

HOW DID THE ECONOMIC CRISIS IN GREECE AFFECTED THE STEPS IN APPLYING E-GOVERNMENT AT THE FIRST DEGREE SELF GOVERNMENT OF GREECE

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Abstract

Greece, in the frame of appliance of e-Government, the last years has made significant steps which have changed the way its public services work and especially the local self government, which is represented by municipalities. Many countries, not only in the European Union but also throughout the world, are adopting decentralization reforms in order to empower local communities. In Greece specially, the economic crisis that started from 2009, gave one extra motivation to use decentralization to make local self government more efficient. Decentralization is the process of transferring authority, responsibility and accountability from central to local governments. To accomplish this, Greek government applied the Law 3852 «Kallikratis plan», instituted in 2010, reforming the local self administration and its duties. The purpose of this paper is to present the consequences of this change to the e-government steps that were done before «Kallikratis plan».

Keywords: E-Government, Local Self-Government, Economic Crisis

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Introduction

E-Government is defined by the EU organisation as the use of information and communication technologies in public administrations combined with organisational change and new skills in order to improve public services and democratic processes and strengthen support to public policies. The Greek municipalities today have the ability to take advantage of the European Union programs and subsidies to achieve a better level of e-Government, with proper substructures – organizational and technological-, and advanced services.

Before the economic crisis there were many researches that noted problems in applying e-government at the Greek Municipalities (i.e. Goulas & Kontogeorga, 2009) and delays (Hahamis P. et al, 2005). Even though the first “taste” was positive we couldn’t deny the arrhythmias noted by the Central Union of Greek Municipalities and Communities (2011) which is also confirmed by this work.

From 1 January 2011, in accordance with Law 3852/2010 «New Architect of Self-administration and the Decentralized Administration – Kallikratis plan», the administrative system of Greece was drastically overhauled. The former system of 13 regions, 54 prefectures, and 1034 municipalities and communities was replaced by 7 decentralized administrations, 13

regions and 325 municipalities. The regions and municipalities are fully self-governed while the decentralized administrations are run by a general secretary appointed by the Greek government. The Monastic State of the Holy Mountain, as an autonomous self-governing entity, is still exempted from such reforms.

This paper aims to look closer the situation in Greek municipalities regarding e-Government and examine the direct impact that Kallikratis plan had on it, which was the main impact of the economical crisis, with all the implied consequences.

In our research we used a case study of the municipalities of the former region of Western Greece to examine the e-Government level before the appliance of Kallikratis Plan. Than we made a survey to collect all the elements relevant with the results of our case study, which took place after Kallikratis Plan and we analyzed the way they had affect on e-government.

The result of our work was to register the e-government level before Kallikratis Plan and right after it, to detect the legislative and structural changes that affected e-gov and the way it does and finally, to underline the spots that need to be prioritized by the Greek Government.

Methodology

We made a combination of quantitative and qualitative research which combines a survey on data that we have collected by the bibliography and by observation of the changes that took place. We followed the case study method for the former region of Western Greece and we used layered sampling of the total municipalities according to the population.

To carry out our study we drew up a questionnaire which was sent to diverse

municipalities of Western Greece, to find their degree of involvement in e-Government initiatives. We obtained responses from 19 local governments and by using layered sampling according to the population we got the information we wanted, relevant with the ICT use and e-Government appliance at the municipalities of Western Greece. The information we collected concerns the period till January 2009.

We can see some sampling data where we can see the layering used, at table 1.

Table 1. Sampling data

Population	Total Municipalities	Sample
0-5.000	30	3
5.001-10.000	27	7
10.001-20.000	12	5
20.001-100.000	4	3
>100.001	1	1

To have a better view of the existing conditions we took also some interviews from employees who filled in the questionnaires and were responsible for ICT and elected representatives of the municipalities' councils. Very helpful was also our personal experience.

Our research was separated to the following parts: the organization of the municipalities on ICT supporting, the ICT level they are and the e-Government steps they were doing.

The region of Western Greece was consisted of three Prefectures, namely Achaia, Ileia and Aitolokarnania, which were further divided into 72

Municipalities and 2 Communities (Local Government Organizations).

