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Master Thesis

E-Government and Reorganization Procedures for better quality and faster Serving Citizens
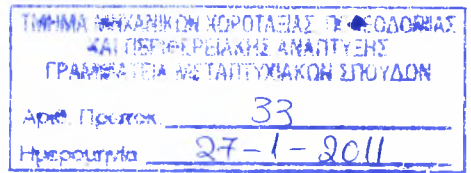
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ABSTRACT

E-Government is nowadays one of the fastest growing sectors of the new economy, as it provides information services and transactions between the government and the citizens of a country. The results of the introduction of this technological revolution are now visible to every citizen, which consist of the daily settlement with public services. Investigations have been made, after the entrance of e-Government in the stronger economies in the world and have shown that technological support of governments have significantly strengthened productivity in the public sector, which operates more efficiently and with greater transparency against corruption. At the same time, the sense of ordinary citizens for dealing with public services has been improved.

The thesis refers to the ways in which e-Government helps achieving better quality and means for faster serving towards citizens by using reorganization procedures.

Keywords: E-government, I.C.T., Interoperability, B.P.R., Development

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List of acronyms and abbreviations

B.P.R	Business Process Re-Engineering or Redesign
I.C.T	Information and Communication Technology
K.E.D.K.E	Central Union of Municipalities and Communities of Greece
K.E.P	Citizen Service Centers
K.E.D.Y.	Regulation of Public Communications Services
O.E.C.D	Organisation for Economic Co-operation and Development
O.T.A	Organisations of Local Governments

Chapter 1

1. Introduction

There has been a rapid growth in telecommunications and computer networks within the last decade and an inexhaustible flow of information which is available online.

The increased demands of modern life have multiplied the needs of citizens for greater flexibility and more facilities in their dealings with the public sector. As a result, the exploitation of this modern information and communication technologies exists in order to improve citizens' transactions with public bodies (a process referred to by the term e-government).

The state is therefore obliged to redefine its relations with citizens and business methods and to also redefine the cooperation with various public services. Following the example of other branches of economic activity, most public services turn to new technologies in an effort to become more efficient and to be able to cope with demands of society and the modern era.

E-Government and its various synonyms existed on the international scene for many years. Since the early 1990's, governments have adopted e-government programs to provide citizens and businesses with electronic information and services.

Today, e-Government is at the forefront both in research and implementation and this new way of governing is attracting the attention of governments, technology providers and researchers.

1.1 Purpose of the dissertation

This aim of this dissertation is a comprehensive study of the context of e-Government, by analyzing the business process reengineering and the basic concepts for procedures and management procedures which are nevertheless necessary for better understanding of the mechanisms which are used in e-Government. The anticipated benefits of the introduction of electronic administrative cooperation and service are

providing answers to the question of how E-government helps achieving faster serving towards citizens.

1.2 Organization of the dissertation

The first chapter is the introduction of the thesis. It, originally emphasizes the necessity of electronic services today, and points out the existence of many common characteristics between them, which motivates us to model the service.

The second chapter is a theoretical approach to the concept of Electronic Government, and a reference to the species and the benefits brought by the use in people's lives. Moreover, it identifies the conditions that must be fulfilled in easy use, and technological issues that arise by the safe and proper application.

The third chapter refers to the categories of e-Government services and the need to organize the characteristic functions of the Internet by use category. Then, there is an identification of some models of services that are repeated in different types of services, noting that the model applications - approvals / certificates have the highest incidence.

The fourth chapter describes the Business Process Reengineering (BPR) procedure with the Development of a Strategic Management.

The fifth chapter refers to the Information Society and the Operational Program Digital Convergence.

The sixth chapter refers to local e-Government and how I.C.T's affect the regional development.

The seventh chapter is a brief reference to some general conclusions and considerations for future extension of the work.

Chapter 2

In this chapter we will attempt a brief analysis of the contribution of public sector in economic progress, development and social cohesion country. This will help us better understanding how e-Government contributes to the development of the public sector.

2.1 Public Administration

Undoubtedly, the new economic-political environment intensifies the role of the state in encouraging innovation, entrepreneurship and removing disincentives. At the same time, the enhancement of skills of people, which consist of the most important capital of a society, is being supported.

In "Information Society" and global markets, government is the main driver of growth of national economy. It is accepted as the key of achieving and smoothly introducing of the so-called: Digital Economy.

Public Administration is an important factor of socio- development of the country, due to the fact that through this the institutional frameworks, the support mechanisms, the operation and control of economic and social activities at both institutional, regional and local level of the country are activated. [Vellis A., "Education and Training in the Public Sector", Information Report, 23 September 1996, p. 3 (in Greek]

So, modern era and international competition requires the modernization of public administration, the reconstruction and the actual reestablishment of it. The urgent need for administrative reform derives from the awareness that the current way of organizing public administration is the major limiting factor for economic progress and development, as well as for the social cohesion of the country. [General Secretariat for Public Administration and e-Government, "Operational Program State: The reestablishment of Public Administration, (2005-2007)", p.1]

Some of the problems of the Greek public administration are shown below:

- Lack of strategic action, inefficient management system
- No meritocracy

- Poor management of scarce public resources
- Corruption and structural inertia, labyrinthine legal and regulatory context
- Administrative flattening, atrophy disciplinary law
- Organizational overlaps
- Absence of rational design jobs
- The vicious circle of bureaucracy
- High cost of public operation system [Regional Training Institute of Thessaly, "E-Government", Lecture Notes]

2.1.1. *The Public Administration in the service of citizens*

Public sector plays an important role in the social and economic model of the European countries, as it is the backbone for the providence of the citizens, ensuring social cohesion and support the operation of competitive market environment. The public activities involve the fields of education, healthcare, social security, consumers' protection and the environment. The advantages of European countries in the economic field, such as a skilled workforce and leadership in key industries, require a proper operation of the public sector.

Public sector is nowadays at a crossroad, facing challenging economic and social conditions, institutional changes and the profound impact of new technologies. As the expectations are ever growing, public sector being a major economic factor stimulates economic growth and should play a fundamental role in the implementation of the Lisbon strategy for economic, social and environmental renewal.

It is a challenge for public administrations to improve effectiveness, efficiency and quality of services. All these challenges, however, should be faced off by keeping the budget at the same or lower levels.

The Information and Communication Technologies (ICT) can help Public Administration to address the numerous challenges. The focus should be on the use of ICT combined with organizational change and new skills to improve the services provided by public services, democratic processes and policies pursued by the public sector. This is the subject of electronic government (e-Government).

Good practice in many countries show that e-Government is a powerful tool for providing better quality within public services, reducing waiting times and improving economic efficiency, increase productivity and enhance transparency and accountability.[Operational Programme "Administrative Reform", Ministry of Interior, General Secretariat for Public Administration and eGovernment]

2.1.2. *The challenge for a digital citizen- centered state*

Digital technology provides the opportunity for easier access and use of information in the public sector. "E-state" could transform the former government organization, by responding quickly to services. It can increase efficiency, reduce costs, increase transparency and speed up the normal administrative procedures for both citizens and companies.

Electronic access would also account as a major contribution to accelerate the transition to information society by strengthening the major Internet services. The challenges for public services consist of the rapid adaptation to new working methods and the establishment of new innovative ways of work including partnerships with the private sector. The transitions to electronic transactions involve major changes to internal processes of public agencies, the management of which can be complicated.

People become more and more addicted to rapid adaptation and improvement of quality products and services offered by the private sector. Additionally, they expect the same performance by public administrations. There is a continuous criticism against the opaque procedures, the long queues and, in general, the undifferentiated treatment of performing.

It is said that the expectation that public services could be more personalized and user-friendly, is customized to the needs of citizens. The public service obligations are generally non-exclusive, all citizens must be served, regardless of their skills and abilities, their income or geographical area. Contrary to what happens with the private sector, public sector cannot choose their customers (like the public one, which does not have the opportunity to choose whether or not be served by the public sector).

The competitiveness of business is strongly influenced by the costs of transactions with the public administration. Because of the continuous growing international competition, the entrepreneurships require the cut off of bureaucracy.

Companies, therefore, expect cheaper and better public services and quality in order to remain competitive.

Finally, citizens and businesses expect the authorities to become more accountable on the management of taxpayers' money. They also demand greater transparency in decision- making and democratic participation in all stages of policy.

In conclusion, the challenges for public administration and the broader public area are:

Responding to a changing world.

Higher expectations on behalf of citizens and businesses.

Addressing the issue of limited resources – more public services with fewer resources.

[Operational Programme "Administrative Reform", Ministry of Interior, General Secretariat for Public Administration and eGovernment]

2.2 Performance Indicators of Public Administration – Evaluation of Public services at national and European level

The government has never occurred so far to define performance indicators services that the public administration has offered some years ago. Such indicators are limited to the private sector. However, as public government has borrowed several methods of modernization from the private sector, it has borrowed assessment methods, too. It should also be noted that the performance indicators within public administration appears to be a very difficult task, as the output / outcome are services and are indeed difficult to be quantified and measured.

It is worth mentioning the following evaluation methods:

- Administration through the objectives (Management by objectives).

This method shifts emphasis on performance. The philosophy of the subject coasted by the principle of participation and respect of different opinion. Below, there is a suitable example to explain this method. Let us suppose that a company sets a strategic goal of increasing sales up to forty percent (40%). So, to achieve this, all departments involved in achieving this strategic objective have to implement their

own internal goals. If every department achieves its own objectives, then the ultimate strategic goal is achieved.

Therefore, the administration, through the objectives, is an approach which contributes to participatory action towards the desired purposes. Like all methods, it also has its positive aspects (Inclusiveness, assignment of specific roles, targeting, partnership and communication, etc.) and negative elements (lack of administrative support, conflict between the parties, insists on numbers etc.) [Kefis B, "Integrated Management. Basic Principles of Modern Entities", Review, January 2005, pp. 86-89]

The concept of productivity [Hodgkinson A., "Productivity Measurement and enterprise bargaining-the local government perspective", The International Journal of Public Sector Management, Vol.12, No. 6, pp. 470-481] [A. Neely, "Measuring Business Performance", The Economist Books, London 1998, pp. 5-8]
Each organization receives inputs (raw materials, capital, information, human resources, and technology) and through the exploitation and processing produces goods (or services) as shown in the figure below.
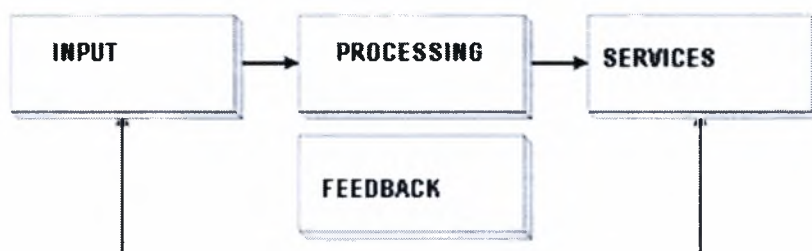
Fig.1: Transition from the inputs to produce goods / services [A. Neely, "Measuring Business Performance", The Economist Books, London 1998]

In this model, the level of productivity is determined (P = output / input) in each company. In the case of public sector is not easy to determine, because the outputs are services which cannot on their turn be quantified and measured through indicators.
The most typical index of measuring productivity is the labor productivity.[IDABC E-Government Observatory, February 2005, p. 8]. In particular, this shows the size of the output for each labor input ascribed to each man. However, input is not only work and capital, so it has been developed to be used as another size measurement, which is

called multi factor productivity (MFP) and measuring effectiveness in the context of working capital and other factors involved.

The concept of productivity can be distinguished in two basic components:

A) Efficiency: How the inputs of the firm are economically used to produce specific outputs.

B) Effectiveness: Refers to the ability of each unit to provide services that meet customer requirements.

There are two ways to improve productivity:

- growth of output and fixed inputs
- Reduction of input to output stable

Although the ideal would certainly be for their own resources to provide more (do more with less).

- Indices of services to citizens

Though the indicators below are taking place in the prefectures, wherein we could not exclude the application and the broader public area.

Indicators relating to time of service:

i. Average response time to service requests by citizens to provide various nformation.

ii. Average response time to requests of civil service to issue various certificates, documents.

iii. Average response time of services reports lesions.

iv. Average response time of issuing various licenses.

v. Average response time in emergency cases.

Indicators related to quality and reliability of service:

i. Percentage of incorrect responses on the information given to citizens.

ii. Percentage errors in different documents, certificates, documentation.

iii. Number of administrative procedures are carried out via telephone, fax or electronic mail (e-mail).

iv. Number of contacts required to make a citizen with various other organizations to handle his case.

v. Number of calls due to damage of various networks.

Indicators of accessibility:

i. Easy access.

ii. The appropriate hours of operation.

iii. Quantitative adequate service.

iv. Lack of financial barriers.

v. Information on the availability of service.

vi. Lack of social and linguistic barriers.

Indicators related to the general satisfaction of the citizen:

i. Number of complaints by citizens.

ii. Quality and quantity of service.

iii. Effectiveness of local government.

iv. How to deal with the problems of society [Karipidis Ch, "Indicators of citizen service in Prefectures", EETAAAE Magazine, Issue 20, April-June, 2002 (Excerpt from study conducted by the Department of Business Planning EETAA].

- Self-Evaluation of Public Services

The Operational Programme "State" is implemented through six projects, which the sub-2: New Systems Organization & Management "and in particular Measure 2.5: Establishment of Total Quality Management Systems: Self- Evaluation of Public Organizations ", is mainly concerning about how to reorganize and reform public organizations. This measure aims to strengthen capacity of public institutions to self-evaluate all manifestations of their functions.

2.3 Conclusion

All in all, Greece has a low level in public administration services.

Bureaucracy, which is the most important drawback when combined with the reasons that we referred to just above, lead to the necessity of urgent administrative reform.

Through this reform the public administration can fulfil the citizens' necessities, which are constantly differing and citizens will hopefully trust the public services once again.

The competiveness and the development of the country are passing through this reform. Thediscourage of investments and the lack of competition between companies are only two of the problems that can be solved by this reform. The chance by E-

government will be given in order for the public administration services here in Greece to come through this reform and, as a result, to become equal to other European countries.

Chapter 3

3.1 Electronic GOVERNMENT

The requirements of today's society are constantly growing. The goal is to collect information and carry out various operations, keeping in mind that valuable time would not be poorly wasted in identifying the responsible body with great anticipation. Furthermore, the percentage of citizens who are familiar with the Internet is increasing in recent years. These two facts lead to several government agencies into making available e-Government applications through websites, designed to fast service the citizens, who have a request.

The term "Electronic Government" refers to the use of Information and Communications Technology (ICT) in Public Administration and Local Government to provide digital services to citizens and businesses.

Below some definitions for E-Government are thus provided:

- "The use of information technology and telecommunications in the public sector, combined with organizational change and new skills of staff, so as to improve public service, strengthening democracy and support public policies. (European Union)"

- "The use of information and telecommunications technologies, especially the Internet, as a tool for better governance". [OECD, [2003] p.11]

- "Using the Internet for distributing government information and services to citizens". [UN [2002] p.12]

- "The use of technology and especially web applications to enhance access and efficient performance of government information and services." [Brown and Brudney [2001] p.13]

- "The relations between governments, their customers (businesses, other governments and citizens) and their suppliers (corporations, governments and other citizens). [Means and Schneider [2000] p.14]

Essentially, E-Government is an effort to enable the ordinary citizens to perform their obligations towards public bodies by using computers and the Internet, thus gaining valuable time and also avoiding bureaucracy. Furthermore, by using this way, the transactions are more secure, everything is transparent and the corruption can be fought, especially since all operations can be controlled.

Undoubtedly, the common belief that in order for a country to be socially developed at both national and European level, either economically or even politically, a government ought to be capable of listening and responding to changes of the era. [E-Government – From Vision to Implementation, Subhash Bhatnagar, Sage Publications, 2007]

Our country's administrative convergence must be achieved with respect to other European Union's countries. To this direction the public administration plays an essential role. However, several directives and regulations of the European Union member States are urged to cut off a number of financial resources earmarking to public administration.

So, in this context a new model of public administration was derived, the so called e-Government. Originally, this term is associated with the use of the Internet to process transactions with the state. For instance, a citizen could submit their tax returns directly from home using their personal computer. Then, it was found that the Internet could be used to strengthen citizen participation in democratic processes. Today governments declare that e-Government is not limited to automation of processes, but is the most important tool for a broad administrative reform, in which new technologies are of high significance. [Ministry of Interior, Public Administration and Decentralization. Secretariat Public Administration and Electronic Governance. "A key text for development priority. Improving administrative capacity of the Public Administration."]

In our country, the overall responsibility of e-Government concerns with the Ministry of the Interior and, in particular, the Secretariat of Public Administration. On the other hand, of course, most of the e-government projects could be implemented, funded by the Operational Programme, which is under the responsibility of the Ministry of Economy and Finance.

E-government promotes transparency, and enhancing citizen involvement after extended administration, it is comprehensive and open to democratic participation and

control. Also, the public sector is fully embraced. E-Government is a citizen-centered government, without social exclusions for the services provided and in respect to personality, providing personalized services can be achieved. Still, the public sector becomes more productive and utilizes the best money of the citizens, waiting time in queues is reduced, there is a drastic reduction of errors and provides more time to interpersonal service, and improves the work of staff.

The necessity of the e-Government is the fact that different countries must respond to the ever-changing world. The expectations by citizens, businesses and the state itself, while increasing the use of e-Government services addressing the problem of limited resources since it can be carried out with fewer resources. More specifically, the objectives of e-Government is to promote the use of open source software and electronic signatures in the public sector to make on-line all basic transactions available with the European Commission (e.g. finance, procurement, search contacts etc) and to also place public data on-line, including necessary legal, administrative, cultural, environmental and transportation information. Moreover, it is required that Member States of the European Union provide general electronic access to basic public services and create simplified on-line administrative procedures for businesses, such as accelerated procedures for establishing companies. To achieve all these objectives, careful planning and designing needs of each individual case are in need for ensuring the successful implementation of electronic government in local communities. So far, all European countries and most governments worldwide have plans and strategies for e-Government. These strategies include services agreed and evaluated at a European level. The methodology being used to compare the progress of different countries in developing their own services - is known as benchmarking exercise (Benchmarking). The benchmark was designated as the primary tool for monitoring developments in e-Government and conducted annually measurements and reports from international, European and national institutions. [E-Government – From Vision to Implementation, Subhash Bhatnagar, Sage Publications, 2007]

3.2 Types of e-Government services

1. Government-to-government (Government to Government - G2G): In-service cooperation. It is considered as the main point of e-Government and has to do with the

exchange of information and electronic transactions between government agencies at local, national and international level.

2. Government-to-Business (Government to Business - G2B): Cooperation with private companies and public institutions. G2B services are divided into two categories; firstly, electronic supplies which bring on cost savings and transparency and secondly, services offered to companies, which do business with the state and through the right and immediate information can achieve greater productivity and growth.

