An E-Government Web Portal

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Abstract: - Nowadays, ICT penetration in personal and public human activities such as education, culture and even health has created what is known as the term e-services, which has become part of our every day life. Governmental services could be no exception to this rule. This paper presents in detail the structure of a model Hellenic e-government environment (web portal). It was created by Net Media Lab of N.C.S.R. "Demokritos" and supports one of the basic e-government models, namely, G2C (Government to Citizen), focusing on governmental information dissemination. The Hellenic citizen has the opportunity to access and obtain information regarding a number of issues surrounding his/her every day needs by navigating through the web pages of this portal. Such information includes information about the Ministries of the country, info-city, news and useful information of various social services in Greece, in both text and audio form. Finally, it must be mentioned that this environment was created bearing in mind the "Design for All" approach, hence people with visual impairments can easily access it and navigate through it.

Key-Words: - E-services, e-government, ICT, info-city, G2A, G2C.

1 Introduction

The rapid development of contemporary Information and Communications Technologies (ICT) has immediate and direct effects on every aspect of contemporary life, including government [1,7,8]. As a result, the expectations of the citizens as well as the structure of organizations have changed accordingly. This development has given rise to an environment characterized by demand for timely delivery of information and services and a requirement for ready access constantly.

As a result, governments around the world have been "forced" to adopt the ICTs and especially the Internet or web-based applications. The main aim is to tailor them to the needs of the citizens the organizations, governmental agencies and businesses in order to cover and fulfill their respective needs to a full extent [2,3].

E-government is the name given to the use of electronic means in order to deliver and provide better, more reliable and more effective government. The impact of e-government is none other than better government, which is more trustworthy and more reliable as it offers a vast number of advantages such as:

- Better policy outcomes
- Higher quality services
- Greater engagement with citizens
- Greater collaboration between agencies
- High Productivity
- Financial benefits for all

As was the case with other e-activities such as e-learning and e-culture [4,5,6], e-government introduces ICT in order to provide easy access to governmental information and services, to improve the quality of these services, and to develop and provide greater opportunities to citizens to participate in democratic institutions and processes [9,10]. This effort includes Government to Administration (G2A) and Government to Citizen (G2C) transactions within different units and levels of government such as justice, taxation, welfare, social security, procurement and intra-governmental services [11,12,13,14,15,16]. All the above require technical policies and specifications for achieving interoperability, security and information systems coherence in the public sector [17,18,19].

The aforementioned context constitutes a basic body of knowledge for the design and development of e-government applications, in general. Bearing this context in mind an e-government environment was designed and developed aiming at constituting a user friendly environment for the user by providing

all the substantial information and services that he/she may need.

2   Abstract Level Description

The e-government system (web portal) that will be described and which is depicted abstractly in the following Fig.1 contains three links (government info, Hellenic news and info-city). The structure content of the system consists of the following steps:

In the first step, there was the task of collecting all the necessary information regarding the objectives of the portal. That is to say information regarding all of the Ministries of Greece, the hospitals, pharmacies, cinemas, news agencies and other social services in the city was collected, in order to be assessed.
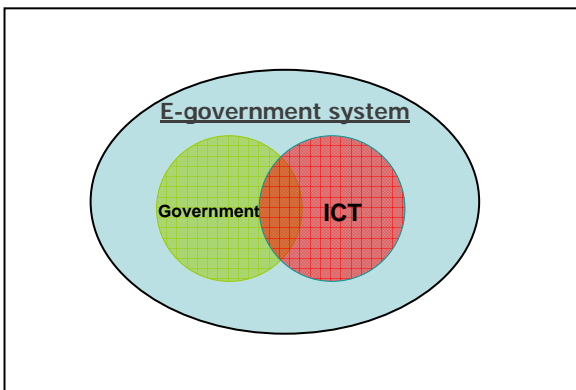

Fig. 1: An e-government system

In the second step, there was the task of categorizing this information after the assessment, in order to have a more clear view of how to organize it and present it in the best possible way. The presentation of the information within a web portal is materialized bearing in mind the needs of the user-visitor at all times. The main aim is to render the web portal accessible and user friendly to the user-visitor, who will be able to easily and quickly navigate through the web pages of his/her choice, without having to spend time unnecessarily on searching. In this case, the information regarding the Greek Ministries, the Greek News Agencies and the info-city was presented in separate web pages.

The third step involved the studying of the appropriate e-content. This task was undertaken aiming at presenting only the most interesting and necessary information for the users-visitors rather than feeding them with redundant information.

Following this task, the e-content was written and embedded into the system.

The final task had to do with the in depth study of the standards and technologies used for the creation of this web portal. Such technologies include HTML for the design of the web pages and the FLASH technology, which was used in order to provide zoom in and zoom out services to individuals with visual impairments [18]. The "design for all" approach was adopted constituting the web environment user friendly equally to disabled individuals as it is for normal citizens.

3   System Analysis

The system main page namely, "E-government Services", contains the three links, regarding information about life in Greece, as it can be seen in the following Fig. 2.

Fig. 2: The Main Page

The Main Page of the system has a very simple structure with a single column of the three links, in order to help the user-visitor navigate more easily. In this paper, all three of these links, will be analyzed in detail, namely, "Government Info", Cities Info" and finally "Gr News".

3.1 The Government Info Page

By clicking on the link "Government Info" on the main page, the user enters the correspondent page. There, the user can find a list of links of all the Hellenic Ministries. When clicking on one of the Ministries, the user will have access to information such as the address, the telephone and fax numbers and finally the web address of each Ministry, which appears on the right hand side of the page, as it can be seen in the following Fig.3.