Our sample was consisted by 19 municipalities which after the appliance of Kallikratis Plan were transformed to unities of bigger and fewer municipalities.

E-Government Level of Municipalities before Economical Crisis

From our research came up for the way municipalities are organized, as is shown at table 2, that the majority (74%) of the municipalities had no structure (office, department or directorate) for the support of informatics and new technologies in general.

Table 2. Organizational structures for Informatics

STRUCTURE	Municipalities with organization unit for Informatics (%)
Office	16
Department	05
Directorate	05
No unit	74

Examining the data we collected about the personnel, the majority (62%) of the municipalities had none specialized employee on informatics and

new technologies. The other 38% had not enough specialized employees to support them and they had technical support externally (table 3).

Table 3. Employees specialized on Informatics in each municipality

Education level	Average number of Employees specialized on Informatics in each municipality (%)
University degree	0,53
Technological Institute Degree	0,11
Lyceum specialization	0,63

For ICT use if we exclude municipalities with low number of employees, the percentage of employees that had computers for their job and could use them was much lower than 50%. The technology they had was not very old but needed upgrade to support new programs and the higher demands users had. In general, all municipalities used software for many of the tasks they manage. They used the client/server model but in most cases (53%) they had only one server, which means security and availability problems.

Moreover, almost all municipalities were covering their network needs with structured networks, which were covering the biggest part of their services. Some of their departments used partly wireless networks -but it's very rare- and in some cases they also had some smaller networks using hubs to extend their main network.

The "SYZEFXIS" project implements the network of the public administration which connects all the bodies of the public sector, the public administration and local authority with broadband networks for their internal communication.

In small municipalities with small number of employees and personal computers all the computers had access to internet. As the number of employees and pcs was getting bigger this access was decreasing. Most of the municipalities (79%) had permanent access to internet and SYZEFXIS helped a lot in this direction. They may also used PSTN, ISDN, xDSL connections, but it was only for offices that could not connect to the main network of the municipalities because of the distance or other reasons.

All municipalities had at least one e-mail account that they use formally for the organization. They didn't use e-signature and e-mails were not considered formal way of communication in Greece but still was a way to communicate somebody with the local self government organizations for clarifications and information. However, it was not used very often.

84% of municipalities had web site or portal from which somebody could find information relevant with the municipalities. Almost all of them had static and rarely updated data or had information that was updated regularly, upload announcements and forms for downloading by citizens. However, 68% of the municipalities were implementing portals which were delivered that period and combined electronic information publication giving to citizens the ability to implement some economic transactions on-line.

HERMES was implemented too and become available, being the central government portal, which cooperates with all public services, included those of the municipalities. In addition, 58% of the municipalities were already connected to the National Population Registry while 11% were developing Geographical Information Systems and the same

percentage had developed web material for their cultural heritage.

Almost all municipalities of the region were connected with SYZEFXIS mostly using 2 Mbps total bandwidth and 800 Kbps data bandwidth. However a lot of delays existed in most Municipalities for the precession of their telephone lines via SYZEFXIS and also the network utilization was almost null to most of the municipalities.

Citizen Service Centers (KEP) are founded to 84% of the municipalities showing the big importance they had.

A very important project was the implementation of Metropolitan Broadband Networks of Optical Fibers in a percentage of 10,81% for the region.

Additional to that at a percentage of 27,03% of the municipalities of the region implemented wireless connections and at few municipalities (11%) Wireless hotspots of broadband access are implemented to serve the special morphology they have, and work complementary with their implemented/implementing Metropolitan Networks for servicing better the citizens.

Impact of Kallikratis Plan on E-Government

We examined the changes that affected the organization, the personnel and the ICT that service e-government.

According to Kallikratis project all new municipalities had to adopt new organizational schemes in 2011. This was difficult as a procedure and as a result most of the municipalities completed this procedure in 2012. Hellenic Agency for Local Development and Local Government (E.E.T.A.A.) S.A suggested some model organizations on which municipalities could work on to form suitable organizations. To determine the number and the type of organizational models, EETAA worked out study with statistical treatment of quantitative elements and with the collection of qualitative data, via questionnaires that were answered by the advisers of Local Union of Communities and Municipalities-TEDK. Depending on their demographic size the municipalities were distinguished in 4 subgroups: Big, Intermediate to big, small to intermediate and Small. Consequently they have drawn up:

- 4 models that concern in continental and remaining insular municipalities
- 4 models that they concern in insular municipalities N. Aegean, V. Aegean and Ionian
- 2 models that they concern in urban municipalities of metropolitan centers

For the operational modernization of new Municipalities it was forecasted the inclusion to the new structures of Service of Planning, Organization and Information technology which in the big municipalities includes:

- Department of Planning and Growth
- Department of Effectiveness, Quality and Organization
- Department of Information and Communications Technology (ICT).