3. Government-to-citizens (Government to Citizen - G2C): Cooperation between the state - citizens. The electronic services designed to facilitate citizens' transactions with government is the primary objective of e-Government in order for processing time to be reduced and for public information and services to be easily accessed.

[www.ebusinessforum.gr, " The Present and the Future of Government to Business Services in Greece", :]

3.3 Rating level e-Services

A) Level 1: Update - Information: Full coverage of the need to inform the user about services provided through information materials and instructions disclosed on the website.

B) Level 2: Interaction - Interaction: Placing the website of official paperwork in printable form to start the process of service. The integration process is non-electronically.

C) Level 3: Two-Way Interaction: Access via the website in the official electronic form to start the process of service. The process may include the clearance of the user of the service.

D) Level 4: Completed Transaction: Websites and information systems that offer users an integrated and comprehensive online service including handling of complex tasks, such as certification, decision, notice, delivery and payment (if necessary). No extra work is required by the citizen to complete servicing. [www.ebusinessforum.gr, "The Present and the Future of Government to Business Services in Greece",]

3.4 Models of Development of Electronic Government

Undoubtedly the task of transition management of traditional public administration to e-Government is quite difficult. Below are various models of development of electronic government, according to scholars. Others are simpler and others more complex, depending on how researchers perceive the meaning of e-Government. But all of them align to the same point: the simple application of information technology services to government cannot be regarded as e-Government. So, an important aspect for a successful transition of a traditional organisation to be perceived as e-Government is the consideration of factors, which are of the same importance as technology, such as strategy, culture, structure, human resources and leadership of the agency.

3.4.1. *The three rings model*

We have seen that a very large number of governmental agencies have "embraced" the e-Government as an innovative and inevitable structure of public service and administration. Many features and several potential benefits are clearly identified. However, there is a relevant model or practical framework through which the distinct functions of E-government can be studied and can be managed systematically and effectively. In this section we present the model of the Three Rings, which was proposed by Koh and Balthazard. It is essentially a simple, intuitive, well understood and explanatory organizational framework of characteristics that the use of the Internet provides. The model is therefore called the Three Rings, due to the fact that it captures all Internet applications and separates them into three main categories of use.
-Information Use

These organizations use the Internet to disseminate information, for education, entertainment, influence or simply use the touch-contact communication with the consumer. For instance, a city can use the Internet to deliver information on services offered to citizens. This informative use of the Internet is the earliest form of technological applications and for many organizations it still remains the most widely application of all.

-Transactions

Nowadays many organizations use the Internet to support a follow-driven process between users and the system, which ultimately leads to the creation and transfer value. Once using the Internet, a citizen of a country is not only able to attend and learn about their accounts across the public, but he can still give the order for payment. This exchange usage of the Internet reveals issues that previously had not been taken into account or considered insignificant in computer applications, such as security.

-Procedures

The Internet provides entirely new mechanisms for entering into business processes, integrating and linking the power that technology supplies with one that the human intellect, as well as with other resources and networking synergies. The widespread use and the "omnipresence" of the Internet, the ability to display and quote information through a multimedia way, the intimacy that the public has developed regarding the use of standard browsers and the availability of many choices of tools to design, make the Internet an increasingly attractive alternative to complete not just applications of our times, and legacy systems before the Internet age, a single platform.

The important aspect of the classification of e-Government applications using a wider context as the model of the Three Rings is essentially twofold. First, it allows them to plan and manage e-Government projects, a broader and more multifaceted view of the ever growing and constantly changing set of Web applications, so as not to "lose the forest for the trees." Secondly, it enables the managers of these initiatives to identify and focus upon a number of critical issues in each category of the functions of E-Government. Knowing what issues are critical and paying attention to them, costs will be reduced and this will allow e-Government to provide services and information more effectively and efficiently[Observatory of Information Society, Best practices for using ICT in the Public & Private Sector, 2007]

3.4.2. *The model of Layne and Lee*

The Layne and Lee [Layne K, Jungwoo L, "Developing fully functional E-government: A four stage model, Government Information Quarterly", Elsevier, 2001, pp. 122-136] identified four stages in the development of e-Government. These four

stages are as follows: A) Index, B) Transactions, C) Vertical integration and D) Horizontal Integration.

In the first stage, priorities of public administration are the presence and the provision of information online. In many countries the citizens acquire knowledge and information very easy, due to the establishment of several governmental nodes and sites. The public service that provides all the necessary information to the web can save time, money and, in general, resources.

In the second stage, the public service is trying to develop electronic communication with users. The websites of public administration are developed and people recognize the Internet as a valuable tool offering them services they want to exploit. A striking example of this stage is when electronic transactions mainly take place amongst government, businesses and users.

The third stage suggests that the simple automation of existing government services is not enough. The aim of this stage is the unification of local regional public services with the central one. For instance, a building permit can be issued at the local level, but simultaneously a national database of licensing planning can be updated.

The aim of the fourth stage is the integration of different services and functions between different departments of the government. The outcome of this stage is the interaction and information sharing by various departments of the administration. So, from one and only public service organization, a citizen can benefit in services not only for this specific organisation, but also for other government organisations. All these stages are summarized in Fig.2.
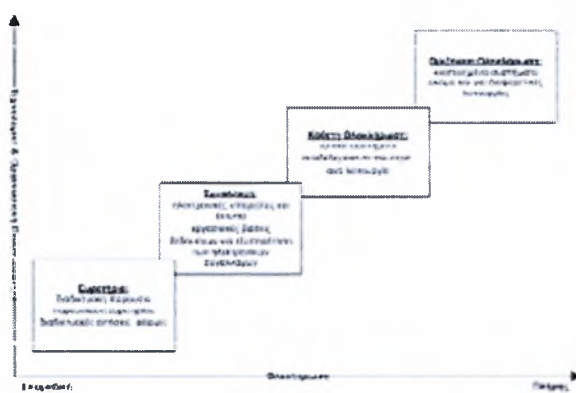
Fig 2: The four layers of Layne και Lee [Layne K, Jungwoo L, "Developing fully functional E-government: A four stage model, Government Information Quarterly", Elsevier, 2001, pp. 122-136]

3.4.3. *SAFAD Model*

This model as shown in Sch.2 was developed in Sweden in 2005 and, in particular, by a Swedish agency for administrative development, the first letters of which derive from his own name (Swedish Agency for Administrative Development) [Persson A, G. Goldkuhl, "Stage models for public e-services integrating conceptual foundations", 2nd Scandinavian Workshop on e-Government, Copenhagen, February 14-15 2005, pp. 3-4]

Many elements of this model are based on Australian National Auditing Office (ANAO). But the aim of this model is to help public agencies assessing what kind of services should be provided electronically. It is also worth noting that the Swedish model was a comparative benchmarking of e-Europe 2002.
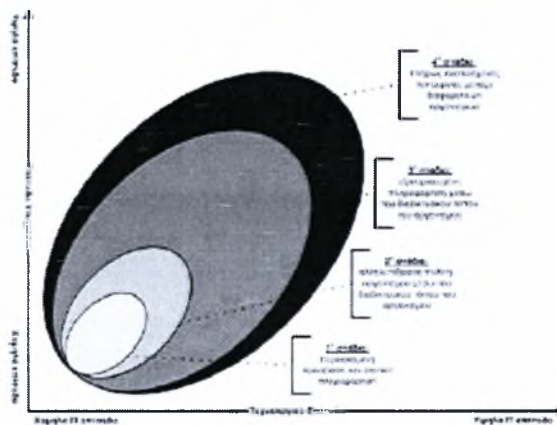
Fig 3: SAFAD model [Swedish Agency for Administrative Development]

The first stage of the above model shows that initial public agencies have limited capabilities. They create websites that provide static information only for the body itself. The public has limited access, and for further information concerning the agency, one should contact the agency itself.

In the second stage the public body begins to interact electronically with citizens. The public visiting the website of the organization may download electronic forms for

services of the Organization, searches databases of the Organization, to subscribe to various services offered by the agency, and so on and so forth.

The purpose of the third stage is the individual service of the citizen. Each citizen expects more solutions to the existing demands. At this point a question of safety transactions arises.

The aim of the fourth stage is the complete electronisation of all services of an organization. It aims to create the so-called one step government, in which the citizen can settle various transactions through a single agency and to provide services.

3.4.4. *Comparative Discussion*

Layne and Lee (2001) refer to the experiences of e-Government as chaotic and unmanageable and, in this sense, claim the importance of dividing the development into distinguishable stages. In Sweden, where SAFAD (Swedish agency for administrative development) is responsible for guiding and supporting the government agencies in the realization of the e-Government vision a stage model is used for guiding and evaluating the progress. (Statskontoret, 2000)

All of these models start off with a stage of providing information to the public. Afterwards, the models begin to differ from each other in a more substantial way. SAFAD continues with an interaction stage, where there is increasing interaction between agency website and the client. The third stage SAFAD and the second stage of Layne and Lee are more or less the same. At these stages the client and agency exchange personal information about the client in a secure fashion. There are, however, some important differences between these stages. SAFAD is focusing less on financial transfers between client and agencies; the other models state this as an important feature of the applicable stage. The last stage where SAFAD pivots the realization of networking agencies. The next step in the models is the integration of government agencies. In Layne and Lee this is divided into vertical; cross-hierarchal integration and horizontal; cross-functional integration. The other models do not separate the cross-functional and cross-hierarchal integration from each other.

SAFAD (Statskontoret, 2000)	Layne &Lee (Layne & Lee, 2001)
information	catalogue
interaction	
transaction	transaction
integration	vertical integration
	horizontal integration

Fig 4: Comparison between SAFAD model and Layne-Lee model [Anders Persson and Göran Goldkuhl, Stage-models for public e-services - investigating conceptual foundations, Paper accepted to the 2nd Scandinavian Workshop on e-Government, Copenhagen, February 14-15 2005]

It clearly appears how differences between different models are usually minor differences and that there is a common trend to classify it as the last level (i.e. the level that requires the highest level of technological sophistication, transformational effort and economical investment) the one that requires a complete integration between several administrations, in order to provide seamless (or integrated) transactional services. In other words, despite different names of equivalent stages in different models, essentially the direction of e-Government development always begins with only the presence and basic information where the technology is treated as simply another site on which to post information. Sites, then, move to stage where interaction and communication amongst citizens, businesses and governmental officials are developed and are the main focus. The next step is provision of real e-service delivery, where the focus is in transactional service and citizens are able to accomplish complete routine tasks online. This stage requires an extensive use of technology that is not only a new way of doing traditional government, but it also has the possibility of creating new and different ways for government to serve the citizens. [Anders Persson and Göran Goldkuhl, Stage-models for public e-services - investigating conceptual foundations, Paper accepted to the 2nd Scandinavian Workshop on e-Government, Copenhagen, February 14-15 2005].

3.5 Benefits of adopting e-government

As mentioned above, the quote of the benefits of adopting e-Government, as can be shown right below, is indicative and without sequence of importance. In particular, the benefits are:

- Save time and money: Without a doubt, every citizen and each firm should not have to wait in queues of a public service to settle a transaction. Instead, there must be a direct, quick and user-friendly way of handling the case. This can be achieved by processing transactions through the Internet. It is obvious that carrying out a case following the above step, money and time are respectively gained.

The above are proved according to three research conducted by the General Society Information of European Commission in 2003 and 2004. Thus, according to the above study, the following criteria are met. [Kathimerini, "An hour gain with each transaction with the State"2005].

The average time that every European citizen wins for any electronic transaction with public services is sixty-nine (69) minutes and for each company sixty-one (61) minutes.

Every EU citizen, who is served by a public electronic Service, wins eighty percent (80%) of the average time that he would spend by himself to settle the case.

With each electronic tax declaration there is ten (10) Euros saving, while the gain for the current Member States of the European Union, estimated that will be over half a billion, when the system was extended to seventy percent (70%) of statements. Regarding to the electronic income tax return, the average user wins seventy one (71) minutes per transaction. Estimates suggest that in future, eighty percent (80%) to ninety percent (90%) of statements be submitted electronically. In such circumstances, Member States of the European Union was estimated to save one hundred (100) million hours year.

The european companies which electronically submit their tax, end up saving 29.3 million per year, and when the total submission reaches the point of eighty percent (80%) of the total submissions, the benefit would amount to 230 million Euros. The percentage of new electronic registration shall be five percent (5%). With this small

amount 2.2 million Euros are already saved. When the rate rises, as measured in thirty (30) percent, then businesses will end up saving 68 million per year. With each online registration at the Higher Educational Institutions users are able to save seventy five (75) minutes, while the time spent by departments of universities in this process is limited to forty per cent (40%).

- Easy access to information by public authorities.

When a citizen visits a Public Service to process a case, he could even spend an entire day to obtain only the necessary information for settling the case. Instead, by creating an online service whose services are available electronically and, in particular, through the creation of Government Gateways, citizens can obtain all necessary information needed to be connected through links to other government gates, so as to complete a case full electronically.

This consists of a 24 hours possibility without necessarily trying to access different government departments during the hours of operation. Such a way of obtaining information does not require the physical presence of the citizen and is the most immediate, easy and convenient way to obtain information. The errors are eliminated and there is the possibility to build a quality management information system.[Proceedings of International Conference on Information Society. "Information and Communication Technologies in the service of e-Government", local development. Heraklion, October 2006]

- Automating processes.

Direct consequence of this benefit is automation processes. A citizen can now visit a site of a public body without requiring his physical presence and can arrange his case electronically. This is achieved, as already mentioned, with the creation of government portals. For the settlement of a transaction between two or more public agencies, citizens can visit a government portal, which will refer to the relevant competent gates of other public agencies. The importance of such a cooperation in local and regional level can be shown by the fact that it has become a priority for the Structural Funds. In such a case, for electronically providing complex services together over one or two companies, process automation is quite essential. .[Proceedings of International Conference on Information Society. "Information and Communication Technologies in the service of e-government", local development. Heraklion, October 2006]

- A transparent public sector.

Many procedures which have been automated or at least have some basic automated steps and do not require the presence and intervention of any human resource, ensure a high degree of transparency and reduction or elimination of irregularities and fraud in public life. For instance, automating the process of procurement of public services, not only saved hundreds of millions of Euros, which can be invested in other public resources, but moreover improved and achieved transparency of the process, by which the commission is made. Transparency means not only automated processes, but also every citizen to know the rights and obligations of each employee, i.e. to know who is responsible for each specific work. [PC magazine, "E-Government in Europe and GREECE", April 2002]

- Cost reduction.

E-Government achieves cost savings on the part of government, but also of the business side / citizens. Specifically, by using the automation process, errors in public institutions, made by workers, are minimized and the costs for personnel expenses are reduced. Furthermore, administrative costs, such as the cooperation and exchange of information between different public agencies, or the same country or in different are reduced. At this point, and to avoid misunderstandings one ought to clarify the following: Automate processes and reduce costs for personnel and mean dismissal of these workers. Instead, these workers are more productive in other places where automation exists and fit with it. In other enterprises citizens can settle a case electronically to save particular administrative expenses that may be available for research and innovation. [PC magazine, "EGovernment in Europe and GREECE", April 2002]

- Flexibility.

Flexibility implies a faster and more dynamic management.

This can be seen in the following example: Assume an Italian citizen living and working in Spain that can communicate and work directly with the Spanish public services. For cooperation and exchange of necessary information from two different Public Administrations the greatest possible flexibility is required. [Realini A, "Master Thesis: G2G E-Government: The Big Challenge for Europe", version 1.1, Department Of Informatics University of Zurich, September 15, 2004]

- Citizen participation in public affairs.

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E-government allows every citizen, wherever he is, to participate in politics. He may vote in national and European elections, to monitor public meetings, actively participate in public forums, take part in polls and share an immediate opinion on subjects making policy and strategy. In a sense, the vision of e-Government supplying democracy services to the citizens, is coming true. This open communication allows companies to be developed and to have fast and reliable information. [PC magazine, "E-Government in Europe and GREECE", April 2002]

- Satisfaction of stakeholders.

The speed, reliability and transparency with which all transactions are executed and handled in the civil cases, are items which require all stakeholders (citizens, businesses, public bodies). Furthermore, the access to information from public bodies, without requiring the physical presence and not to be made only during the hours of operation services, but rather on 24 hour basis from anywhere, contributes to the society. The government is now customer- driven and that is fully understandable by the citizen. These same characteristics are sought by companies, so as to be developed more quickly and reduce their administrative costs. [PC magazine, "EGovernment in Europe and GREECE", April 2002]

- Strengthen transnational cooperation.

The introduction of electronic government allows cooperation between domestic public agencies and between different countries. This cooperation transferred between governments, where the natural boundaries become unavailable. Trade between them can be commercial, economic, with social status or simply to disseminate information and knowledge.

Strengthening competitiveness, productivity and efficiency [F. X. Chevallerau, «The Impact of e-Government on competitiveness, growth and jobs», IDABC Egovernment Observatory, February 2005 & europa.eu.int/idabc/en/document & Commission of the European Communities, «Productivity: The Key to competitiveness of European economies and Enterprises», 262 final, May 2002]

In March 2000, the European Council in Lisbon set out to make the European Union by 2010 a more dynamic and competitive economy, with an emphasis on society, to achieve sustained economic growth with more and better jobs and also better social cohesion and respect for the environment. This goal has become known as the Lisbon Strategy. In order this strategy to be achieved, the competitiveness of European

economies, which is the objective of the Lisbon strategy, should first improve productivity. This latter can be achieved by investing on technology.

In order to clarify the above relationship, the term competitiveness is appropriate to be explained. There is a definite and clear definition of the concept of competitiveness in the economic literature. Instead, the concept remains vague. A definition that can be given is the following: "Competitiveness is the ability of an entity (a company, a country, a set of enterprises, etc.) to operate efficiently and productively compared with other similar entities. This capacity can be measured by availability of products in international markets compared to other similar entities". Another issue of competitiveness definition is the ability of a country to achieve stable economic growth; as they are annually measured with the change in Gross Domestic Product.

Another, however, definition is broader than the two ones above and are adopted by the European Statistics Agency, Eurostat, is given by the Organization for Economic Cooperation and Development (Organization for Economic Cooperation and Development, OECD). The definition is the following: "Competitiveness is the ability of businesses, organizations, industries, countries to produce and sell the products, while constantly subject to international competition, but simultaneously increase the real incomes of citizens." With a better reading, the above definition is a bit contradictory. Concerning the one referred to previously, that produces and sells a company's products efficiently and competes with other firms, while noted it will increase the incomes of citizens. How is this achieved and how are the two a key factor in the cost? The answer to the challenge of truly achieving low cost and high real wages is the concept of productivity. Productivity means producing more outputs given inputs. Thus, the recent decline Productivity in the European Union is synonymous with the deterioration of economic development.