Hence, the user-visitor has the possibility of initially obtaining basic information about a Ministry of his/her choice such as its phone number and address. More specifically, the personal phone numbers of the Minister, Deputy Minister and

General Secretary of the Ministry can also be found in this page. For more information regarding the specific Ministry, the user has the possibility of visiting the Ministries web site, by simply clicking on the provided link.
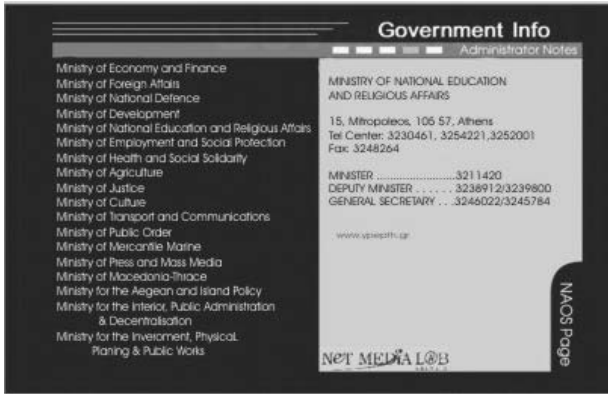

Fig.3: The Government Info Page

3.2 Info City Description

Correspondingly, by clicking on the link "Info City", the user enters the corresponding page. This page presents the implementation of an info-city for the two largest cities in Greece namely, Athens and Salonica, information that is essential for both a citizen and a visitor.

After choosing his/her preferred language (Greek or English), the user enters another page, whereby the page instigates the user to choose one of the two aforementioned cities (Athens or Salonica). After the selection of the city, which undoubtedly facilitates the navigation for the user-visitor, a page is loaded where the user can choose one of the following social services, to get informed about vital and useful information regarding the city's activities and services of his/her interest, such as:

- Theatres
- Cinemas
- Pharmacies
- Hospitals
- Useful Telephone Numbers
- Inter-City Motor-Buses
- Airlines
- Radio-Taxi
- Railways
- Radio Stations
- TV Channels
- Museums
- Art Galleries

By clicking on one of the above links, the user can get all the necessary information regarding these institutions. For example by clicking on the link "Cinemas", the user accesses information about all the cinemas in the city, their addresses and their telephone numbers, as it can be seen in the following Fig.4.

Fig. 4: The Info Cities Page

As it was mentioned before, the FLASH technology, which was used in order to provide zoom in and zoom out services to individuals with visual impairments. By right clicking the mouse and selecting the "zoom in" function, the user views a larger version of the web page, which is depicted in the following Fig.5. Reversely, by choosing the zoom out function, the user can view the original version of the web page.
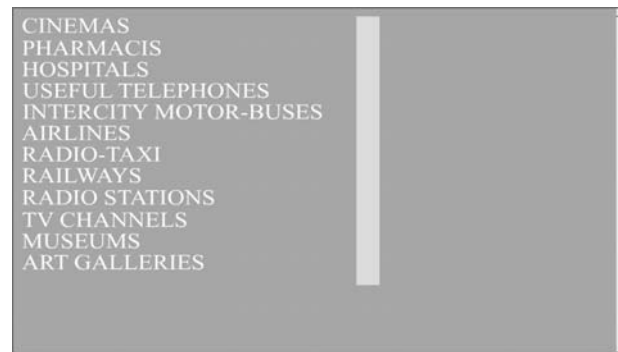

Fig. 5: The Zoom-In Service

3.3 The Gr News Page

Finally, by clicking on the link "Gr News", the corresponding page loads. This page provides Hellenic news to the web users-visitors and to the overseas Greek citizens. It contains news from well known Hellenic radio stations and news agencies and acts as a Hellenic news library. This is the first ever Hellenic media web portal. The links of these radio stations and news agencies that contribute to the operation of this page can be seen in the following Fig.6:

Fig. 6: The Gr News Page

By clicking on one of the image links, the user can access information regarding the correspondent radio station or news agency such as their program as well as news feedbacks.

4 Conclusion

The conversion from government to e-government is an opportunity for government to show their capacity to adapt to an environment of constant change. With the intelligent use of ICT and especially the Internet, governments have the unique opportunity to take advantage of the indisputable advantages that these technologies can offer, in order to achieve better and more functional government.

Unfortunately, for a number of years there was a tendency and logic that ICT was too expensive and maybe unreliable too. Thankfully, this viewpoint has changed radically and there is a general way of thinking that ICT is no longer considered expenditure but rather an investment. Providing online services is undoubtedly expensive, but on the other hand, the long run benefits are unquestionable. Of course, priority should be given to those services, which are the most beneficial for all, rather than to those with little or no demand.

The advantages and benefits of this transition to electronic government with the use of ICT are numerous and very attractive. For a start, there is the better and more profitable engagement with citizens, higher productivity, more efficient administrative procedures, the strengthening and growth of democracy and finally, the provision of high quality online services as well as improvement of the existing ones.

When developing and providing an e-government system there is one particular parameter that has to be taken seriously into account. Since such a system is primarily aimed at a citizen, it goes without saying that the system must and should be customized to his/her needs. Luckily, ICT has the potential to create such environments, which enable the citizen to comprehend the government structure more easily and hence, be able to deal with it more effectively. This results in the mutual trust between government and citizens, which in turn gives the citizens the confidence to use e-government systems.

The main aim of this project was to create a special e-government system on the Internet that was adjusted to the needs of the Hellenic people. It was vital to simplify as much as possible the issues that surround ICT access, in order to develop a more user-friendly environment for the user visitor. Bearing this in mind, the project gradually started becoming a new reality especially for the Hellenic people, as this was the first ever e-government environment in this country.

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