Kallikratis Plan, because of the new services that municipalities had to provide, anticipated that bigger in population municipalities of regional units of regions were compelled to provide complete administrative support in the remaining municipalities of regional unit, that do not have the necessary material and technical infrastructure or the essential personnel for the exercise of competences that were transmitted in them with Kallikratis law. (Article 206, Law 3852/2010).

For “Kallikratis” there were two axes of Intervention of Information Society SA (2010-2011):

Axis I: Functional Unification of Information Systems (IS):

1. Unification and adaptation of existing Information Systems for the beginning of application of Program the 01.01.2011 which would at the same time ensure in the Central Administration the disposal of essential elements for the total control and planning, and

2. Planning of a completed model for the electronic Self-government and the electronic Decentralized Administration.

Axis II: e-KEP The axis e-KEP concerns in the guarantee of benefit of administrative services to the citizen so that is achieved reduction of distance that is created between the citizen and the Administrative Services because of the concentration of Self-government in less - more powerful and bigger Administrative Units.

In the frame of operation of Public Administration they have been implemented and functioning a number of Pan-Hellenic scope networks which interlinks institutions of Public Sector offering to them advanced telematic services. Such National Networks are the Network SYZEFXIS, the Pan-Hellenic School Network and the National Network of Research and Technology. At the same time, in the past few year were implemented the Metropolitan Broadband Networks of Optical Fibers (MAN) which offer services of interconnection of high speed in local level, in institutions of public interest in 68 urban regions of country.

In the frame of development of broadband networks (optical fibers and wireless networks) in Greece have been constituted four (4) Regional Municipal Forms (Eastern Macedonia and Thrace, Central Greece, South-western Greece and Crete – Islands Aegean) that cover all country, in which participate Municipalities which have materialized important work of broadband infrastructures. These forms aim to participate in the management of operation and exploitation of broadband networks.

Although MANs are ready from 2009 we are still waiting the results from the public consultation on the terms of statement of International Competition on the entrusting of Convention of Concession with object the Management, Exploitation, Maintenance and further Growth of Metropolitan Networks of Optical Fibers (MAN) from the Special Secretariat of Digital Planning of Ministry of Regional Growth and Competitiveness.

Because of Kallikratis changes, from 2011 all municipalities were taken out from National Registry until the adaptation of central Integrated Information System of National Registry so that it corresponds in the new needs and the improvement of data quality of the registries in not included municipalities.

At the same time, began the implementation of the National Liksiarcheio, which is shaped in the frame of Kallikrati and completes the citizen registry. According to the possibility that ICT provide for the unified - technical and operational function of National Registry and National Lixiarcheio, to central and local level (to each Municipality), leads to the National Registration of Citizens, which creates important economies of scale, simplification processes and better and more direct service of citizens.

The Ministry of Internal, through the “Integrated Information System of Registration of Citizens” aims at the creation of united base of data that will give reliable elements with all data of citizen, from his birth until his death, included also his municipal activity (e.g. change of his family situation, re-publishing etc). It is a work that mostly strengthens e-government and promotes the organizational and administrative modernization of Greek Public Administration.

Conclusions

The economic crisis in Greece found the Municipalities in the phase of growth and appliance of e-government and obviously it was inflected to the e-government steps municipalities had done.

Lack of resources led to the obligatory shrinkage of organizations of Municipalities but also led to the similarity in the confrontation in the way organizing and modernizing their structures, so that they correspond in the new electronic reality.

Thus, the reformation of organizations and the merging of their ICT personnel with the unification to new structures is certainly an important improvement. Sure the interval from the suppression of old structures up to the organizing and establishment of the new structures disorder the all development, while in all the 2011 the new structures operated faulty. However it was essential step in order e-Government to be applied on robust bases.