[A. Neely, "*Measuring Business Performance*", The Economist Books, London 1998, pp 5-8.]

If productivity is the path to economic development of a country then technology is an important factor for increasing productivity. The productivity gap observed between the EU and U.S., among others is mainly due to low investment in technology. In particular, during the period 1992 to 1999, investments in technology accounted for 5.6% of Gross Domestic Product of the European Union, when the U.S. accounted for 8.1%. However, the contribution of technology on productivity seems more to be of a model that developed a body (Economist Intelligence Unit) in April 2004. In this

model, used as a sample of sixty (60) countries including the twenty-six (26) ones that were developing and least developing other countries. On that basis, then, this model evaluated the contribution of technology on productivity in fifteen (15) countries and within the USA.

As already mentioned, an important component of e-Government is its technology. Suppose that a company applies the e-Government services, namely electronic deals the Public Service. This means, that on the basis of the benefits analyzed, the company saves time, money, and has human resources in hours of delays at a government agency to settle the transaction, knows that once the process is automated and therefore will be transparent and then has less functional expenses. Thus, having a fixed input or fewer (less human resources involved in the settlement of the transaction) improved productivity is achieved in terms of more efficiency and outputs. That will help into reaching and competitiveness will be compared with other European companies.

- Economic development.

Economic growth depends on accumulation of human and natural resources and the development and efficiency of the workforce. Productivity, as has already been mentioned corresponds to the capacity of producing more outputs, given inputs of labor and capital. The latter depends on the quality of natural resources, improving the skills of the labor capacity, and from the technological changes and improvements. Given, therefore, the productivity and competitiveness, with the introduction of e-Government leads to economic growth.

Empirical estimates suggest that the contribution of technology to economic development of the European Union during the second half of the 1990's amounted to 0.4 to 0.5 percentage point that, while the United States amounted to 0.8 to 1 percentage units. Considered generally accepted that this lag of the European Union against the U.S. was due to low investment in technology at that time. Economic growth is estimated to have the following five dimensions:

A) Upgrading of SMEs. The advantages and benefits of e-Government will no longer benefit only large companies and SMEs. Each company, domestic or otherwise, large or small, receives the same opportunities arising from e-Governance.

B) Education. To maintain the growth of SMEs they have to recruit well-trained staff.

C) Attract high-tech services. The new Digital Economy customers are primarily high-tech companies.

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D) Access to technological infrastructure. New Feature Economy is universal access to technology infrastructure.

E) Friendly attitude of the government. Better customer public agencies have proven to be businesses, not citizens. By being friendly, those engaging in the government co-operation between public institutions and businesses become more smooth and constructive.

- Improving the image of Public Service.

With the above features the image of public institutions is improved. They acquire a more friendly and modern face. The citizens feel that public bodies are ahead of developments and closely follow the callings of our time. They trust the public services for the immediate and reliable dispatch of their cases.

[Regional Training Institute of Thessaly, "E-Government", Lecture Notes] In conclusion, in order all stakeholders (citizens, businesses, other public bodies) to benefit all the benefits listed above, it is necessary to overcome any obstacles that slows the development of e-Government.

3.6 Electronic Government & Electronic Services

The E-Governance aims to modernize public administration by introducing advanced technology and digital online government information systems infrastructure for the savings and quality improvement services to businesses and citizens.

The provision of services by the Public Service, by electronic means inevitably creates the need to leverage the way they are provided, and often confirm the feasibility of various sub-processes or restrictions attached to them.

Consequently, the process digitalisation service involves clarifying the administrative procedure followed. This clarification may lead to a finding of emergency:
 To reorganize the way of processing service.

 To update the forms that must be completed.

[Ministry of Interior, Public Administration and Decentralization. Secretariat Public Administration and Electronic Governance. "Electronic Governance and Administrative reconstruction. B. Andronopoulos, Thessaloniki, September 2006.]

3.7 Clarification of the term "Service"

A department has the following characteristics that distinguish it from a procedure, process, or simply a work of an institution:

A. A user can be a citizen, company or other entity. Exceptionally, for complex services and structures, approximated as users of other departments or managers of the same body.

B. It is deliverable: The deliverable should be independent. The user who receives can use without requiring additional work, trade or deliverables.

C. Has provider: Some Service Unit provides the service (the Directorate Ministry, Prefecture or ADS).

D. Has governor: There is at least one Service Unit responsible for the regulated service.

Services can be simple (information, certificate, certification, financial transaction, transfer of information content) or complex (assessment, advice, competition, procurement, consulting, promotion, supervision, monitoring, licensing, preparation and production of the regulatory framework).

Often, performing a service requires more than a "basic" services provided by different agencies to meet a comprehensive user's needs. For instance the "license to establish the service station necessitates the use of individual services from Public Works, City, Urban   etc. [Ministry of Interior, Public Administration and Decentralization. Secretariat Public Administration and Electronic Governance. "Electronic Governance and Administrative reconstruction. B. Andronopoulos, Thessaloniki, September 2006.]

Electronic Democracy

Electronic Democracy is defined in various ways, often unlike the general condition of electronic government. Electronic Democracy is a condition for the use of information and communication technology to enhance citizen participation in the democratic process. It includes all electronic means of communication that enable citizens, in their effort, to control the activities of public servants in common. Depending on the perspective of democracy, electronic democracy can incorporate various techniques:

To increase transparency in the political process

- to strengthen the active involvement and participation of citizens and
- to improve the quality of gauging public opinion through new sites Information and Discussion.

Morrisett [Morrisett L 2003. "Technologies of Freedom?", eds H Jenkins & D Thorburn, Democracy and New Media, MIT Press, Cambridge, Massachusetts, pp. 21-31] identified six conditions for the use of new technology aimed at strengthening the democratic process:

1. Large, widespread and efficient access to the public.

2. Providing relevant and timely information.

3. Internally interaction and between institutions, politically and geographically distinct communities.

4. Access to various positions in relation to political issues.

5. Ability to highlight opportunities and knowledge about the effects of various options.

6. Information for the actions of political organizations and elected representatives in relation to a topic.

This determination is almost equivalent to the term e-democracy raised by the Committee of ministers of the European Union in 2004, compared with the actions that should be developed are:

- Strengthening participation, initiative and involvement of citizens in local public life.
- Improving transparency of democratic decision-making and accountability of political factions.
- Improving responsiveness of government.
- Encourage public debate and promoting decision-making.

Interoperability in Public Administration

Internet sites are used by institutions of public administration as means of access for citizens and businesses in e-Government services. In contrast, websites initiate requests of the users to the appropriate support systems (back-office), and generally

act as intermediates in the interaction between operators and users of electronic services.

Therefore, the delivery of e-Government services by institutions of government through their websites, particularly at levels 3 and 4 requires the interoperability of the websites with information systems of the body entrusted with handling affairs of citizens and businesses. The interoperability of websites in the back-office systems operators must follow certain standards and to meet certain requirements. All are detailed in the Framework Interoperability and Electronic Transaction Services (PDID) or like the English word e-Government Interoperability Framework (e-GIF), which of course updated and adjusted in line with technological developments, at regular intervals. Undoubtedly, the exchange of data between websites and back-office systems and the process of handling a case of citizens of the back-office systems should be transparent to the user's way.

Apart from the issue of interoperability in the same place there is one interoperability website relating to third parties. There are many cases where a citizen does not know to what body he should be addressed to a specific service and is, thus, forced to seek information on various websites for the public administration. For instance, a citizen does not know whether the licensing of a shop should contact the District, the Prefecture and the city's office of the store. One way of addressing this problem is through websites, which collect and present content from other sites (content aggregation). Of course, policies, standards and technologies will be used either to obtain or use content from other sites, that must comply with the provisions in the Framework Interoperability and Electronic Transaction Services

[Charalambides C.,"*E-Government: Services and Applications*", June 2006]

3.8 Initiative e-Europe-i2010

Under the initiative e-Europe (i2010) there has been a strong effort to turn the Internet and implementation of all services through it. More specifically, it is promoting concepts such as e-Government (e-Government), e-Health (Electronic Health Services), e-Learning (Online Learning Services) and e-Business (electronic business). All these, of course, while trying to combine mass availability of

broadband access to citizens and businesses, are simultaneously safeguarding the privacy of users. The e-Europe Action Plan is part of the Lisbon Strategy, which aims to make Europe the most competitive and dynamic knowledge-based economy by 2010. The design of the e-Europe being developed over the following four lines of action:

A. Policy Measures to review and adapt legislation at national and regional levels to strengthen competition and interoperability, awareness, and to underline the political will.

B. The policy measures supported by the development, analysis and dissemination of good practice. Projects will be launched to accelerate the deployment of applications and infrastructure technology sector.

C. The policy will be monitored and concentrate better through the benchmarking of progress in meeting the objectives and policies that support these objectives.

D. Overall coordination of existing policies will bring about synergies between proposed actions. A steering committee will provide better oversight of developments in policies and ensure adequate exchange of information between policy makers at national and European level and the private sector.

[http://europa.eu/legislation_summaries/information_society/c11328_el.htm.]

3.9 Legislation in Greece

Although the Greek Public Administration has understood the necessity of supporting the communication of Bodies by electronic means, the degree of adaptation is still in its early beginning. The need for new regulations and legislation is indicative, which aimed to simplify the procedures of public administration and integration of Community law in the Greek reality.

An example of a need to adjust the institutional framework is the Regulation of Public Communications Services (KEDY), which determines the communication way between public bodies. The KEDY needs to be reformed to include appropriate topics:

- Implementation of Integrated Information Systems and electronic support services, which allow the gradual adjustment electronic transactions.

Because of the objective difficulty in immediate implementation of electronic transactions, there must be a separation of the documents set in paragraph 3 of Article 14 of Law 2672/1998, which the documents can be integrated to direct provision through electronic services. Also, this article should be expanded to include issues of data handling and processing respective services with web services.

• Phasing out the conventional way of filling documents and enforced the electronically way of archiving.

• Implementation mechanisms for easy search of archived data, referred to entered data of earlier cases or processed cases through standardization encoded metadata.

• Re-evaluation of Law 2690/1999 (Ratification of the Code of Administrative Procedure and other provisions, GG 45)so as to be considered of as a valid renewal information which are exchanged between institutions, as well as possible sanctions of the usage of outdated material.

• Create standard electronic documents or forms on topics such as circulars, recommendations and decisions, as well as gradually cancelling of forward documents and documents for widespread use.

[General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralization, "Regulation of Public Communications Services, Athens, January 2003]

Requirements for using e-Government

The potential user of an online service of a Body of Public Administration, either being a citizen or a business, during its interaction with the "Electronic Public Administration should comply with the following:

• It is unnecessary to know which the function mode is, as well as the structure and the responsibilities of organizational units of the administration being involved in servicing.

• It must contact only the starting point of service (center service, public information system) and receive the result of service from an exit point without intermediate steps involved in service (One-stop shop), and

• There must be continuous (online) information on the flow of information and decisions, which concerns the cases that are handled electronically. To meet the requirements of users of electronic services provided by agencies of the Public Administration, it is clear that services will be provided with an information system beyond a single institution. The system should be able to combine content and functions of the individual Web services stakeholders in a transparent manner for the final user of the service. There are efforts towards this direction, so as to develop information portals and service covering a wide range of public administration bodies (e.g. Financial Services) or in the best case, the entire Administration. The Web portals are known by the term Government Portals. However, in order for dynamic composition of heterogeneous data functions and services from different public administration bodies to be achieved and for the disposal to interested parties to be allowed, there must be the completion and the interoperability of all relevant information systems that carry out parts of different functions, since a transaction of a public body may lead and / or require automatic controls data from other agencies. [General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralization, "Regulation of Public Communications Services, Athens, January 2003]

3.10 The importance of broadband

In order for the municipality and the citizens to make use of ICTs, the "Broadband Networks" is needed, due to the fact that it can provide quick, secure and reliable Internet connections. Moreover, opportunities to provide better services to citizens are offered, but also a source of revenue since the TA may be involved in construction, management and operation of broadband infrastructure.

General implementation of broadband networks make significant changes in the operation of each local community and contribute to the improvement of quality of life citizens as they provide new opportunities for health, learning, culture, entertainment and entrepreneurship.

Broadband means "broad band" required to transmit data at high speed over a telecommunications channel. Broadband brings with it a significant qualitative change in services, applications and content offered by the Internet and ICT. With the "Broadband, Internet, telephony and TV converge, while the terminal is consolidated (computer, phone, TV).

Network services / applications can offer a dynamic, integrated and high quality. (KEDKE Conference, November 2007, Thessaloniki).

3.11 Government Portals

The "Government Portals" are the backbone of any e-Government system and have, therefore, a central point of debate in each state or intergovernmental effort of introducing e-Governance.

A "Government Portal" is a portal that:

- Deals with the Public Administration.
- Is subject to government or state agencies.
- Is aimed at groups of users, who have dealings with the Public Administration.

The aim of the "Governmental Portal" is structuring a government agency, which provides a central contact point for users (citizens, businesses, etc.) for each kind of information (guidelines, information, news) or service (government agencies) needed

bythebody.

The most common user groups, consisting of a "Governmental Portal" is:

- Companies (companies, organizations, etc.)
- Citizens.
- The cooperating government agencies.
- The officials of that government or state authority.

The government body in charge of a "Governmental Portal" can be:

- A specific agency or department (e.g. Ministry of Finance, Social Security, TEE). Citizens.
- A local state authority (Region, District or City).
- The central government (the Greek Government).

The countries that are pioneers in the field of "Electronic Government "(Denmark, Sweden, Britain, Ireland, Canada, USA, New Zealand, Australia) have set a target of a central government portal at the country or geographical region, wherein a potential user can be informed and served on any matter concerning his contact with the state.[Plessas F., "Alternative Technological Methods for Reconstruction of Public Agencies",Master Dissertation 2009,University of Patras].

Conclusion

E-Government offers the public an opportunity to maintain and strengthen good governance in a knowledge society, through the transparency of its services and the productive exploitation. E-Government strategy should focus on achieving the goals of Lisbon, to reduce barriers to internal market for services and mobility across Europe, effective application national policies and regional or local development.

With the development of technology and the Internet, more people are likely to have fast and reliable information through the municipality. In order to evaluate e-Government progress in some countries several stage models describing the evolution of public services have been developed. These models divide the development of e-Government into several stages from simple information provision to more complex services.

Too many government agencies have "embraced" the e-Government as an innovative and inevitable structure of public service and administration. Many features and several potential benefits are clearly identified. However, there is a relevant model or

practical framework through which the distinct functions of e-Government can be studied and managed systematically and effectively.

In order to evaluate e-Government progress in some countries, several stage models describing the evolution of public services have been developed. These models divide the development of e-Government into several stages from simple information provision to more complex services.

There are also legal - institutional unresolved issues concerning electronic governance. The communication between public services and transactions of citizens and the state are mainly manuscripts in accordance with existing institutional framework. But now, with e-Government communications and transactions being done electronically and therefore need a corresponding institutional framework that does not exist.

So by using the programs, e-Europe earlier and the strategy i-2010 is part of the plan for the e-Government program "e-Gov2010". E-Government is a horizontal aim, as a government which is effective through information technology, contributes to improve the daily lives of citizens and the competitiveness of each country (Institute Local Government, August 2006).

Chapter 4

4.1. Business Process Improvement

In recent years emphasis has been given to the role of process and is by now considered to be an essential component for the organization and functioning of organizations. By improving procedures the performance of an organization can also be improved. The process of connecting the past with the future allows us to schedule future work. In practice, improving processes is a key strategy used as a Management tool to support the mission, vision and objectives of the organization. In the private sector there are two prevailing philosophies in improving processes:

• Continuous Improvement Process.

•Business Process Reengineering.

4.1.1. *Continuous improvement processes*

Continuous Improvement processes are primarily associated with the management of Total Quality. Small groups of workers (often referred to as cycles quality) apply techniques solving quality problems (e.g. cycle DEMING, JURAN trilogy etc) and they aim to achieve, and follow a continually systematic way, also small and sustainable improvements in the processes of space responsibility. These efforts focus on better use of available resources, to improve the quality of output and reduce the execution time and cost of the procedure. Whenever a better integrated workflow is achieved, efforts for further improvement are resumed. Continuous improvement is therefore used in normal functioning of the Agency and based on the philosophy that a process could be possible, then it could be better.

The best known definition of the redesign (or refurbishment) of procedures is this spoken from the HAMMER and CHAMPY. "Reengineering is the fundamental rethinking and radical redesign of business processes to achieve dramatic

improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed".

[http://en.wikipedia.org/wiki/Business_process_reengineering#Definition]

During the redesign efforts focused on the "from end to end processes", which are usually cross organizational units. These processes are critical for the Agency and are directly related to the vision, the mission and the strategic objectives.

Interdepartmental groups are working to map and analyze existing processes (state "like-AS BE") and then to design of the new situation (situation "as it should-TO BE") which achieves the desired performance.

The resulting redesign programs are guided directly by the leadership of the agency and interdepartmental groups are organized and managed by senior management. Actions of the redesign are radical and transformational. In fact, the agency is reinstated under the redesigned processes. The organizational and technological infrastructure is significantly affected. In particular, the role of technology changes and is transformed by a support mechanism into new driving mechanism procedures. The redesign of the technology rather than pulled from existing procedures, pushes, and activates the new procedures. [Anthopoulos L, "*Participatory E-government*", PhD Thesis, Thessaloniki 2005].

 By using the term reengineering of public administration, we mean development architectural structure of the organization, joining the strategy of a public body with administrative procedures, so as to ensure that strategic objectives were eventually achieved. It is about an organizational change program, which focuses on processes rather than functions of the body, so that significantly improves performance. The simplification of administrative procedures is a common desire of unfulfilled policies that has the responsibility of planning, as well as the compliance audit of other, entrepreneurs and finally, of all people traded with the public. As in the case of business process reengineering, it all comes down to redesigning the processes of the organization in order to achieve dramatic improvements in critical performance measures such as cost, quality, service and speed. [Saxena K.B.C, "Re-engineering Public Administration in Developing Countries, Long Range Planning", Vol. 29, No 5, 1996, pp. 703-711].

Re-engineering government is identical with the concept of reengineering business processes, thus only applying to public administration at local government and other

agencies of the broader public sector. So, given the differences in public and private sector, authorities redesign business processes to be modified before implemented in the public sector.

The objective of redesign of public administration is the change of a public body in the direction of what it is doing rather than what it is. It includes the total reprogramming, redesigning and implementation of administrative procedures, organizational structure and supporting information systems in direct or indirect response to external forces in order to achieve the objectives of the organization. Possible objectives are to radically improve in time, efficiency (cost) in quality of service and finally in satisfaction of external client-citizen. The idea behind the redesign is simplification of procedures, by using the removal of unnecessary documents or limitation of stakeholders, ranging from those that mostly afflict the citizens.

