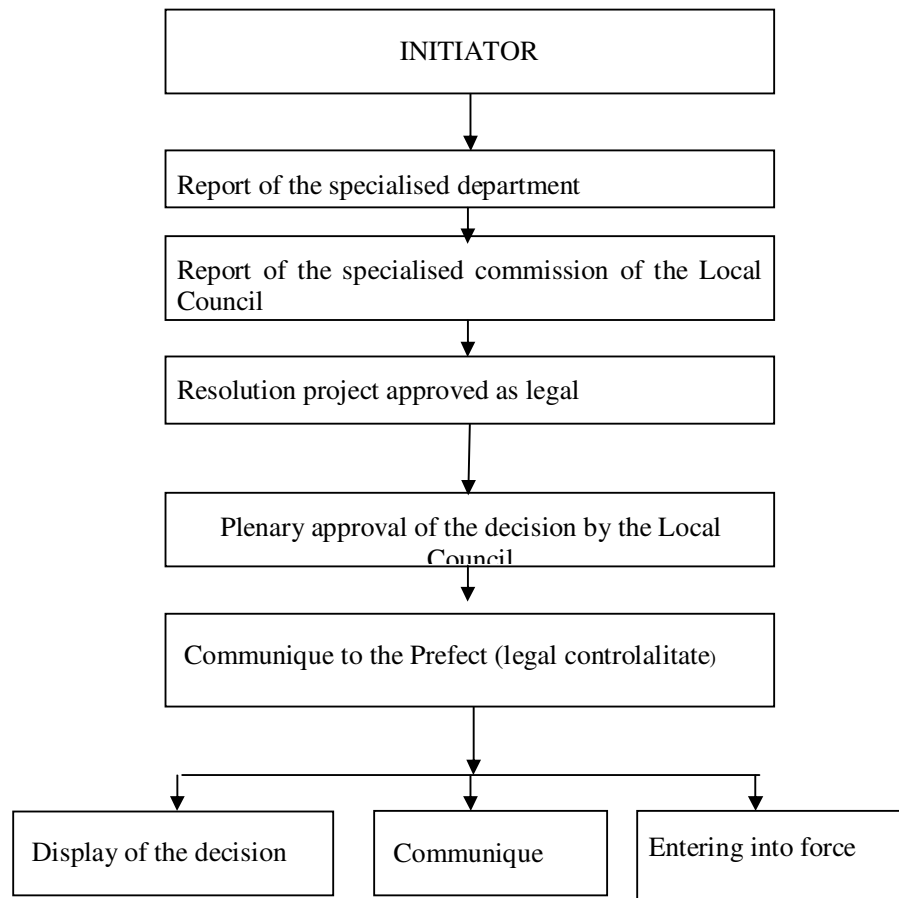


Figure 1. Methodology of a decision

In exercising its powers, the Mayor shall issue provisions. They become enforceable after being brought to the attention of interested persons. (Organizational and Functional Regulation of Campulung City Hall, 2009)

The provisions of legal acts issued by the mayor are expressing a willingness exercised unilaterally and directly produce legal effects, have the character of being up to date and binding on the whole territory of the municipality, their implementation being ensured through the exercise of public employment by state authorities. Decision-making is extremely complex, and state authorities have to this end a great responsibility to avoid wrong decision making.

The quality of the administrative act depends on the quality of decisions. We must pursue the efficacy of the decisions results (quick access to relevant information, recognition and identification of the problem faster, easier access to analysis tools) and effective decision-making (the decision reducing costs, reducing decision time and reducing effort). We may say that a good decision-making may be associated with the long-term success of the institution. Analyzing the information and decision circuits, we realized some flaws in their operation, deficiencies that are presented in a graphical form below:

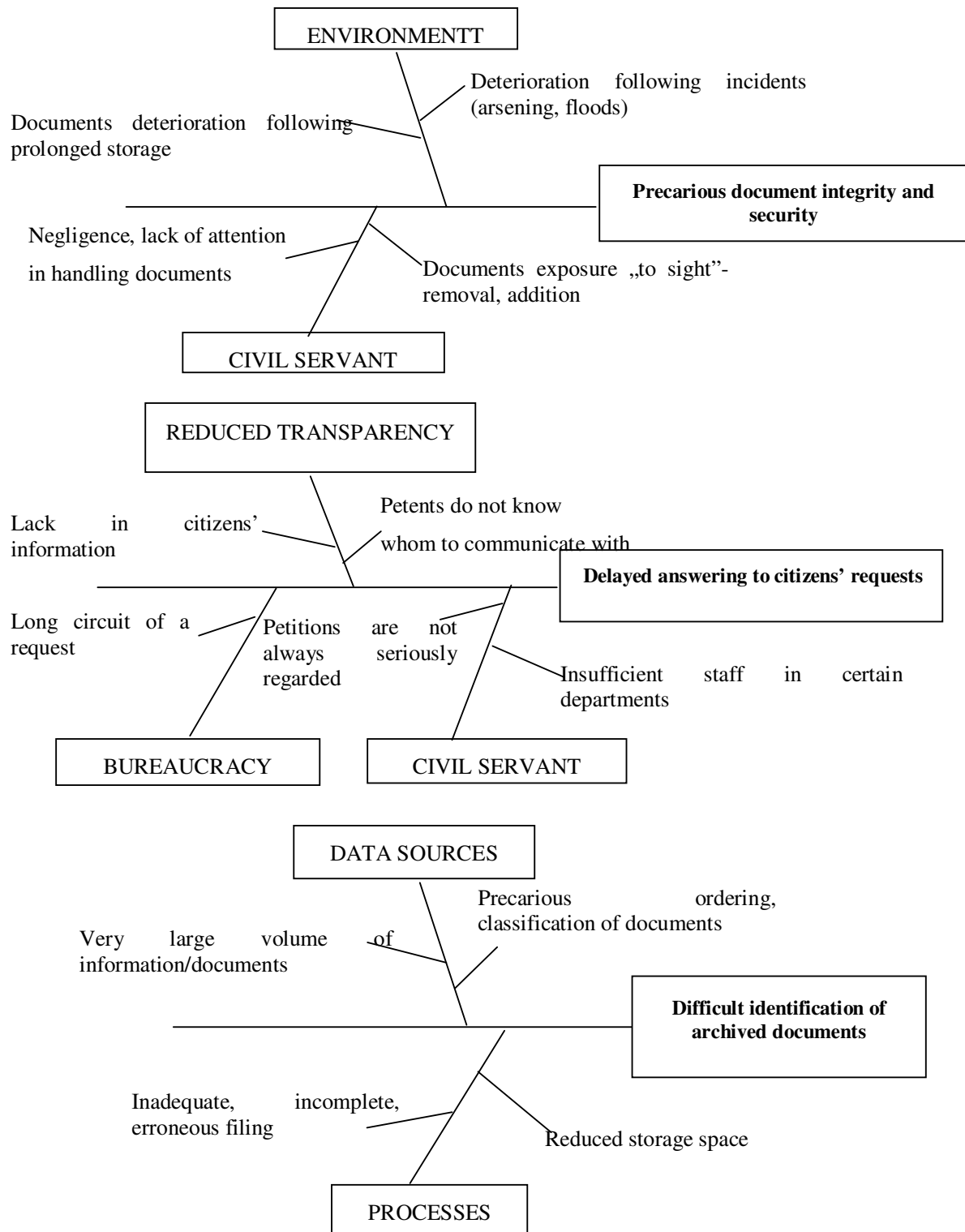


Figure 2. Defficiencies in the existing informational system in administration

## THE DESIGN OF THE INFORMATIONAL SYSTEM

One of the European Union's requirements in the context of Romania's integration views the modernisation of the working and structural system of local public administration, in the sense of modernization and employing informational technology.

In order to comply with these requirements, a modern informational system would have to provide (Tarbutaru, 2009):

- A sole entrance for all current requests addressed to local public administration;
- Increase of speed in answering to citizen's requests;
- Improvement of data and information integrity, as well as in the quality of documents;
- Increase of the communication level between different departments in local public administration by use of extranet;
- increasing access to data, information and public knowledge;
- Integrated administration of the entire data, information and documents cycle;
- Data processing automating, acceleration and safety;

Taking into consideration the aforementioned requirements and the observed deficiencies, we have designed an information and communication technology system within a modern local public administration. Taking into consideration the aforementioned requirements and the observed deficiencies, we have designed an information and communication technology system within a modern local public administration (Figure 3 – The Architecture of an Integrated System) that would provide a maximum efficiency and optimal running of the entire administrative activity. The structure of this integrated system has the following components (Feasibility Study, 2009):

### A. The Citizens Information and Communication Integrated Informational System:

- A1) Unique registry's office ;
- A2) Telephone switchboard;
- A3) Infokiosks;
- A4) Offices for the public access to information.

### B. The Hardware Integrated System (the infrastructure);

### C. The Communications Integrated System

- C1) Intranet;
- C2) Extranet;
- C3) City Hall private telephone network;
- C4) City Hall private mobile phone network;
- C5) Internet (optic fibre).

### D. Data and information archiving, saving and recovering

### E. The Integrated Software System:

- E1) the Geographic Informational System (GIS)–digital map of the town;



- E2) Modules of specific integrated applications for each department;
- E3) Document Management (documents tracking application);
- E4) Content Management (management of the entire informational cycle);
- E5) Administrative Intelligent (Analysis and Reporting).