For crewing of new ICT structures there was a concentration of employees of the former municipalities which suppressed, in the new

structures that resulted from their unification. However, considering that before crisis no Municipality had sufficient specialized personnel in new technologies, it is fate the new structures to need more ICT specialized personnel. If we consider that from 2009 municipalities did not make any new nominations and personnel withdraw with retirement or according new provisions that applied in the country this need becomes bigger.

Moreover, the fact that the data that the old municipalities allocated and managed with different applications of different technologies had to be unified created many difficulties in the undertaking concretization and the application. The initial concretization timetables were proved not feasible while the infrastructures that existed were not ready municipalities had not disposed enough time for the suitable preparatory work for adaptation of services and applications' data. However, the financing by the European Union and its exploitation in the reformation of structures and the functional unification surely helped enough.

An additional subject that had to be faced was the operation and support of big e- Government work that was materialized in the old municipalities and needed adaptation in the new conditions. Work, as the portals of Municipalities and the National Registry are, could not be functional for a big period of time because needed adoption of new applications and the data that unified and the suppression of old structures had to be considered.

Municipalities that were unified had to choose one of the portals that the unified municipalities had implemented, to update the data and adapt the electronic services that provided on the new applications that were selected to unify and adopt the data. The lack of resources for the implementation and the support of these adaptations was one more factor of delay that in most cases has brought the municipalities enough steps behind in the e-government concerning the level that had been developed before the crisis.

Obvious is also the need of municipalities for new adaptations of data, in order to correspond in the requirements of National Registry that had been implemented and many of the former Municipalities had been incorporated providing one more important service of e-government for the citizens. This service although was in use before 2011, after Kallikratis law for a long time did not had the ability to have valid and updated data, until the Municipalities adapt the applications they have chosen and their data.

However the objective for the creation of an "Integrated Information System of Registration of Citizens" and the financing by the European Union constitute a serious factor that not only helps in negotiating the above obstacles but also in the extension of National Registry with National Lhksiarcheio.

Important delay because of the crisis and all the changes that have taken place to the municipalities, we had at the utilization of the Metropolitan Networks that had been materialized and they still have not been developed because there is no progress in entrusting their management, Operation and Exploitation in Contractors. The operation of such an important work in combination with the possibilities of the network SYZEFXIS could give big impulse in the growth and distribution of e-government.

What Can Be Done More

Considering the situation that prevails in municipalities and generally in all country with the reformation of public sector, there are surely many things that should be done and have to be implemented in a short time.

Taking advantage of the financing by the National Strategic Reference Framework (NSRF) 2007–2013 municipalities can run the completion and development of all important work that is in development, as National Lhksiarcheio, SYZEFXIS-II, MANs, etc

In the frames of personnel mobility services of municipalities can be staffed with ICT specialized personnel. Important also is to continue the training of all employees on subjects of electronic government, an effort from National Center for Public Administration and Local Government (EKDDA) and not only.

It is important new municipalities to correct and/or implement new electronic services and inform and prompt citizens for their use. The simplification of processes and the reduction of problems in electronic service of citizens will strengthen enough the way citizens affront e-government.

The completion of entrusting of management, operation and exploitation of MANs and the participation in SYZEFXIS-II can help e-government to take off because it will improve rates of connection and service of citizens and will develop new possibilities and new, advanced internet services that will contribute in the whole growth.

In general therefore, the application of Kallikrati in Greece initially brought a lot of problems in the growth, turning the country many steps back to the sector of e-government. However the fast confrontation of problems will elect the advantages of the project and will help in the growth and establishment of a really effecting electronic government.

Future Work

The radical reformation of structures of local self-government, besides the problems in e-government that created, gave the chance to correct and improve the fundamentals for the development and growth of e-government in Greece.

It is interesting to watch the development of such reformations and record the difficulties that present and the possibilities of surmounting of obstacles. This will help in the forecast in corresponding cases of the direct, medium-term and long-term subjects that can appear in order to be confronted fast and efficiently. Thus, we can see how we could avoid corresponding situations through a better and more careful plan of applying and organizing new e-government structures.

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