 The redesigned administration is effective and open to citizens, while offering best services in an environment of transparency, providing, nevertheless, full access to Public information. The most important conclusions on the simplification of the last twenty years are the following:

- Simplification is not a static one-off process. The concentration procedure that needs simplification is now a necessary process since the technological, social and economic developments become inoperative.
- The simplification of procedures is integral to change and reform all the activities that constitute Decision-making processes at all levels of government.
- The simplification requires constant political decisions reducing state intervention and the adoption of specific principles of intervention.
- Coordination of procedures is more of a cultural issue, rather than a technical one. That means that it largely depends on business culture, of how that is receptive to operational change.
- The simplification of administrative procedures requires the active participation on behalf of people in administrative and economic process, maximum self-awareness and appreciation of their role.

[Karkatsoulis P., "*Simplifying the procedures for social and economic development*", Oikonomikos Taxydromos, 2001, p.30 (in Greek)]

4.1.2. *Key features of re-engineering government*

The redesign of public administration consists of four basic dimensions:

- Strategy.
- Organizational structure.
- Information Technology.
- Culture.

The redesign of public administration requires great care in all four dimensions and is trying to improve areas, where there are conflicts between them. Optimizing only one, if that does not lead to improvement of the others, then it may not have positive results for all process. In the past, automation of State services that took place in the most developed countries had failed, because the main emphasis was only given to technology, neglecting the other dimensions of the redesign public administration. [Saxena K.B.C., "Re-engineering Public Administration in Developing Countries, Long Range Planning", Vol. 29, No 5, 1996, pp. 703-711].

1. Strategy

Strategy is a very important element of the redesigning of public administration, and identifies the objectives and direction. As reengineering of public administration is defined the mechanism by which it achieves the organizational structure that connects the organizational processes with strategy, the strategy is, then, the foundation of the redesign. Without concept of strategy, any attempt to redesign it would be ineffective. The strategy of an organization is determined by creating a vision and establishing objectives that will lead to realization. The strategy is the possibility of a combined team to understand where they want to reach, to identify measures that should be taken to bridge this gap and to implement those measures to effect change and maintain its beneficial effects. The key feature of a vision is its long-term aspect, as it cannot be achieved in a short period of time. The vision should be aligned with strategic business objectives, and this is a necessary condition to lead to desired

results.[Watson G., "Business Systems Engineering: Managing Breakthrough Changes for Productivity and Profit", John Wiley and Sons Inc, 1994, pp. 37-38].

Speaking about a public institution, the vision refers to the ultimate target, which the agency will be required to succeed in the market, where it exists or the wider environment in which it operates. The goal should be communicated to citizens through a public statement of vision. The concept of the vision of an organization should contain two elements: guide thinking and a feasible, common picture of the fundamental purpose of organization, which are all committed. For example, if we refer to a public organization, the vision should include concept of social "good", i.e. the interest of society as a whole. The broader vision could provide high services that will fully satisfy users with the lowest cost and will be offered at prices affordable to the community whole. After clarification of the vision of the organization, it would be appropriate to mention that it was made to be more specific, realistic and to have achievable goals.

(Specific, Measurable, Agreed, Relevant, Time-Specific - SMART).

2. Organisational structure

In the traditional structure of public administration, senior management has more power, it is in the top of the hierarchical pyramid and employees located at its base. The citizen has no direct involvement in public administration. While in theory that is implied to be the centre of all activities, in practice this does not happen. The only involvement is limited to: higher administration is supposed to know their needs and trying to apply policies that promote their interests, while workers try to achieve the goals set by management.

Instead, the re-engineering government aims to bring employees on the basis of the hierarchical pyramid closer to the citizen. This will better understand their needs and adapt procedures of improving their effectiveness, while increasing and overall satisfaction of citizens - foreign customer. Therefore, the Redesign seeks to transform the entire organizational structure, and management becomes an entirely new role. As there is understanding of the internal practices and problems of workers, there must be support by removing barriers, improving processes through careful listening of the ideas of employees and continuous support in trying to implement new procedures. Another related issue is the empowerment of workers. As a part of the redesign, empowerment is the ability of the person or team to work on its own way and pace,

within the agreed framework of place and time and given resources to achieve a target established by the leadership of the organization. The principle of this philosophy is giving employees the power to take decisions to implement the needed improvements in procedures and the freedom to operate autonomously and independently, making them, in their opinion, necessary changes. [Saridakis N, *"Business Process Reengineering,"* National Center of Public Administration presentation].

3. Technology

The development of information technology is a great opportunity for accelerating the development of public administration. The services sector, in which the government is enrolled, is labor intensive and, hence, information technology plays an important role in improving its efficiency. Unfortunately, the use of information to the public in later years is related to the services of the private sector. The information technology offers significant help to modernizing many agencies of government at all levels. In addition, it reduces costs transactions between the private and public sectors and modernizes key management systems within the public sector, such as customs, tax, national land, population registers, etc. The IT is a driving force behind the redesign of public sector and is indeed as an integral part of it, due to two variables that positively influence this role:

- Interface. Most public agencies are particularly bureaucratic in their structure, so networks have developed internal communication. Information technology can link flows information between different public bodies through modern communication networks.
- Accessibility. The computer can provide direct access to organized databases and data sources simultaneously in many organizations. But often because of the lack of the link, the various agencies do not have access to the same information and perhaps not linked to the same server. The diversification at hand, in both the volume and content of information, is available. Common databases can provide accurate and timely information to many public organizations, making it possible to manage based on data and not base types.

Actually, the technology gives the opportunity for the government to meet the needs of citizens and municipalities to provide new methods to provide services which will aim to better meet them. Characteristic is the increasing use of Electronic Government

globally. [Saridakis N, "*Business Process Reengineering*," National Center of Public Administration presentation]

4. Organizational culture

Organizational culture is a set of beliefs, values and expectations shared by members of an organization. These beliefs and expectations product rules, norms of conduct, which govern the overall behaviour of individuals - groups in the body. The older the culture, the more integrated ones are the perceptions of the body and it is more difficult to be converted. Hence, organizational Culture evolves in the course of the organization and could be seen as the biggest obstacle to the redesign. Indeed, culture of the organization, deeply rooted and firm beliefs of employees can cause tremendous problems to the whole issue of redesigning organizational processes. The values of the company, which over the years have been adopted by all employees, can be a significant barrier to change. This does not always happen. Some values that promote change in a company is to encourage the adoption of initiatives, transparency, the public and known to all employees a vision and respect the confidence and emphasis on service quality, while values are obstacles to change is the avoidance of risky options, hesitation and lack of communication, thinking and gregarious increased competition between partners and members of a team. The revamp aims to change the organizational culture the creation of a new, more receptive to change. Empowering workers contrasts with the existing culture of public administration, which is structured according to the bureaucratic model organization. Because of the bureaucratic nature of public administration is characterized by strong stratification, the senior management has considerable power over ordinary workers. Thanks to this power, relations are at a level of workers - supervisors, where the workers have no right to comment on or consider the decisions and acts of their superiors.

The redesign is directly related to initiative and decision decisions closer to the base of the hierarchy as possible. Furthermore, the employees are those who know better how to complete the task for which they are responsible. Thus, the readiness to accept culture change depends largely on the leadership organization and the establishment of open communication at all levels. If the administration inspires and establishes a system of open communication and mutual respect amongst workers with a system

based on merit and healthy rivalry and competition (no competition), the change is welcome much smoother than a cumbersome and bureaucratic work environment. The redesign problem is to accept the vision, goals and methodology within all the organization to address i.e. organizational barriers to change. This may be possible with continuous education and training of workers to the changing needs of work, and constant awareness of the advantages that the change can have regarding daily workload. [Regional Training Institute of Thessaly, "Development of Strategic Management", Lecture Notes].

4.2. Continuous Improvement and Rescheduling Procedures

The components involved in all the methodologies to improve procedures are: People, Processes and Technology. Continuous Improvement efforts focus on people and in how they handle their work. Achieved improvements are usually20% slowly and without great risk. However, during the Reengineering, these efforts focus on relevant procedures and technology, but usually seeks improvements in 1000! % within a short period of time. This of course involves extensive changes in organization and high risk. The following figure shows the differences in size and years of improvement.
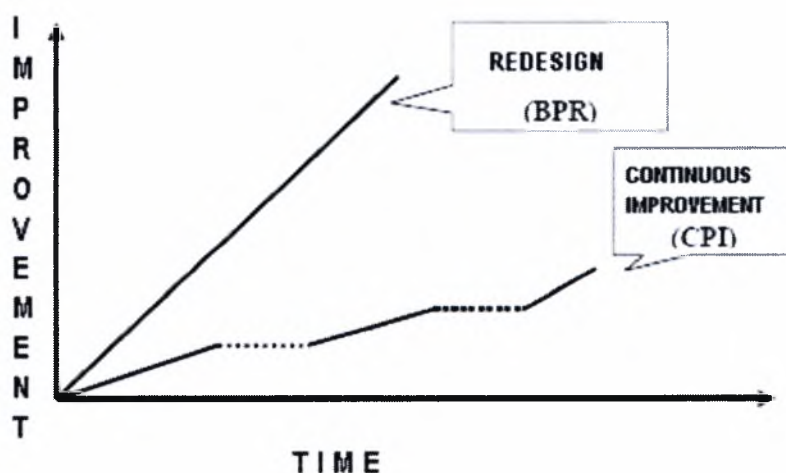

Fig 5: Re-engineering processes and continuous improvement [Regional Training Institute of Thessaly, "Introduction to Business Process Re-Engineering", Lecture Notes].

Generally both philosophies have common objectives:

• Increase efficiency.

• Improve customer service.

• Reduce costs.

• Use of information technology.

• Reduce work identical and isolated systems.

The last time the Continuous Improvement and Reengineering tended to merged with the common name Better Business

(BPI: Business Process Improvement).

4.2.1. *Basic Principles of the Improvement of the procedures*

Public Administration in America, recommends the following principles should apply to all efforts to improve procedures.

• Organizing its results and not to work.

• Use the competitive analysis and other techniques to evaluate the costs and benefits of the procedure.

• The modernization process before automation.

• Establish the owner of the process (responsibility, accountability, authorization)

• Convert data processing in real work produce information.

• Place the deciding points out that work and set up regulatory mechanisms.

• Standardization of these procedures.

• Spotlighting the client (citizens and businesses).

• Collect information once and preferably at its source.

• standardize data definitions across the organization.

• Change now and no waiting for the perfect solution.

• Design a new system only as a last resort.

In general, the GSA (American Public Administration) recommends that teams working on improving procedures to respond to any proceedings to following questions:

A. Can you do what I do?

B. What do I do better?

C. What can I do in order to be cheaper?

[Regional Training Institute of Thessaly, "Introduction to Business Process Re-Engineering", Lecture Notes]

4.2.2. *The Rescheduling Procedures as procedure*

The redesign of administrative work, as work is a specific and well defined process and therefore it has input, output and processing. Input is the today procedure called "AS IS". The output is a new procedure we called "AS REQUIRED" or «TO BE». The processing is the set of actions that transform the process from "AS IS" condition to "AS REQUIRED" situation. Basically the process of redesigning can be shown the figure below:
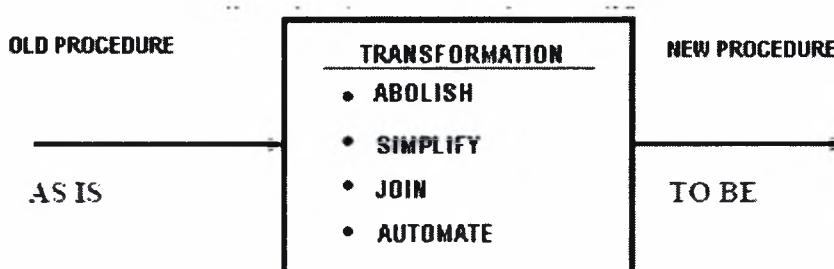
Fig 6: The Reengineering of administrative processes as a process [Regional Training Institute of Thessaly, "Introduction to Business Process Re-Engineering", Lecture Notes]

Although the definition of "AS REQUIRED" status is the subject of redesign, in general, the new processes are:

• Better (quality indicators)

• Cheaper (cost indicator)

• Faster (indices year)

[Regional Training Institute of Thessaly, "Introduction to Business Process Re-Engineering", Lecture Notes]

4.3. Implementation Categories of the Reorganization of Public Administration

Given the inherent difficulties in implementing the redesign of public administration, the various agencies do not apply to the same extent at all times. Thus, depending on the degree to implement the magnitude of change divided into three categories.

1. Improve

That is the lowest level of implementation of redesign. It usually includes a better part of a process within a single function, rather than to improve the whole process from start to end. The aim of this type of redesign is to improve individual sub-projects, i.e. value added activities of the process, which includes seeking opportunities to reduce bureaucracy, duplication of work and preparation of courses and simplify operations. For this type of redesign, the use of IT is rarely required. It is very easy to achieve, while such an effort can have scores of 5 to 25% of the total performance of the procedure. But rarely has an appreciable effect on final outflow. Once limited to a subproject of a process involving a few people in it, so we will meet very little resistance application and therefore very low risk of failure.

2. Process Reengineering

This formula includes the total redesign of a process of beginning to end. Moreover, each process requires a more integrated approach, as it consists of different subsystems - subprojects. This means that the process redesign requires subsystems coordination and reorganizes the way in which they are linked and not to mention the value chain. Such a redesign requires analysis of the process model at the highest levels of hierarchy and a decision on possible ways to improve it. The application of this type of redesign of public administration is a strategic decision and has the necessary support from management. Indeed, it may lead to radical improvement of the final process at 50% or even more, in terms of cost, estimated quality and turnover. Also, there are significant investments in resources - inputs needed to reach

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and assist technology information in designing new processes. Additionally it can prove risky venture, especially because of the need to cooperate several functions or departments and the risk taken by organization to achieve the final result.

3. Organizational Restructuring

This formula contains the highest degree of implementation of the redesign of public administration and is designed to change the structure and culture of the organization in order to improve all procedures. It starts with a fundamentally internal assessment of the agency, which refers to the purpose of its existence, and the objectives which are essential in succeeding. Only then, the agency can monitor its performance, how to achieve its goals, and how this method could be improved. Organizational restructuring means complete and total change in the organization, both in goals and in methods.

Although this way is very dangerous and costly, successful implementing agency may result in the following:

- Radically improve the overall performance of the organization.
- Clarity and transparency objectives, guidance, skills and real mission at all levels of the organization.
- High degree of customer satisfaction.

Despite the obvious benefits of the restructuring of an organization, only few are those who dare, because of the high risk that this project involves, and the high costs required. Be it is also clear that the types of the two redesign (public administrative and operational) are identical or at least have too many similarities. Thus, we report the conditions: (a) restructuring of the whole business (enterprise wide change), (b) changes to improve each process (process improvement changes) and (c), changes at work (Task level changes). The degree to which, therefore, a business or an organization decides to implement the redesign of processes depends on many factors, including the amount of investment that is willing to make the means available to implement the redesign, how leadership is committed to the objectives will be required in achieving and the risk to take along with its objectives. All these factors play an important role, certainly not the same in every circumstance, so a redesign effort is never identical to another. [Saxena K.B.C., «Re-engineering Public

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Administration in Developing Countries, Long Range Planning», Vol. 29, No 5, 1996, pp. 705].

4.3.1. *Planning for phased implementation of the Reorganization Public Administration*

The dilemma of whether ran effective implementation of redesign of public administration is at a government agency, can easily be addressed by phasing in steps as shown in Figure 5.2:

Business Process Reengineering Cycle
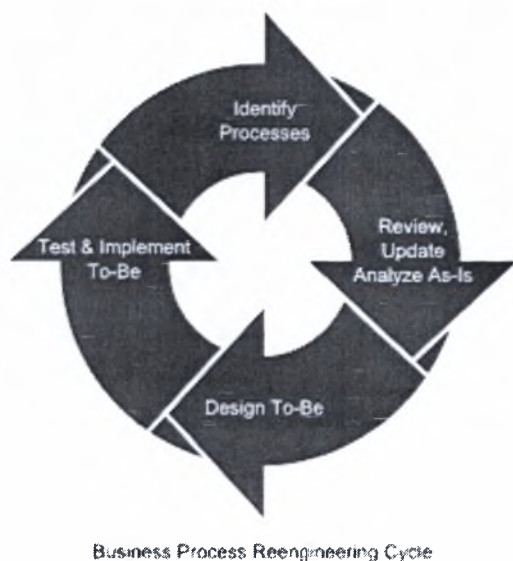
Fig 7: Methodology for implementing the redesign of organizational processes [http://en.wikipedia.org/wiki/Business_process_reengineering]

A framework for this could be the following:

- Step 1 - Vision

The method of public administration reengineering is closely related to mission and vision of the organization. It is therefore essential on behalf of the agency to develop a clear strategy and to set the vision, with respect to be communicated to all employees and social partners. It should be noted that the vision is not a banal statement formally made by all the organizations, but is a picture of the future of the organization, which

should be shared by all officials, and which unites them as a common identity, towards a common future.

- Step 2 - Identify the process

Since the strategic vision and objective of the target are set, the organization should identify the organizational processes, individual goals, limitations, their interactions, the main inputs and outputs and the parts involved in the execution of each of the procedures. It should also identify the clients, the internal and external suppliers, i.e. those providing inputs. Furthermore, all the subsystems should create a map where all processes ought to be depicted (Business Activity Map). Then, there must be an identification of the key organizational processes i.e. those directly related to the organization's strategy, which contribute to creating added value and may be candidate for redesign. So are the two characteristics which have a process to be a candidate for redesign, to be strategic in terms of importance and produce value for the citizen. The organization may have to choose between those who are more critical the need redesign; their claims to resources and the level of risk in the implementation of the redesign.

- Step 3 – Process Redesign

It is necessary to model the particular selected procedure in a high degree of detail. The modelling involves creating a graphic imaging process with flow charts (flow charts). After modelling, the process is analyzed with emphasis on weaknesses and problems. The analysis is, then, based on the detection and measurement of specific performance indicators. Below is a gap analysis (gap analysis) to assess the gap between the point in which the body is shown and what we want to do in the future. In this way, process redesign and improved as necessary and as an available technical and financial resources. In case that the economic resources do not prove enough to meet the needs of redesign, then either the design of business should be reviewed or increase resources for the implementation of rescheduling process.

- Step 4 - Implement the process

At this stage, enhanced or redesigned process becomes functional with the necessary improvements in organizational structure, systems information technology and, if necessary, in organizational culture. This phase can pass through many intermediate subsystems, if the changes that need to be done are great and have to be implemented gradually. In this case, it is necessary for the initial plan to be applied, making the

necessary course changes where the conceptual plan is not workable. Necessary at this stage is the notice and continued training of staff involved in implementation, in order to address any problems that may arise.