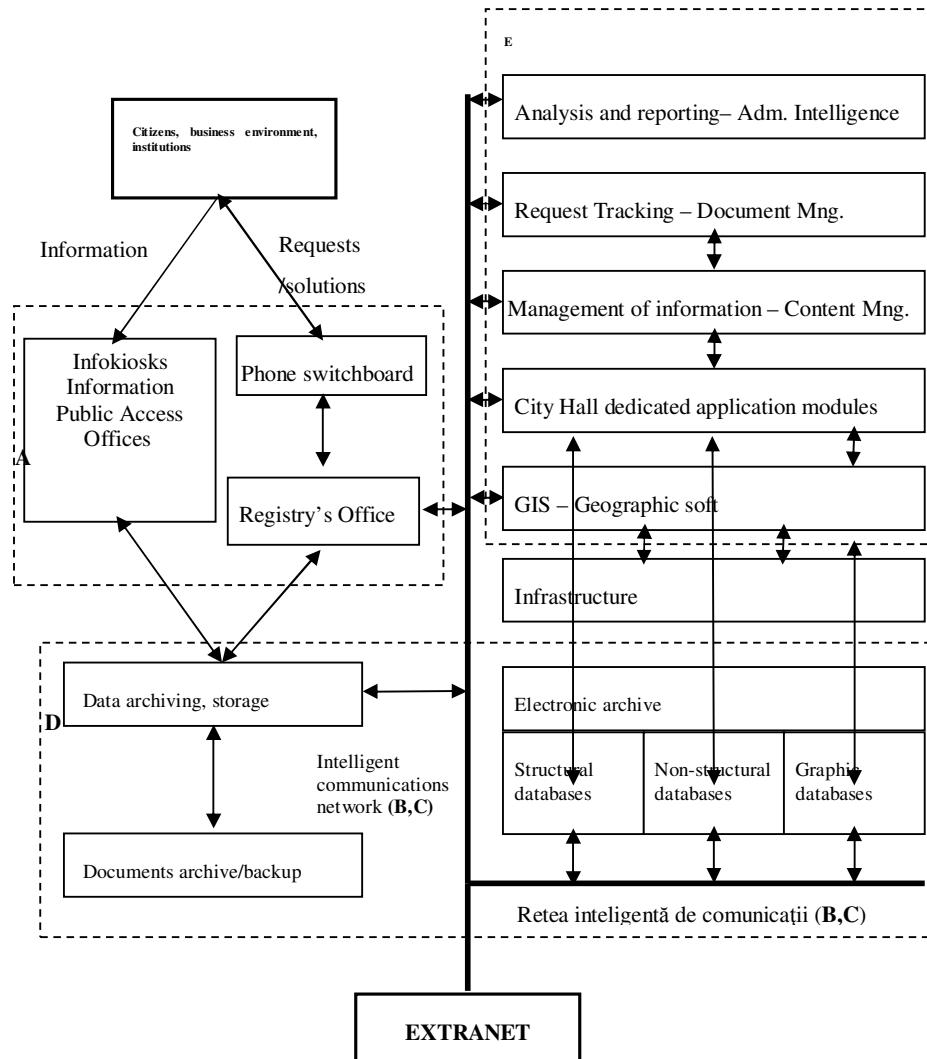


Figure 3. The Architecture of an Integrated System

The information and communication technology is one of the component systems, vital in the context of integration, its development level reflecting the general level of technological development, economic and social development of local society.

**CONCLUSIONS**

With globalization, a more and more prominent contemporary phenomenon, the management of quality and information is a way to support organizations or institutions in order to achieve remarkable results in their fields.

The complex dimension of local governing provisions, which should effectively harmonize the economic, social, administrative, environmental and political elements, requires that managers have

formed powerful databases that provide the opportunity not only to supply information, but also their aggregation in relation to the objectives to be achieved.

The use of IT technologies in the process of governance and public administration is an obvious necessity nowadays. The advantages that new technologies bring can lead to simplification of government processes and their increased dynamics. From another perspective, taking into account the extent of e-government projects, the information systems dedicated to this sector show a high level of complexity and issues regarding their implementation. The citizen is at the heart of e-government, being the main beneficiary of the integration of technology in this field.

The modernization of institutional communication through the introduction of information technology has resulted in increased efficiency of public administration, elimination of bureaucracy and increase in the quality of public services. Thus, the transition from a driven, centralized administration to a decentralized administration in the service of citizens, determined the need to redefine the relationship of the "Administration - to - citizen" and "Administration - to - Administration", using the means of the information and communications technology.

The implementation of the informational process in the local government requires a change in the management approach to public administration activities, being imperative to implement ISO standards and programs of strategic, performance, and change management, projects in public administration, procedures to ensure standardization and compatibility of administrative activities with the European Union procedures, streamlining their work.

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