- Step 5 - Assessment process

The new plan should be monitored and evaluated continuously, in order to ensure that all internal weaknesses and problems have been resolved. We must create units of degrees in order to achieve the goals of change and constantly assess the possibility approached pragmatically. However, the new procedure, the implementation of the redesign may have been improved, even if the performance does not meet the objectives originally set.

- Step 6 - Improve

The phase of continuous improvement is the last stage of the redesign, which is indeed for the ultimate goal. All the individual steps - steps are achieved, so as to help achieve the ultimate goal, which are the continuous improvement. The fact is that all methodologies to solve problems are to identify weaknesses in the agency to able to resolve. According to the circle of Edward Deming: Plan-Do-Check-Act, the redesign is a process that never stops. Continue to optimize the entire process. It is then in progress, as the redesign of public administration aims to continuous awareness to achieve optimal results.

[Saxena K.B.C., «Re-engineering Public Administration in Developing Countries, Long Range Planning», Vol. 29, No 5, 1996, pp. 710].

4.3.2. *Obstacles in the implementation of the Reorganization*

The redesign of public administration is not always easy to apply, because of some characteristics of a public body. The features could be seen as obstacles to implementation of reengineering:

- Most public agencies place emphasis on written processes and formulas, while there is a lack of clear strategy and targeting.
- The Concept of client in the public sector is different from that within the private area. Even if you explain the concept of internal and external client in the chain of quality services, more public agencies are monopolies or

oligopolies and bureaucratic organizations do not have a position on "voice of the client", a very important parameter in the private sector.

- The benefits can be derived from the Public Administration Reengineering mainly due to the cooperation and horizontal action between functions. But in public administration, organization and communication is based on the vertical structure of the hierarchy and thus is likely to be applied only to prove a very difficult task .

- Improving a process requires first determination of it. It is true that the concept is new to most public bodies, which makes it quite difficult to determine, measuring its performance and evaluation.

- The concept of hierarchy is very strict in red public services, middle managers have many opportunities for autonomous action without authorization from a supervisor. In a sense, the middle managers feel powerless and therefore not take the initiative.

- The weakness and anxiety felt by public managers is partly because they see that the best lessons resulting from the private sector, the sector is in recession but follows a continuous rise. The crisis of public administration has taken a more ideological form. The governors feel anxiety and also understand that they lack the theoretical background, which increases the feeling of powerlessness and anxiety.

- The governors of local governments must implement policy set by elected representatives of the people, which means that they have power and authority to take several initiatives, if their personal decisions and judgments conflict with the elected representatives of local society.

[Saxena K.B.C., «Re-engineering Public Administration in Developing Countries, Long Range Planning», Vol. 29, No 5, 1996, pp. 706].

Conclusion

Summarizing the key points of this chapter, it is concluded that redesign organizational processes (i.e. the fundamental review and radical redesign of processes to achieve dramatic improvements in critical measures of business performance such as cost, quality, service and speed), is strategically important for

any organization, whatever the economic situation and development phase in which it might be located.

Moreover, the degree of implementation of the redesign is not the same in every organization.

Instead, it varies depending on the need for change, how effectively procedures were implemented and the time they decided to redesign the amount of resources available for making change, and so on and so forth.

The methodology for the application of Re-engineering organizational processes is not consistent both in literature and in practice. There is not a single definition or a specific way of implementation.

Thus, organizations that try to make the process of redesigning implementation, do not use the same method, either influenced by the different approaches, by the needs of the organization, or even from the Perceptions of the Administration's vision and of means to achieve this.

Actually, the redesign is a very useful methodology for change processes and achieves organizational change, because it can bring significant benefits to the performance of the body, improvements in time and cost, profitability, market share, customer satisfaction.

Simultaneously, the structure of the organisation is optimised, in order for more effective performance to be achieved and the organizational structure level is getting flat, with fewer layers of hierarchy. In this way, the body acquires greater flexibility. There is also a significant improvement in internal communication and cooperation on climate prevailing in the body, while the relations between labor and managements are improved.

It is true that the government has gone through a stage, where its emphasis is on the needs of citizens and not just internal objectives efficiency. To achieve this goal, the public administration must be effective and efficient (productive). For this reason the redesign / reconstruction of public administration has been adopted to coincide with the redesign of business processes, only that it applies to public authorities, organizations of the wider public sector and local authorities.

The aim, then, is to simplify procedures by eliminating unnecessary supporting or limiting the stakeholders, starting those that afflict most citizens. The reformed public administration is effective and open to the public, as it provides better services in an environment of transparency and will also provide full access to public information.

The ultimate goal of any reconstruction method is improved. Speaking for improvement always refers to improving the quality of service to citizens but also of benefits for the organization itself.

We conclude, therefore, stressing that technological reconstruction government agencies are both necessary and feasible and there are many successful examples and solutions that can be followed. As suggested in previous chapters, one shares some good mood and so will the respective governments and the employees themselves.

Chapter 5

5.1 Information Society

Entering the country in the Information Society (IS) is a key strategic choice for achieving sustained economic growth and convergence with the economies of our European partners. The development of the Information Society has the potential to transform Europe into a society and economy, where advanced technologies are used for improving living and working conditions of all citizens. The Information Society creates new data and new opportunities for growth, prosperity and quality of life. Unlike other technological changes, rapid development and deployment of Information Society affects all economic domains, organizational and industrial structures, public services, cultural and social activities.

The Information Society promises to offer a wide range of benefits, including more high living standards, business opportunities for participation in new growing markets, changes in production methods and delivery of products with higher productivity, more unsatisfactory to the employee work, which will use advanced technology and flexible labor arrangements. The same technologies will allow workers to upgrade their skills as part the process of lifelong learning, which aims to improve the prospects for employment and incomes and strengthen education and learning in schools. For citizens and communities, the information society promises to provide better public services, as governments develop services that focus on Shopping Cart citizens, thus offering choice and convenience. Needless to mention that those who live in remote areas and scattered communities will also benefit from access to economic and social opportunities offered by emerging technologies.

5.2 National Strategy 2006-2013

The Digital Strategy 2006-2013 replaces the "White Paper" on the Information Society and strengthens the existing role of the Operational Programme "Information Society" in terms of goals. In parallel, the new digital strategy meets the challenges of the D Programming Period (2007-2013) and is compatible with the new European policy on the Information Society "i2010" and Action Plan "Jobs & Growth" prepared during the first half of 2005.

The Digital Strategy 2006-2013 in Greece, gets beyond the narrow limits of utilisation of new technologies and communications. It aims to mobilize citizens and businesses and to unlock the potential of each of them for the benefit of all. The role of the state in this effort is moving. The Digital Strategy 2006-2013 would gradually change the character of the state from a mentor, a country that provides multiple options and opportunities, leaving the power of choice to citizens and businesses. For this reason, the strategy is facing the state rather than introspection or sake, but only through the eyes of citizens and service companies, focusing on the possibilities and opportunities that can be offered to them. New technological tools utilized to achieve unimpeded flow of knowledge, information, ideas and cultural experiences from and to Greece, in order to enhance the international dimension of the country. [Special Service Management of OP Digital Convergence, Information Technology Committee, "Digital Strategy 2006-2013"].

The Digital Strategy 2006-2013 sets specific and measurable goals that are not purely technological content, but on wider aspects of daily life and activities. Given the range of interventions, the initiative is a policy that affects the entire useful range of social and economic life of Greece. To achieve the objective, using the information technology and communications as key tools, but also new skills related to production and exploitation of knowledge.

The strategy addresses the digital challenge as an objective that can still be conquered by the country. The European dimension of the country contributes to this direction. So, Greece actively participates in European events and is positively influenced by European policy framework and the predictions of common European legislation on new technologies. The Digital Strategy 2006-2013 the country is fully compatible with the fundamental guidelines and policies of the European strategy i2010, presented and launched in 2005. . [Special Service Management of OP Digital Convergence, Information Technology Committee, "Digital Strategy 2006-2013"].

Greece, through a national strategy, is now facing a major and exciting challenge. A challenge that concerns not just the technology itself. For new opportunities offered to citizens and businesses, for more and cheaper ways of communication, higher value-added jobs, for better and faster access to knowledge, for better service from public services, entrepreneurship is flourishing in new areas. Finally, the new strategy aims to put information and communication technologies as a helpful resource in daily life and activities of citizens and businesses.

The Digital Strategy 2006-2013 has a very specific purpose. To host a "Digital Leap". The purpose of the digital leap is to address vigorously the main causes of delay, focusing on two main directions:

- To improve productivity through technology.
- To improve the quality of everyday life in a practical way.

To achieve the Digital Leap, a very precise determination set of objectives should be defined. The goals must both face the causes of delays, and to provide new outlets and opportunities for growth and prosperity of businesses and citizens. In order for the "Digital Leap" to be achieved, six specific goals must be outlined. . [Special Service Management of OP Digital Convergence, Information Technology Committee, "Digital Strategy 2006-2013"].

➤ Towards the improvement of productivity:

1. The aim is to promote the use of information technology in enterprises, to improve their productivity and hence productivity within the Greek economy.

2. The public sector is seen as a disproportionate body, which must use technology to improve its internal processes, while facilitating a more efficient digital service to operation of the business fabric of the country.

3. The aim is to improve the openness of information and communications sector of the country and support in order to contribute more to GDP.

4. The aim is to enhance entrepreneurship, especially in the sectors of technology-producing industries and to use technology aggressively. . [Special Service Management of OP Digital Convergence, Information Technology Committee, "Digital Strategy 2006-2013"].

➤ Towards improving the quality of life:

5. The aim is dynamic use of new technologies by citizen's Daily level.

6. The aim is to develop digital services that save time and offer new possibilities to deal with the bureaucracy of the public.

In the Digital Strategy, the concept of e-Government is horizontal, touching both productivity and quality of life, particularly through Objective 2 and 6.

A basic condition for achieving these goals is to "interface", somewhat equivalent to the concept of broadband. Access to broadband infrastructure and services is a necessary condition for the digital leap. . [Special Service Management of OP Digital Convergence, Information Technology Committee, "Digital Strategy 2006-2013"]

However, the term "interface" refers not only to broadband. It also describes the ability of individual organizations and companies, public or private, to share data with compatible or open procedures and systems. A "Link" also touches the institutional framework and issues of convergence of different technologies.

The objectives of the Digital Strategy reflect the philosophy that the public sector should employ the role of serving citizens and business with minimal impact on aggravating them. The six goals demarcate digital assistance, if they are aimed to serve citizens and businesses with practical and visible ways. These actions include struggle with the introspective sense of "computerization" of public sector with no tangible results for citizens and businesses. [Special Service Management of OP Digital Convergence, Information Technology Committee, "Digital Strategy 2006-2013"].

5.3 Hermes Portal

The aim of the portal is the development of a single government portal of the Administration to inform citizens and businesses and to provide integrated and secure e-Government services at all levels, from a central point (e-Government Portal), known as the National Center Hermes.

The proposed Government Portal aims to comprehensively inform the citizens / businesses in their dealings with the Public Administration (Physical or electronic) and to also deliver (selected) Integrated Electronic Trading Services (3rd and 4th level) from a central point, providing all the necessary infrastructure and applications to achieve full interoperability between information systems Public Administration and digital authentication of citizens and businesses.

The applicant will reach reference to a specific point of contact with the Public Administration, which then automatically connects to the appropriate, but scattered and unrelated public website, in order to receive information, products and services from government with only one access. It is worth mentioning that the National Gateway will not replace the websites of the operators, but will operate as a digital router, which will facilitate and guide their stakeholders at appropriate points. Therefore, all public web sites will maintain their autonomy and their contents, but redesigned and linked to the National Center under the new program "Politeia", as "certified partner" that will operate on certified standards (standard content and appearance).

The portal is not designed on the responsibilities of agencies, but based on the needs of citizens and needs of business, especially those related to the establishment and operation of businesses. The portal will be linked to operational sites that are being developed for overall service specific groups (sites for tourists, students, farmers, businessmen, etc.). Thus, for instance, a farmer will not have to turn back places with the Ministry of OGA, the ELGA of OPEKEPE etc.

[Proceedings of International Conference on Information Society. " *Information and Communication Technologies in the service of e-governance and local development. Heraklion*", October 2006.].

5.4 Syzefxis: The National Public Administration

It is mainly concerned with the interconnection of public electronic services government in a closed public network and with the access of the Internet at high speeds. The pilot phase was completed and since September 2005 the next implementation phase began. A key advantage is the reduce telecommunications costs in the public sector, as communication between the civil service will be over the network Syzefxis. It consists of a project that can push the Public Sector and will allow the   interconnection of   information systems and provision of new complex e-Government services through standard procedures. But there is a case that the infrastructure that has been created cannot be utilised, due to expected high cost of

maintenance and management and as a result, the services offered to citizens, companies or public servants will end up being below the expectations of the Syzefxis program.

The Project "SYZEFXIS" develops voice-data network at high-speed link, which connects 1800 public sectors. Provides: Broadband Internet access and email services, web portal with added value services (e.g. directory services, collaborative applications, etc.), all institutions of public administration, security infrastructure to issue digital certificates, e-learning (synchronous and asynchronous), teleconference services, free phones among the agencies of the organization and for all related services.

[Proceedings of International Conference on Information Society. " *Information and Communication Technologies in the service of e-governance and local development. Heraklion*", October 2006.].

5.5 *K.E.D.K.E Framework*

KEDKE wants for ICT to play a serial role in Local Governments. For this reason KEDKE issues a document with the title "Framework for cooperation of KEDKE with the municipalities and Communities for its strong presence in the Information Society" in order to develop a scientifically based and empirically founded long-term strategy for developing the Information Society at local governments. It has also started implementing the first major project under the responsibility of KEDKE-financed by the Operational Programme Information Society - to create a "Unified" Web Environment to deliver services to citizens and enterprises, which will support electronic and all online services provided by a modern city, using the capabilities of the National Network of Public Administration "SYZEFXIS".

With these actions the Information Technology and Communication Technology (ICT) from the municipalities seek to exploit, for the achievement of internal operations themselves and for communication and transactions with citizens and businesses, local government (Local E-Government).

It also seeks to develop local democracy and to support Entrepreneurship (investment in ICT, new business opportunities, training human resources) and social cohesion (20.Vl. KEDKE & NRP, 2006, municipalities in Information Society, Issue KEDKE). These proposals put forward the ones presented hereafter:

Infrastructure development such as:

- Develop a minimum level of IT infrastructure (hardware and software) to each municipality, depending on the size and activity.

- Hosting and maintaining networks and infrastructure will be created: as Network of Public Administration and broadband infrastructure.

- Providing electronic services to all LAs.

- Human resource development and training of human resources of TA.

- Coordination, synergy between the stakeholders of public and private sectors.

- Creation of support mechanisms with specialization of services, local services by category and type of users such as office information, technical support (Help Desk) and software tools specific issues (toolkit).

5.6 Implementing Electronic Government in Local Government – Current Status

There is no doubt that in the recent years certain moves have been made and have made concrete steps towards the introduction and use of information and of the Internet to local authorities. So now there are municipalities with an Internet connection; even at low speeds and limited use, while a part of the economic and administrative functions is computerized.

According to a research for E-government that the Observatory for the Information Society has hold in 2007:

The most common applications are office automation applications.
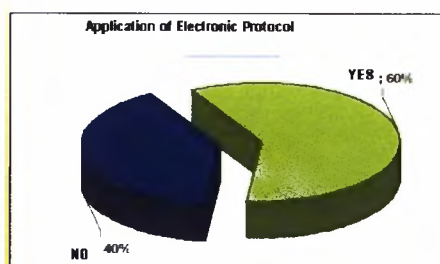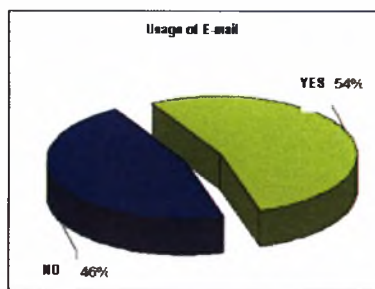
Connected to the Internet are: 69% of PCs of the Regions, 60.54% of PCs of the Perfectures and 67.5% of PCs of the Municipalities
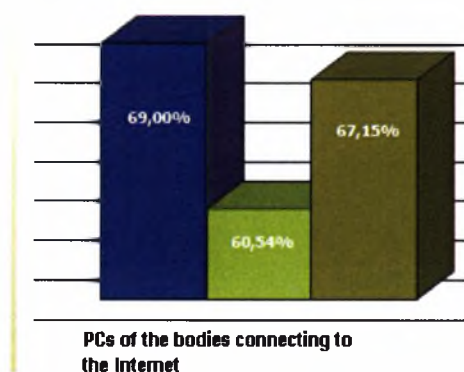
Regions: With the exception of large regions, needs is a stand-alone application (prepared tapes can packages) and in particular: the basic processes of operation and communication technology (automatisation of office, protocol, e-mail) to financial-administration and on design / technical work.

Prefectures: Generally found disparities in development level of the districts with some applications to develop themselves and others to use very old technology (p.chDOS).

The works of the Prefectures of EPKtP maintain current applications and create a seamless operating environment and applications.

OTA A'Degree: There are significant shotbacks.Only the 63.69% of municipalities have implemented office automatisation and 74.27% email application protocol (50% in small municipalities). Almost all operators have newly installed applications, resource management, but require major improvements to be fully established. Small, but many middle Municipalities face significant shortages of vital computer functions (registers, registry, Municipal Roll, etc.)

In terms of broadband penetration, the percentage is well, according to the study of the Observatory for the IS period November 2006-April 2007 as the percentage of

services available online Broadband on the facilities / buildings which housed amounts to 39.5% in Municipalities and Communities.

According to the same study, no local authority failed to provide interactive or transactional services to citizens. Delay in giving an account e-mail address by LA A'level a rate of about 35.3%. However, an interesting fact is, while most local authorities (77.28%) consider it essential to provide electronic services provided by the institution to citizens, only 36.75% of them consider it essential to electronic participation of citizens in decision-making processes (e-participation). Regarding to IT Executives of Local Authorities, the majority is male (76.9% versus 23.1% women) and holds relevant qualifications in Information Technology (Particularly in the Regions and Prefectures). Although these strains have good skills, they discover a need for further education. It should also be stressed that the results of the study, executives of the regions and local authorities are receptive to educational initiatives. As for all officials Certificates knowledge control PC has 28% while online computer is available at 97.7% of officials in Municipalities.

As the skills of end users, found digital division amongst the older, senior and younger executives are less hierarchical position, which are clearly more qualified and familiar with ICT. It is also important that the small local authorities lack knowledge, and equipment and that these are the major factors of non-use computers.

However, most of respondents in an investigation (86.8%) seem to agree that ICT use is necessary for the performance of their duties. Alongside the above, according to the study of Observatory for the Information Society, it was found that the main obstacles to modernizing information systems of municipalities is the lack of resources and / or funding (27.81%) Service Information exists in 36.5% of LA A grade and rate rate of 45.9% cover the related needs through outsourcing. Also, the municipalities, the percentage of players who have not registered Strategy utilization of new technologies is at 80.2%. (32.Paratiritirio for IS 2007).

Furthermore, the responsible executives of Municipalities and Communities exhibit low information for most European and national strategies on new technologies. However, these bodies are heavily involved in procedures, proposals and integration of ICT projects (73.3%) or with internal resources or with external cooperation and support from the advisory market public, private or campus.

Conclusion

The Information Society creates new data and new opportunities for growth, prosperity and quality of life. Unlike other technological changes, rapid development and deployment of Information Society affects all economic domains, organizational and industrial structures, public services, cultural and social activities. So, the Information Society promises to offer range of benefits, including more high living standards, business opportunities for participation in new growing markets, changes in production methods and delivery of products with higher productivity, more unsatisfactory to the employee work, which will use advanced technology and flexible labor arrangements. These same technologies will allow workers to upgrade their skills as part the process of lifelong learning, which aim to improve the prospects for employment and incomes and strengthen education and learning within schools.

For citizens and communities the Information society promises to provide better public services, as governments develop services that focus more on giving people choices and conveniences. Those who live in remote areas and scattered communities will also take advantage of the access to economic and social opportunities offered by emerging technologies.

The Digital Strategy 2006-2013 prepared by the Commission Computer and aims to make a "digital leap" in productivity and quality of life by showcasing ICT and new skills is viewed as a key strategic direction of the country for the near future.

Chapter 6

6.1 Regional Inequalities in Greece

All reports related to the Greek economy since 1950 reach a common finding: the structural inequalities of the public sector are one of the major impediments for achieving high rates of economic and social development. Despite the significant inflow of funds from the EU the last three decades, key indicators such as GDP, unemployment and poverty levels reveal significant and persistent imbalances in the productive potential of the country. The social and economic inequalities between regions and between different spatial entities are the main structural feature of the development model of our country. Despite the significant steps taken against economic and social convergence with other EU member states, eight of the thirteen regions of the country gather GDP below 75% of the EU average. The same is true for intra-regional disparities in the quality of life and citizens' access to social infrastructure and services, particularly in education, health and welfare. [Makedonia newspaper, "*Kallikrates motive for the development*", 13/11/2010].

The causes of the creation of regional inequalities engaged several modern scholars, mostly Greeks. Grouping them into categories, and following the separation of Petrakos and Psycharis (Petrakos G, Psycharis G., "*Regional Development in Greece, 2004*", Kritiki Publications), one would say that the determinants of inequalities are historical, physical, political and economic in nature.

The history, in every country, played an important role both in developing countries and the spatial distribution of population. The gradual expansion of the New Greek State, since its creation from South to North with a series of independence wars from 1821 to 1945 was the predominant factor determining Athens as the main town, as the South offered a sense of stability and security. The position of Athens as the capital and most developed region was reinforced by the large emigration of refugees in 1922, after which Athens had the highest proportion of the population and economic

activity. The development did not only help the increase of the workforce and the size of the market, due to the influx of refugees and their knowledge. Finally, historically, an important factor formation of the Greek economic landscape, according to Petrakos and Psycharis (Petrakos G,Psycharis G., *"Regional Development in Greece"*, 2004, Kritiki Publications) was the postwar division of Europe for the period 1949 and 1989, as because of the "cold war" and the Greek civil war Greece's northern border was closed to trade with neighbouring countries. This border closure has weakened the major cities of northern regions, which could not now be extended to markets beyond the borders, and "loaded" with the extra weight of transport costs, if they wished to take share from large local markets the country.

Furthermore, geo-morphological factors included characteristics of the natural environment of the country. So the fact that Greece is mainly mountainous and with a lot of islands, this has significantly affected the development prospects of areas because of population concentration that is highest in lowland and coastal areas. The reasons why there is a large concentration of population in lowland areas are various, among which the Psycharis and Petrakos (Petrakos G,Psycharis G., *"Regional Development in Greece, 2004*, Kritiki Publications) report the climate conditions and the progress of technology has allowed for easier execution of civil works and infrastructure, as well as the change of the production model of the country during the 20th century from purely agricultural production to industry production. Thus, with the population unevenly concentrated in a few areas, it would necessarily arise uneven production structure in the economy, and therefore uneven development. In addition, this division contributed an intense insularity, which favored the creation of small local markets at a great distance from the mainland, which consequently hindered further growth, except through tourism.

About the political factors, the structure of the Greek state and the Greek government is of great importance, which is highly concentrated, with no significant power and freedom to be given to local authorities. This factor tends to reinforce the lack of sufficient resources and independent lack of personnel, the effect of which does not give meaningful opportunity to contribute to the development problems facing the Greek region.

Moreover, except for small powers of local governments, there is the great difficulty in exercising effective policy introduced by the large number of municipalities and prefectures. The "fragmentation of local and regional administration" (p. 108), as

expressed by Psycharis and Petrakos (Petrakos G,Psycharis G., "*Regional Development in Greece*", 2004, Kritiki Publications), does not allow spatial units to obtain the necessary population size with a resulting inability to create effective mechanisms for local development, as "Any economic activity, whether it relates to public goods or private ... requires a minimum size for users to operate properly and be sustainable" (Petrakos G,Psycharis G., "*Regional Development in Greece*", 2004, Kritiki Publications, p. 109). Finally, the fact that the criterion, which makes the decision on the amount of public expenditure is the size of the population and not, for instance, the level of development and the small percentage of total public expenditure which is available, do the authors talk about a lack of coherent and sustainable policy of public spending, are two very important factors not necessarily creating inequality, but suspension of dealing with the problem.

Concluding with the factors, we move on to the economic factors. The economic factors, therefore, have influenced Greece in a way conducive to the unbalanced economic development in the Greek areas, which is based on the theory and scientific verification, agglomeration economies and concentration, production structure of local economies, business cycles, European integration and the quality of the workforce. The first reason attributes to the rise of inequalities in the large size of some areas that benefit from agglomeration economies, i.e. those related to reduce average costs, and agglomeration economies, i.e. those mentioned above as related to the benefits of pooling and cooperation of many companies. The second reason refers to the production structure of local-regional economy and quality of the workforce. For Greece, Petrakos and Saratsis (Petrakos G., Saratsis Y, "*Regional Inequalities in Greece*", Papers in Regional Science, 2000, sec.79, pp 57-74) refer that the counties with strong secondary sector, with capital intensive business, with tourist resources and high quality workforce tend to have faster growth rates than those who do not possess. The fastest growing areas have a strong presence in the secondary sector and tourism resources, can confirm the simple observation in the case of Greece, while contributing to the quality of the workforce that can easily be understood, if we consider the comparative advantage offered by an education and trained personnel to attract new production activities. The third reason stresses the importance of economic cycle fluctuations in the economy in creating inequality. This is highlighted in the case of Greece by Petrakos and Saratsis (Petrakos G., Saratsis Y, "*Regional Inequalities in Greece*", Papers in Regional Science, 2000, sec.79, pp 57-74), while

generally similar correlation of inequality with economic cycles has been reported and by Petrakos, Rodriguez-Pose and Rovolis (Petrakos G., Rodriguez-Pose A., Rovolis A. (2003), *"Growth, Integration and Regional Inequalities in Europe"*, *Research Papers in Environment and Spatial Analysis*, sec 81, Department of Geography and Environment, London School of Economics, pp1-25). The above authors concluded that disparities are increasing in high growth phase, because the more developed regions can better and quickly exploit the benefits of development. European integration and the internationalization of the Greek economy, according to Petrakos and Psycharis (Petrakos G,Psycharis G., "Regional Development in Greece, 2004, Kritiki Publications), integrating European markets increased competition had to face the Greek enterprises and were mainly affected the developed areas of the country, which failed to respond to international competition, since foreign firms have greater capabilities and potential. So, while on the one hand access to the EU and EMU, is mainly hitting developed areas with productive structures of the engine of growth, it adversely affected the prospects for growth of Greece, on the other, inside it resulted in reducing inequalities.

Finally, also a very important reason for the disparities in development levels in Greece are persistent regional development policies undertaken by economic and political institutions.

These policies are expressed through the public investment program, which is not quite clear whether they had a clear territorial redistributive character, and argued that infrastructure projects do not address the problems of a large part of the region, mainly because turning around the facility in metropolitan centers, particularly in Athens (Petrakos G,Psycharis G., "Regional Development in Greece, 2004, Kritiki Publications). Moreover, Petrakos and Psycharis (Petrakos G,Psycharis G., "Regional Development in Greece, 2004, Kritiki Publications) consider that although given incentives to take up and implement investment projects in the region, it is not clear whether the final allocation of resources was desired in terms of regional policy, since in areas with significant developmental problems such as Epirus, the Peloponnese and the northern Aegean and were given a significant share of subsidies.

Generally, in the case of Greece, we can observe that factors associated with the initial conditions and characteristics of the regions are responsible of a greater extent for the uneven development of areas of Greece's regional policies.

In recent decades, most European countries have introduced radical reforms of the structural and functional characteristics of local government in order to address inherent weaknesses such as small size, impossible undertaking development initiatives, the inefficiencies in providing quality services to citizens, and lack of transparency and accountability.

Countries such as Germany, the United Kingdom, Sweden, most countries of Central and Eastern Europe and, more recently, Denmark and Greece have moved on for consolidation of municipalities. The main objectives were to achieve agglomeration economies in providing quality services to citizens and strengthening the role of government in development design.

In most countries that have indeed followed this direction, specific incentives have developed for financing new municipalities to meet their needs in management staff, training and logistical resources and technical assistance in undertaking development initiatives. Any losses concerning proximity of municipal services is usually treated with institutional initiatives towards strengthening the role of decentralized municipal structures and balanced representation of spatial entities. The coordinated action between the new and expanded municipal services requires, however, building strong executive structures and the adoption of appropriate practices, such as evaluating qualitative and quantitative targets defined through participatory processes.

The analysis of the current situation and relations between local government and public services leads to a long list of problems that characterize the function, organization and capacity of Municipalities and Communities in Greece to meet modern needs.

The system of local government in Greece is characterized by strong differences between municipalities and communities, in exercising its powers, financial and administrative resources and the overall economic position and role in domestic governance system. These differences give rise to corresponding differences in living standards and quality services enjoyed by citizens. This situation is exacerbated by the lack of appropriate legal and financial incentives to overcome inherent weaknesses

associated with the small size of the self-governing units, the inability to take development initiatives and inefficiency in providing quality services to citizens.

One of the major problems identified by all parties and stakeholders is the economic dependence of local government by central government. Moreover, the municipalities and communities lack the necessary institutional tools, to facilitate business for developing and utilizing their property.

The small number of powers of local government are against the requirements of modern democratic governance models and EU directives to implement the principles of subsidiary and proximity to the citizen (Article 4 Lisbon Treaty). The merger exercise powers in the central state and regional ends above, facilitates interventions in local communities and prevent the development of local authorities to exercise self-contained bodies of a democratically legitimized power, which directly answers to local communities.

Moreover, the local government of Greece has not yet established sufficiently new, modern tools, methods and principles of management (management by objectives - Indicators, total quality, etc.), electronic government and the wider use of new technologies have spread at a rate commensurate with the high level of growth and prosperity that characterizes the current Greek society economy. Thus, more and more people are turning to private services to meet their needs, thereby reproducing social and income inequalities.

Another drawback of local government is the low income compared with most European Union countries. Revenues communities are still lower than those of municipalities, thus intensifying the institutional and administrative differences. Therefore, investments by local authorities are funded exclusively through special grants and loans.

Significant weaknesses identified, also in pursuit of specific responsibilities having to do with sectors of the local government. On development activities the municipalities do not have many opportunities to formulate and implement appropriate development plans that the centralized system of development planning and limited cooperation with the private sector. Of course, the administrative failure in most municipalities, small size, inadequate staffing and lack of skills prevents them from taking actions or development to promote employment and entrepreneurship in their region.

These problems are exacerbated by the serious lack of development of electronic government. The lack of networking of services between local authorities and ministries, as well as gaps in network security and infrastructure (especially in suburban and rural areas) hinder the provision of related support to the administration. Significant weaknesses identified, also in pursuit of specific responsibilities that have to do with the local government.

According to all the previous mentioned above, the Greek government is planning on making a total redesign of government, in a New Architecture of Government Administration and Decentralisation putting in place the Program "Kallikrates".

With "Kallikrates" program re-founded by the government with fewer and stronger municipalities, it will be able to meet modern requirements, to use technology and modern management practices. The strengthening of the administrative capacity of local authorities create conditions for the transfer of significant powers to them, especially in areas of social welfare, health, employment, environment, transport and especially community development. Moreover, by incorporating new principles of democratic governance such as juries, the obligatory suspension of all decisions of municipal bodies on the Internet and supporter of the citizen and the company seeks to strengthen citizen participation, transparency and accountability.

The second major change that "Kallikrates" is going to cause is the creation of regional governments as a secondary government. In those regions transferred powers are in order to effectively pursue at the regional level, and responsibilities currently performed by state region, except those having a purely national character, which they remain in decentralized public administration. In this way, for the first time in our country, the main pillar of development planning is the directly elected body. Simultaneously, perfectly binding and inflexible time limits are the basis for further broadening of regional and global functional state reform in the direction of strengthening the executive functions of the central government. So, a new model of development is gradually promoted in our country, that entails coordination of the three main pillars of green development, environmental protection, equitable social and economic development and territorial cohesion.

Kallikrates is not just a piece of legislation that streamlines the administrative organization of the State. It is much more of an instrument, by which pursued through the restructuring of local government and decentralized

administration we can enhance the development of the region to mitigate both the interregional, and intraregional disparities. For this reason, the Kallikrates, then, brings on changes in the governance system of the new local authorities, their competence, the way the exercise of state supervision over them, how we exercised more decentralized administration of the State aspires-oriented public interest, to radically change the image of the country for the same eventually citizenship. [Makedonia newspaper, "*Kallikrates motive for the development*", 13/11/2010].

The creation of large cities cannot by itself lead to structural changes in quality of life and citizen service. The key to success lies in creating strong cities, with administrative and financial autonomy, with responsibility for education, health, welfare and planning. A municipality can be competitive, if it can meet the needs of its citizens. When you have a modern network infrastructure, when you respect the environment, when you base on the diversity of each community, you compose and conduct development programs.

All these must be based on transparency, political accountability and good governance. The foundation of Digital municipality and to familiarize everyone with the digital government and governance puts the citizen at the heart of politics, the core of decision-making. Measures such as the suspension of all decisions and acts of organs of local authorities and the automation of processes through the Internet to help in this direction and implement the principle of proximity to the citizen and his needs. Economic and administrative efficiency through horizontal structures and "self-contact ' between services, uniform and strong growth points, broadband, e-Governance and transparency are requirements that, need to be redeemed in the name of an effective administrative reform and a more qualitative democracy.

Local e-Government

E-Governance is not only a closely defined area, but particularly important in the context of applications to the municipalities, since by e-Government the need is removed to move civic centers of power in its place to serve.

E-Government, at a local level, is central to the modernization of local government. Modernising Local Government promotes the quality of 'local' services and the effectiveness of the "local" democracy and enables organizations to: Design a comprehensive strategy for local development.

Provide efficient and low cost services to serve the local community.

Assess the quality of these services.

Make quick, effective and responsible decisions.

The local government strengthens the above and relates them to:

- The transformation of "local" services for citizens.

- Renewal of a 'local' democracy.

- The promotion of "local" economic viability.

By using the term E-Government, we mean a new form of Public Service, which is widely used in correlation to information technologies and telecommunications, so as to achieve the quality upgrading of the civil service and to improve the working conditions of employees. In other words, it is a political and technological strategy that focuses on the use of new media by local communities.

The aim of the local e-Government information and public access to services on a 24 hour basis and the qualitative upgrading of the citizen to municipal services. The handling of information will be made through the service and also the reform and designing of new processes that citizens will be served electronically. The government is the governing body of the country and the instrument under which it can implement the option of decentralization. The current introduction of new technologies in Government despite the delays that occurred, a part has been established with specialized information systems and is now ready to make a big step for further completion.

Strategic Directions for Digital Convergence of local authorities

Planning for the transition of electronic government should include full design of all elements of the organization:

- Strategy

The Strategic Plan includes a detailed depiction of the current state of the Agency's local authority (as defined) integrating design, as existing under the Operational

Programmes and other programming instruments with any necessary pre-adjustments and revisions.

The strategic plan also includes basic guidelines for managing the transition process pointing uncertainties and risks of transition and suggesting ways to manage change and risk, along with security and interoperability framework to be respected. The change management procedures and risk analysis are planning to address them, with the use of key components of this strategic plan. It should be noted, however, that the project would not be rigid, but would rather provide the basis and stimulus for improvement in practice, and to adapt in new situations, to respond flexibly to endogenous or exogenous challenges.

- Organization, functions, procedures.

The organizational design will cover the structure and segmentation by job descriptions, organizational culture and communications, and so on and so forth. The public bureaucratic agencies consider organizational projects as the essence of their existence. This is a very crucial part of the design as one of the objectives of the planning exercise is to improve working conditions. So, at this stage all the logic and the philosophy of design must be accepted by the public.

- IT systems.

The architecture of computer systems will follow the strategy in order to lay the foundations for the new organization. Given that strategic choice is to create an electronic government body, naturally follows that the draft of the new organization will match the architecture of the data flows, security systems and procedures, categories of users, and so on and so forth. The proposed operational model will be of particular value for the correlation between people and information systems. The project will be implemented through the procurement or procurement of information systems and will be completed after acceptance testing.

- Manpower.

The planning of human resources will have to deal with the design of policies for a new administration, a new configuration of characteristics, skills, qualifications and experience. The project will cover all aspects of staffing, management of human

resources, planning development, performance evaluation, remuneration, and so on and so forth. The training of staff is a crucial factor in the success of this effort. [E.E.T.A.A, "*Electronic Government in Local Government*",2010].

6.2 Information and Communication Technologies and the necessity of using them in regional development

The I.C.T. is one of the most important factors of economic development. The regions and municipalities seeking to attract businesses in their boundaries should promote the provision of broadband and efficient electronic services. There are some companies that expect from local and regional authorities to provide them with electronic services of similar quality and efficiency to that provided by the private sector. Therefore, I.C.T. can and should play an essential role in regional and local development.

All citizens should be included in the Information Society, regardless of age, gender, skills, national or cultural background. The availability of electronic infrastructure is certainly a prerequisite for digital inclusion. Access to digital content and digital services is another key factor.

Furthermore, the digital integration of an important factor for the development and promotion of local democracy is of great importance. The promotion of social dialogue and interaction through the Internet offering to local and regional authorities to strengthen their information about political processes and public debates on local political issues of great importance is an additional key point.

The I.C.T. can help create a more unified and coordinated public sector. The information and services can be recorded, stored and exchanged between public agencies and bodies, without people being forced to provide the same information to different organizations every time you need to do business with the public sector.

The I.C.T. constitutes an operational tool of improving the quality of public services. The availability of information on the Internet and the establishment of a system of integrated electronic services can simplify and improve the time-consuming procedures.

In many cases different ICT systems operate even in small population OTA. Payroll systems and financial management are necessary to better manage the financial resources of an organization. The electronic filing and organization are also necessary for the proper administration and geographic information systems (GIS) used to record environmental data and spatial planning. Local authorities can save money from better coordination of services, while effectively internal organization can release people to be employed subsequently in areas with greater needs. Finally, among the advantages of using ICT limiting bureaucracy, the bulk of available information, and reduced time for handling municipal affairs may be included.

Decisions about new technological solutions must be based on the strategic objectives of the local and regional authority. The recording of strengths and effective monitoring of program implementation I.C.T., which are necessary steps to achieve the function of ICT as a tool, that can increase efficiency to release resources and improve the quality of the services rendered. Overall, the benefits of ICT not perceived in the absence of organizational change or enhance the capabilities of staff. For better performance of ICT local and regional authorities should follow a series of actions. The existence of appropriate infrastructure and if it is necessary for the operation of ICT not high enough for local and regional authorities to exploit the full potential of modern information and communication technologies, is critical. We need parallel configuration of an integrated strategy, that includes the key areas where the user can exploit new technologies and the main objectives he must make. Finally, one of the main inhibitors for the efficient operation of ICT is the lack of digital skills on the part of public and municipal officials. Local and regional authorities should therefore record digital opportunities for employees, to enable then to organize the necessary education and training.

The technology for the operation of Local Government in the 21st century is already in place: the internal functions already supported by electronic systems. Huge investment in projects such as SYZEFXIS have created the conditions for radical change in the mode of communication and local authorities. A series of projects of OP "Information Society" as the development of Integrated Information Systems of Prefectures (OPSNE) give practical techniques, that can better serve the citizens and to exercise effective central control over the functioning of public administration. The new organizational challenge of public administration is the transformation of

institutions and organizations in the context of ongoing major administrative reform. The new organizations that will arise, should not be a simple growth of existing (already obsolete) line-bureaucratic or exogenous interventions imposed modernization, but genuine radical reform of how public administration, sensitivity:

- expectations and demands of citizens for better customer service.
- importance and with respect to public money.
- dignity and the aspirations of public officials.

Especially the potential of ICT.

Many researchers in the field of e-Government believe that ICT can radically change the way government is conducted through the four possibilities of these technologies:

- The online availability of the same information at different levels geographically remote locations and the potential for extensive junction and processing of such information.
- The exercise of control and coordination without physical presence.
- The large real-time computing capability with minimum risk of error and correct application of standardized procedures.
- The huge storage capacity in a small space, with simultaneously search and retrieval of information in minimum time.

New technologies are important tools for the creation of a modern democratic state, for the modernization of public administration, and for improving relations between the state and citizen. In order for services to be improved concerning citizens and businesses, applications have been operated or implemented and services in information and communication technologies. Further development aims to create a networking environment in public administration in order to transform existing information into digital form, creating and maintaining databases, supporting the process decision, giving information and making electronic transactions between citizens and businesses. [Ministry of Interior, Public Administration and Decentralization. Secretariat Public Administration and Electronic Governance. "Electronic Governance and Administrative reconstruction. B. Andronopoulos, Thessaloniki, September 2006.].

The development of Information Society is based on the rapid evolution of Information and Communication Technologies (ICTs). These technologies are essential tools for open and effective governance and improved services to citizens. At the same time, these create a new based knowledge economy and enhance the role of human resources.

With the increased use of ICT the impact on society also increases. The new European strategy i2010 information society recognizes this in three ways: ensuring that ICT benefits all citizens, making public services better, more cost effective and accessible and improving the quality of life.

ICT is widely used and more people are benefiting. But today more than half the population of the EE are not taking full advantage of these or are effectively cut off. The strengthening of economic, social and territorial cohesion by making cheaper products and ICT services, including in regions lagging behind, is an economic, social, moral and political imperative. In i2010, strong emphasis is given to full participation and to provide citizens with basic digital competence.

In modern Greek society, the government has an obligation to provide citizens and businesses with high quality services in a short time and with the lowest possible cost. The information and communication technologies provide the tools necessary to achieve this goal, while facilitating the functioning of public administration in terms of transparency and democratic participation.

The introduction of new information and communication technologies in Public Administration is an integral part of overall government policy for decentralization of executive powers of the state, and the reorganization of public services. The management of human resources (which are a wider issue of training is necessary but not sufficient) to be combined with the use of technology, so it should be at the center of each agency and the public, the private sector and therefore the municipalities.

The creation, sale and use of information, requires automated public services, appropriate functional interfaces to access databases and repositories. Given the rapid growth of the Internet use in Greece, access and creating pages in Web (World Wide Web), and the provision of electronic mail are prerequisites for an exploitable system "processing" information. These conditions have already been secured for most public services.

E-Government includes all aspects of governance and administration of the municipalities that may be supported and upgraded by the use of ICT:

- Configure local and regional public policies.
- Decisions to the management of local affairs.
- Design and provision of services in an interactive way for citizens, businesses and visitors.
- Public participation in civil, social, professional and political organizations, non-governmental organizations.
- Taking the functions necessary in a modern city such as urban planning, traffic regulation, environmental protection, natural disaster management, promotion of business and employment, cultural activities, education, social services, primary health care, network management infrastructure.

[General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralisation, Greece in the Information Society, 2002].

ICT can strongly contribute to improving the quality of life. They are able to improve the health of our citizens through new medical and welfare services. In the light of the demographic challenges facing Europe, ICT can contribute to effective and efficient systems of public health and welfare. They can become a strong force for reinforcing European cultural diversity by making the heritage and our cultural creativity widely available. ICT is also a tool for environmental sustainability, e.g. through monitoring and disaster management and production processes clean, energy-efficient and effective. ICT can contribute to a safer, cleaner and more energy efficient way. The importation, production and operational use of ICT is not separated from other municipal functions and activities and the services offered by municipalities. Despite these difficulties, the use of ICT in municipalities is not a luxury but a necessity. They offer a realistic opportunity to enhance the work of all within the municipality and especially the quality of services offered to residents coupled with the facilitation of their participation in municipal matters.

The role of e-Government in local development with the implementation of electronic government at a local level has improved the daily lives of citizens, enhancing social

cohesion, protected by concrete measures the environment and energy planning, economic development, highlighted the site as an attractive tourist destination in the area of business, culture, sport and recreation.

The establishment and operation of productive technology infrastructure is now a key component of development of society and human service needs. The computers, broadband content and frequencies should not be regarded as a mere technocratic issue. They have an impact on politics, economy and society. The information and communication technologies are changing the way they work, communication, transaction and entertainment are drastically changing the conditions and bases economic competition.

"Economic competitiveness is based on the technology. To enhance the economic engine by making use of new technologies, interventions are implemented in product markets, initiatives are taken to enhance information industry and the institutionalized knowledge in new technologies is supported for small businesses. For the development of electronic commerce, the state creates the right regulatory framework, by adopting the commercial law and electronic payments, and by taking measures to create conditions of trust and consumer protection.

Also, the introduction of innovative electronic trade applications to private companies is supported as well as the creation of e-commerce centers. Finally, for the utilization of industrial innovation, motivations are given to companies and research organizations in order to collaborate on joint projects." [General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralisation, Greece in the Information Society, 2002].

Information Society creates new jobs, requiring new skills and new forms of flexible working. By using this, the state plans and implements regulatory and investment interventions, so as to create new jobs in emerging sectors and occupations in demand. The state also takes care of retraining programs, gives incentives to revitalize areas and sectors which are declined, to face the decline in employment in specific areas and professions. It also prepares young people to remain compete in the working environment of the Information Society by implementing seminars and lifelong learning.

Interventions are designed in order to promote new forms of work such as tele-working:

disseminate best practices, adapting the legal framework, promoting pilot projects in

the private and public sectors, development of tele-centers remote areas. Also, special attention is given to adaptation of new requirements posed by the Information Society, for the vulnerable groups population and people not to be threatened from social exclusion. [Ministry of Interior, Public Administration and Decentralization. Secretariat Public Administration and Electronic Governance. "Electronic Governance and Administrative reconstruction. B. Andronopoulos, Thessaloniki, September 2006.].

In the Information Society, economic competitiveness is based on technology. To enhance the economic engine by making use of new technologies, implemented interventions in product markets, labor and capital initiatives need to be designed to upgrade the computer industry, and institutionalized support on a know-how basis for new technologies about SMEs. For the development of electronic commerce, the state creates the right regulatory framework to Adaptation of commercial law, the adoption of electronic payments, and measures that creates conditions of trust and consumer protection.

Also support of the introduction of innovative e-commerce applications in private businesses and the creation of e-commerce centers is taking place.

Finally, the use of industrial innovation, gives incentives to companies and research organizations to collaborate on joint projects.

The economic policy today.

After the macro-economic stabilization of the Greek economy, the emphasis on economic policy shifts in development policy with a focus on micro-economic policies and structural interventions.

The macro-economic adjustment should be completed by the structural adjustment of the Greek economy to modern developments.

Globalization and competition.

It consists of the rapid promotion and utilization of technology in production and in many social processes and the elimination of the protective borders for trade, investment and capital movements, integrating the national economies and the changing nature of global competition. There is competitive pressure that brings

increasing globalization of investment, innovation and economic efficiency, international technology diffusion, leading to greater growth and higher incomes.

Information and communication technologies in business.

In today's society, no company or organization cannot ignore the information and communication technologies, because that would mean ignoring a power, which can improve services, expand markets, increase profits and instead endanger its survival. The companies which manage to combine ICT harmoniously with the overall business strategy have a better chance of survival, growth and employment growth.

A big advantage for Greece is its geographical position, which enables it to strengthen its traditional ties with the majority of neighbouring markets and increase its economic penetration into these economies. Unlike other EU countries, such as Portugal and Ireland, Greece is close to markets where it can provide the lights and to help further economic development through mutual interest. An indicative example of this penetration of Greece to neighbouring markets, are the Greek commercial banks, which currently derive 10% of the profits from the markets of the Balkans. Moreover, Greek consumer products companies and telecommunications show significant activity and growth in Southeastern Europe, while manufacturing and telecom companies penetrate the Arab world, entering into agreements for the construction of infrastructure projects. Of the countries ranging in Greece, there are no missing markets in Africa, Latin America and even China. Thus, although Greece is a mature financial market for wealthy Greek business, it has the potential of growing even more in neighbouring countries and traditional hospitality, with a larger population and thus with better economic prospects.

E-business, aims to automate the communication between trading partners to simplification of business processes, creating new services / products, increasing competitiveness of enterprises creating the "global market" mainly through the use of the Internet.

The fact that companies today operate in a highly competitive environment, characterized by challenges, such as rapid technological development, globalization of markets, the radical transformation of the production process and the emergence of the knowledge society makes the need for improved productivity even more imperative.

Operators are required to operate and run their businesses according to new data, focusing on its goals in the continuing transformation, the immediate adoption of reforms and launching new and innovative initiatives. The existing technology, knowledge and skills of staff, work organization and managerial practices, research and innovation, and work environment are some of the major factors affecting productivity at the enterprise level. Each trader is, therefore, interested in further improving productivity and competitiveness, he is required to evaluate its business in relation to these factors and make appropriate changes and investments, while making use of the opportunities and aid projects that are offered by the State.

Investment in appropriate technology equipment affects labor productivity, improving overall productivity.

Similarly, productivity is substantially reducing in relation to investments in information technologies and communication technologies (ICTs). The use of new technologies enables companies to offer better quality products and services to improve their internal operation.

The research and development and innovation can play a key role in improving productivity, leading both to upgrade the production process and the development of new products and services. Innovation is a key factor in trying to differentiate the company from its competitors. Previously, innovation, was largely related to the modernization of machinery. And while some companies could innovate in this way, the new knowledge could now be extended to the rest of the production structure. At present, however, the period has been through significant changes, which often separate the implementation of innovations from the purchase of new machinery.

Recent research on e-Government, presented by the European Observatory, explores the relationship between e-Government and competitive economies, moving to a detailed review of a series of key issues with a key role in shaping the major issues that need a healthy and competitive economy watch. The role of e-Government is important, as it helps to accelerate the development of the competitiveness of European economies.

Information Society and e-Government in particular, are often cited as a key element in developing the competitiveness of Europe, exemplified by the European Commission with the "development work". However, the correlation between "transformation" of public services and a competitive economy - leading to even more

growth, better jobs and a rising standard of living - remains complex and vague. Productivity growth is the key to boosting competitiveness. The competitiveness of an economy has two complementary dimensions: the ability of businesses to successfully compete in international markets and opportunities for new employment in the population. At a first glance, it sounds contradictory, the response of business in a globalized market where the cost is often a key factor, while increasing real incomes. It is definitely a challenge, and one of the most crucial success factors for achieving a competitive cost with high wages are increased productivity, which is increasingly reliant on the use of information technologies (ICTs). ICT is now the main factor explaining the emergence and increasing the productivity gap between EU and the U.S. during the past decade, which may lead to an even higher growth rate of the difference in GDP, employment levels and living standards.

For the European economies, characterized by aging populations, the trend towards increasing restrictions on the budgets and in some cases, high levels of unemployment, making it a must to increase competitiveness is appearing. Therefore, this requires in turn increase productivity through better use of ICT investment in all productive activities of society. So, the government is actively leverage competitiveness affects economic activity through taxation, social spending (education, research and development or infrastructure) and institutional framework (e.g. in relation to the political environment, and so on and so forth.). What does happen, however, with the profitability of the "state machine"? Public services play a special economic role in European economies with different roles such providers, employer, purchaser, and so on and so forth. Although research shows that there is a clear and straightforward relationship between size and overall economic performance, however, that the efficiency and productivity of the public sector were recognized and have a significant impact on competitiveness. Enhancing efficiency and productivity of public sector helps boost competitiveness through their impact on productivity growth in the broader economy. So, if the state and the structures become effective and efficient, this would imply enhancing quality in providing better services in the economy and citizens.

E-Government promises just that. Another aspect could be viewed as necessary, however, the Treaty is to achieve two strategic objectives: to provide in-service improvement across the public administration and reduce the "cost" of non-compliance for recipients of public services. Initial attempts to measure the effect of

the pursuit of competitiveness in these conditions, with emphasis on the economic and social impact of e-Government, are made with the development of relevant indicators. These indicators are intended to provide further development to assess the relationship between e-Government, competitiveness and economic performance. [Managing Team of Operational Program information Society].

Over the years, new technologies increasingly invade the everyday lives of humans. Information technology and telecommunications are changing the way we work, entertainment, communication and transaction and establish new conditions for economic competition. A tool for modernizing the state and business competitiveness, require new ways of working require new skills and the need for continuous learning and change the educational system. They also allow improved services in health, welfare, and environment and contribute to the enhancement of cultural heritage However, new technologies have an undeniably negative impact on one part of the workforce. Workers with traditional skills for which demand is reduced and those working in areas that are shrinking under the pressure of international competition and continuing technological developments often face unemployment. Meanwhile, the development of more efficient production methods and new products accompany the process of structural change and enhances the appearance of new areas of activity that provide new job opportunities, so that total employment is increased, but is not always parallel to the rapid evolution of technology. It is necessary therefore to increase productivity by implementing new technologies to keep pace with the development of the market, so there is a consequence concerning the total job growth.

Until now, information and communication technologies have increased employment especially in the tertiary sector of services to people with high ratings, while they have decreased in the secondary sector and workers with low skills. Businesses and industries with the most innovative behaviour are productivity and employment growth above the average. Businesses with more knowledge systematically outweigh others. People with more knowledge and skills occupy better paid jobs. Therefore, it seems that new technologies are a source of new jobs, but also create the need for appropriate adjustments.

[E.E.T.A.A , *"Employment in the Information Society"*, 2010]

Increased employment in the Information Society.

There is a general policy framework of efficiency and social justice. New technologies are reaching all sectors of the economy and, therefore, the majority of workers are changing standards of qualifications in many professions. Experience shows that policies that focus on preserving jobs in declining sectors and occupations seriously delayed the renewal of the industrial system with adverse effects on healthy firms and for employment. It is, therefore, necessary to restructure jobs and skills more rapidly and also to shift from passive to active forms of assistance, aimed at upgrading human resources and achieve "employability". Such a policy is effective and socially just when supplemented by appropriate training and lifelong learning. Successful policy is one that combines support for innovation and technology diffusion efforts to upgrade the skills of workers.

Regulatory and investment interventions.

To create new jobs in emerging sectors and occupations in demand, the state promotes a series of regulatory interventions and investment data, such as support new business initiatives, focused on new technologies through incentives and technical assistance, the development of conditions conducive to investment growth investment risk capital (venture capital), job creation through the liberalization of infrastructure and services in telecommunications and generally encouraging the introduction of new technologies in all sectors of the economy, but also assistance in the tax system and locking system create incentives for new jobs.

Care to address the decline in employment. The negative impact of the introduction of new technologies usually focuses on specific sectors and occupations, and often has a geographical dimension. It is worth focusing on actions, such as training programs in workforce, retraining services and activities to promote employment in pockets of unemployment, incentives to revitalize areas and sectors in a recession through tax exemptions and other advantages, and early retirement schemes for older workers who hardly fit into the new training programs.

Policies for new skills and training.

Perhaps the most visible impact of new technologies in the labor market is to reduce the demand for workers with low skills. This emphasis on skills creates the need for new training and lifelong learning. The state initiatives are working in this direction for new courses focusing on development of information services / products, training

programs for community groups that need new or improved capabilities, and enhancing the specialized IT staff. An important role in shaping and financing of training should be played by the private sector, which can also better adapt programs to actual needs. For its part the government aims to meet the training needs of a population that includes the unemployed and employed people, but their position is precarious, because of lack of access to training opportunities.

[ANKO A.E, *"Explore the potential contribution of the Information Society in employment of socially vulnerable groups"*, 2005].

6.3 Information Society lever for regional development

If one wants to choose a sector wherein the Information Society contributes, then the regional policy is one of them, as there are no geographical restrictions due to new technologies. People that are far away and isolated are coming closer to the decision centers, they can take part in the commons and they have opportunities that could not have earlier.

Telecommunications network and related services are already an emerging field, equivalent to the usual transport infrastructure, such as highways, railway network and port facilities. The nature of new technology released from local and geographical constraints provides the occasion for a drastic transformation of economic and social affairs.

As our country faces the emerging Information Society problems caused by geographical location and the distance of the international decision-makers, so we have to face problems that may be caused in its internal, in relations between the various regions and the center.

The main purpose of Information Society's policy in regions is to reduce the isolation and integration in global area through the formation of specific planning for each region using the following axes:

- the use of local characteristics and comparative advantages.

- increase investment in areas of infrastructure, production and use of products, applications and services for the Information Society.
- improve the quality of life.
- increase the participation of residents in the community, and promoting broader national goals.

Institutional and development framework for taking initiatives.

The development of the region exploiting the opportunities offered by the Information Society is a key objective for government policy. Geographical, demographic, administrative and economic characteristics of our country appear in regional level and are challenges due to potential of new technology.

The particular characteristics of each region.

The Greek regions vary considerably, not only in terms of economic development, but also in terms of characteristics and inherent potential. Variations also occur within the same region, as other areas are richer and other poorer. The problems that occur in islands are different from the problems that occur in mainland.

Will new technologies increase or reduce regional inequalities?

The use of Information Society shows us increased potential removal of international isolation, cross-border cooperation, new employment opportunities, economic activity and ensuring equal opportunities in upcoming developments. However, the way that the removal of isolation will work, depends on the dynamism of the local production tissue and the ability of businesses belonging to a region to expand their markets and operate competitive in a wider, national or transnational, market.

Those regions that show greater developmental lag, have no minimum critical mass and no local business resources, which significantly lagging behind in terms of available manpower and infrastructures, interventions are needed to accelerate the pace of development so as to address risks marginalization.

[General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralisation, Greece in the Information Society, 2002].

Political context of the interventions.

The political context of government interventions is determined by the continued strengthening of the powers of regional and local authorities coupled with the creation of strong municipalities. Program "Kallikratis" will help to this direction.

The establishment of the Regional Government is null by exploiting the potential of e-Government. Transparency in the conduct of public policies in the regions is inextricably linked to good governance, deepening the democratic functioning and strengthening of social cohesion. The new architecture is designed taking as given in the legislative initiative that has already occurred, the obligation on local authorities to erect any action required on the Internet, including decisions on the operation of the College and the notices, tender, procurement, recruitment, procurement and contracts. In that way the right of public access is given with information and exercise instruments of social control in the region and in the management of financial resources, and thus the principle of political accountability.

With these reforms the regional unit takes on the load of implementing responsibilities, acting like link between local needs and large national priorities. The new municipalities established as powerful political bodies and single point of administration, with size and financial means suitable to provide effective performance of functions relating to local cases, improving the organization and services and integrated approach to local Development planning, with more straightforward democratic participation.

[Managing Team of Operational Program Information Society].

Development and investment interventions.

The development and investment arm of interventions at regional and local level are expressed only through the National Strategic Regional Framework. Institutional policies and development are interventions create new environment for development Greek regions.

In the environment which favors the decentralization of power and promoting local initiatives, the importance of applications to Information Society is multiplied, so as to ensure three conditions:

Necessary enabling technology is the existence of modern telecommunications and broadcasting infrastructure that cover almost the entire country with a minimum set of services at affordable prices.

Social and democratic condition is an in-depth informing to the local population for the necessity of modernization and, more recently, strengthening the capacity absorption of new technologies in specific areas.

Finally, the necessary organizational and functional requirement is to ensure the local presence of updating operators, (like doctors, teachers) where developed applications for Society Information can be employed.

[General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralisation, Greece in the Information Society, 2002].

Lines of action and implementation principles.

Based on the above, the main policy framework for the development of Information Society in the region are the following three:

- Strategic plan and action plan for the Information Society in each region, adhering to local conditions and the structure of local production systems, the comparative advantages and the needs of each region and specific areas within a region.

- Development and application of information and motivation in order to ensure possible wider participation of local social partners, preparation and implementation of projects.

Establish a monitoring and coordination of programs for the Information Society at regional and local level, the restructuring of Regions and two degrees Local Government and the necessary commitment of private, social and public sectors in each region to implement this strategy. This mechanism is part of the broader monitoring system actions on Information Society.

Objective: shaping a pragmatic strategy. The aim of these projects is to develop a realistic strategy and expertise in specific applications, ensuring the broad participation of the local workforce. In this context it should be taken into account and addressed not only in terms of the location of the region compared to the others, but also any internal (economic, geographic and social) heterogeneity of different areas of the region should also be referred to.

[General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralisation, Greece in the Information Society, 2002].

Analysis of the situation.

The analysis of the situation (social, economic, technological, and so on and so forth.) needs requirements combined with a complete record of relevant actions and projects carried out in each region are the foundation to deliver its strategic vision and pragmatic scenarios integrating new services and applications of the Information Society in the economic and social development of the Region specialized in limited applications. The designs of the Regions on the Information Society should be specialized for a certain number of selected applications for feasibility studies that will form the basis of the implementation plan. Each of the studies should address in detail issues, such as the wider environment under investigation, implementation, user profiles, their likely needs, amount of effort required to meet the needs, and so on and so forth.

The Regional Plans for the Information Society should have a specific policy for the development of supply and production of new technologies, telecommunications infrastructure and demand for new services.

[General Secretariat of Public Administration, Ministry of Interior, Public Administration and Decentralisation, Greece in the Information Society, 2002].

6.4 The future of e-Government

Difficulties may arise in the development, integration and upgrade of e-Government applications. Even a simple mistake, such as controlling the control of trade can be confusing. Once a government decides to adopt strategies of transformation processes, significant challenges arise, which have to do with the future. The main challenges are the following:

1. Infrastructure Development.

Countries that adopt e- Government are more or less struggling to establish a basic infrastructure to exploit new technologies and tools. Many developing countries, although they share the will, they do not have the infrastructure for the immediate deployment of electronic services. These countries must include developing

innovative approaches aimed at solving the problem of the necessary connectivity state structures in their strategy efforts to develop infrastructure,. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

2. Security.

Each government will address issues related to protect information and systems from abuses that threaten the integrity and availability of services, but also public confidence in the system. These include security protection against hackers and viruses, ensuring the integrity of electronic records and prevent the theft or counterfeiting information. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

3. Personal Data (Privacy).

Even for those governments that have centralized structure to protect the privacy of citizens, e-Government presents some new challenges. The storage of information in electronic databases, although it was done for their protection, might include risks, in combination to sharing various data services. Many systems collect, store and use personal data for service users and even visitors to the sites. To maintain confidence in e-Government and to avoid irregularities in the use of personal data, a government must determine how to limit the distribution of personal data to individuals and when the user has not entered the information in kinds of organizations , implementation of tools is required and outside of the state machine. Governments should also carefully consider the issues relating to the identification of users through cookies and that one can use them to identify behaviours in a user. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

4. Trust .

The e-Government program ought to build trust between government agencies, citizens and companies. Trust will be built in the early stages of development of the initiative and reported in each of the entity. The greatest concern underlying most of these bodies is the change what a new system will bring and that it will have negative effects on them. This kind of trust also includes two very important aspects of any online service, safety and the protection of personal data as described above. Without trust, people who are already hesitant into using technology, avoid any attempt to electronic services. Electronic Government can and should play an important role in informing the public in relation to policies applies. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

5. Digital Divide.

Differences in access to services E-Government, which is commonly called "digital divide", is a set of issues. The gaps in access and in usage of electronic government may be related to a number of characteristics such as age, location, income level, education level, language and disability. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

The issues of digital divide, which seems to be common to every culture and country, are referred to both the ability to access services, and also to the ability to access the content. A democratic society has a moral and legal obligation to strive to eliminate all forms of exclusion and ensure that every citizen enjoys equal and easy access to state services. The state should maintain its traditional service for those who are unable to use such electronic means. So, the solution to the problem of access is a very important issue for e-Government in the future. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

6. Economic differences.

Income is a major concern in rich and poor countries. The economically disadvantaged have lower levels of access, but often appear the highest levels of interaction with the State. In a state with relatively small expenditure on public services and limited access to the Internet, economics will play an important role in preventing the public to use electronic services. Even if access is available to those who have, through a public space, "it is not the same as you have automatic access via high-speed connection at home and office". In richer countries, the economic differences can cause gaps in the use of electronic services. The countries with the largest digital divide are those that have a high income inequality. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

7. Education (Training).

 In general, the rising education level, respectively, has an increased use of Internet. At all income levels, people with higher education have a higher frequency of the Internet use compared to other lower education levels. The training in the use of technology seems to be the key element in this gap. User groups that have experience on the Internet are the most frequent users of electronic services. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

8. Accessibility.

Ensuring that people with disabilities can use government websites is another important issue in the development of e-Government. Responding to the needs of people with disabilities can present particular challenges. For people with disabilities, an accessible website can be used with a variety of ways that do not depend on a sense or ability. The failure of accessibility to online services creates the threat of virtual isolation of the disabled necessities. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

9. Transparency.

The government's transparency should be a significant factor in the design of infrastructure. The people rarely understand how government decisions are taken. This lack of transparency prevents most people from active participation, development questions or protest on misguided decisions. The lack of transparency can also be concealed phenomena of corruption or favouring by the State. The government websites and online services should comply with the principles of law on state functions. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

10. Information society.

Governments cannot be too ambitious in e-Government, but probably there will be no corresponding public awareness about available online services. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

11. Human Resources.

Human resources should be structured bearing in mind the objectives of e-Government. A trained and happy human face is very important for the success of the Electronic Government. Public servants need training and incentives to "Unite" with the new infrastructure. The senior leadership should not expect public employees will feel threatened by e-Government, either because of fear detection of corruption, either due to fear of reduced strength. Politics can play an important role in creating a positive climate for change, ensuring adequate training and rewarding those who support the change. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

12. Benchmarking.

Governments must regularly evaluate the progress and effectiveness of investment in order to determine whether the objectives are clear and aims to meet schedules. Calculation of the value and progress of investment is a

difficult, but nevertheless necessary step, if it is desirable to support these initiatives. It may include qualitative and quantitative measurements, such as the number of online services, to reduce the average time for transaction processing, reducing complaints about service quality, increasing citizen participation in democratic processes and reduce costs for state. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

13. Priorities.

There is, of course, the risk of promoting e-Government against the most basic responsibilities of governance. For instance, in some parts of India high usage of electronic services is shown, while just 50 km from these areas there are serious problems with water supply and power supply. [Regional Training Institute of Thessaly, "E-government", Lecture Notes].

Conclusion

The public sector of members of the European Union faces challenges at all levels: economic, social, political, institution. It should also play a key role in modernizing society and simultaneously to meet the profound changes brought about by new technologies.

The subject of e-Government is precisely the use of Information and Communication Technology (ICT) combined with organizational change and acquisition of new skills to improve public services, democratic processes and policies pursued by the public sector.

Citizens and businesses now require from the public sector to improve the quality of products and services.

There is the expectation of public services that are more personalized and user friendly, customized to the needs of citizens.

E-government also offers the public sector the ability to maintain and strengthen good government in a knowledge society through the transparency of its services.

E-Government strategy should focus on achieving the Lisbon objectives, to reduce barriers of internal market for services and mobility across Europe, effective implementation of national policies and regional or local development.

The question naturally arises, what tools will implement the new strategy?. The digital strategy may be different for next year, from the present Operational Programme "Information Society" or next period. The OP is certainly the thrust digital strategy, but is not limited just to this. The implementation of digital strategy will take into account all the available tools and especially potential public-private partnerships (PPP) projects in service e-Government. Having analyzed all stages of preparation, and based on European and national development priorities Digital Strategy could be prepared by the two major strategic objectives:

Productivity and better quality of life through use of new information and communication technologies and new skills. The two key strategic objectives are further broken into lines.

Their aim is to improve productivity and to boost faster growth of the Greek economy through the exploitation of technologies information by companies. Furthermore, consider that the public sector must use technology as a tool to improve internal procedures while facilitating the operation of the business fabric the country. Seeking to contribute to entrepreneurship in each sector, especially in areas that utilize the technology. They want to coordinate best efforts of its own industry based on new technologies.

Considering about the quality of life, aimed at exploiting the dynamic new technologies by citizens at the everyday level and propose several practical ways to employ this action. Moreover, aiming at developing electronic services for citizens, which saves time and offers new possibilities to deal with bureaucracy. With such an approach, the concept of electronic government is horizontal, reaching the two major directions. At the heart of all efforts to implement the digital strategy is the human capital, which should be interested in developing, enhancing their skills through new technologies. But what is important is that we set the strategy at a higher level of abstraction. Instead, specification of any critical actions is essential, necessary and practical.

Chapter 7

7. Conclusions

E-government is a key feature of a modern and effective state with beneficial effects on economic growth, competitiveness and prosperity of society. According to the European Union, e-Government does not concern only with the tools provided by information technologies and electronic communications in public administration, but it is also concerned with their combination with organizational change and new skills of staff so as to improve the civil service, strengthens the democracy and supports effectively the broader government policies. Nowadays, the governments state that e-Government is the most important tool for a broad administrative reform in which new technologies play a new role. The European Union bringing into effect the implementation of the Lisbon Strategy and i2010, has given special emphasis to the development of e-Government aiming to modernize the public administration and providing value added services to citizens in all EU countries.

Greece, as a European country, must not only proceed with the adoption of the European instructions, but should also take steps to substantially converge to development levels of other EU countries. Of course, this part of the route involves the functional integration of ICT, as it will unleash potential growth and solve chronic problems of bureaucracy and opacity. Despite the long delay in use of Information and Communication Technologies (ICTs) in Greece, there have been an increased interest and investment in the sector over the last years. Of course, there is a lag in comparison with many countries in E.U, although according to the Observatory for the Information Society, we are now in a phase of rapid convergence to European levels. The last-mentioned study by the Observatory for the Information Society for e-Government in the public sector suggests that the current situation will improve with the completion of major ICT projects, which are nearing in completion. An example of such major projects is the project HERMES (National Center of Public Administration), the project Sizefxis, the National Electronic System for Public

Procurement and the Management Information System Regions. The increased penetration of broadband to public sector is expected to give a great boost to the electronic services.

The introduction of Electronic Government in Local Government will certainly lead to the upgrading of structures and infrastructure, increase efficiency and productivity, promote decentralization, expand citizen access to public information and will enhance participation in the administration of local affairs.

The key to any progress is in the conduct of elected and first and foremost the mayors and heads of communities, strengthening the belief that the import of systematic coordinated operational use of ICT is worth and any cost.

Our country has a reasonable use of Information and Communication Technology but has not fully achieved the goal of digital convergence.

As shall be determined by surveys of the Institute of Local Government and EETAA SA reported previously (vl.Kef. 4.5), about half of Municipalities offer electronic services. This percentage represents the most large urban centers and less provincial municipalities.

Generally, there are significant gaps and weaknesses in the structures, functions and human resources of local authorities on Informatics. Uniform standards and common platforms have not yet been developed with so many technological incompatibilities. Moreover, existing operating procedure, commands and culture of human resources of local authorities are major obstacles. Also, there is a significant digital divide between the skills of older workers, senior and younger executives who have a lower rank position, which is clearly more qualified and familiar with ICT. However, recent efforts are being made to upgrade the municipalities in computer and the internet. The KEDKE has developed a strategic framework for cooperation with municipalities for the strong presence of local authorities to Information Society.

This fact can be shown during the CSF III (2000-2006) and the NSRF (2007-2013). The OTA can use the structures created (TEDK, development agencies, training centers) and the expertise and experience acquired in previous years, can help in designing and implementing measures for using ICT in the new programming period. Of course, the new Digital Strategy 2006 -2013 has already been designed, under the new initiative of the European states on the Information Society "i-2010" and planned for e-Government "e-Gov2010". Therefore it has been estimated that during the next years our country will intensify the efforts for implementing Electronic Government

(E-Government). The OTA can use funding from the O.P. of Ministry of the Interior for Better Management ability of the Public Sector and from Ministry of Defence for the O.P. Digital Convergence. Finally, the National Network "Syzefxis" can be used for networking with other Local Authorities and public bodies for the delivery of municipal services.

The Digital Strategy which has applied to the horizon of 2013, has a very specific target to mobilize citizens and businesses and utilize their potential to benefit all of us, with specific timetables and predetermined strategy.

The systematic introduction of Web applications at the local level makes immediate improvements in internal organization, communication and cooperation with citizens. In conclusion, it is necessary to continue with the fast steps of introducing new technology in order to improve quality, efficient functioning of public administration as a whole, transparency and facilitate access to services.

Conditions for success of E-government

In accordance with a recommendation of the Committee of Experts of the Information Society Managing Team , fundamental prerequisite for the success of eGovernment is the adoption and consistent adherence to the principle of creating customer-oriented services to citizens and businesses. This principle requires a significant reorganization of the public administration to allow optimal use of information technology and communication. Furthermore, the general conditions for the success of electronic government include:

- Understanding the state of priority and critical e-Government for the country and substantial commitment to broad application.
- The creation of a strategy with concrete steps and timetable for reorganization of the Public Service and the transition to electronic government.
- The proper communication of the vision and the process of implementation and join in that both "customers" of services (public and companies) and the "providers" of services (staff of public administration).
- Securing the active cooperation of experts (business information and communication technologies (ICT) specialist consultants, figures of public and private) that will undertake the task of technology transfer, implementation, support and in some cases operating systems.

- These bodies should be seen as stakeholders, partners and co-authors of the entire project and not just as vendors or implementers. Finally, it is obvious that without a vibrant and healthy industry technologies Information and communication technology (ICT) in our country cannot implement the vision of e-Government.

In a general framework, the main barriers to implement the e-Government program is not so of a technical nature, but more or less socially and culturally. The e-Government must be followed by changes in the organization, philosophy and structure of public services. It requires training of public officials and citizens, management and institutional issues and penetration to Internet access. All these obstacles to the spread of e-Government must be resolved immediately and the beginning would be by addressing the ignorance of citizens, who currently have little knowledge about what the Information Society means and what changes this will bring into their daily lives.

In any case, even the finest technological system to be characterized as being successful, it requires, if nothing else, users.

The e-Government services should be understood as the right of citizens to participate in the Information Society and accordingly an obligation of the Administration to provide similar services. This right should therefore be facilitated. It is also now commonly accepted in Europe, that one of the obstacles to implement e-Government services is the lack of confidence in them. The legally binding framework of electronic government in combination with the transparency would greatly facilitate the establishment of relations of trust with citizens and businesses.

The systematic introduction of Web applications at the local level makes immediate improvements in internal organization and communication, resulting in cooperation with citizens. In conclusion, it is necessary to continue with the faster process introduction of new technology to improve quality and efficient public administration as a whole, transparency and facilitate access to services.

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