A UNIFIED FRAMEWORK FOR POLITICAL PARTIES TO SUPPORT E-DEMOCRACY PRACTICES

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ABSTRACT

e-Government and e-Democracy constitute a central theme in information society policy at all levels: local, regional, national, European and even globally. To this direction, a variety of efforts have been made and many systems have been developed. This paper proposes a methodology for designing and implementing web-based services that can support e-Democracy practices. Furthermore, the paper presents and describes the effort made by a Greek political party to this direction, for the design and development of a unified framework for providing, supporting and managing e-Democracy services. The paper describes the actions taken and the work done according to the proposed methodology.

KEYWORDS

e-Government, e-Democracy, Open source software.

1. INTRODUCTION

The wide adoption of the Internet and the familiarization by enterprises and citizens with it was sought for many public authorities as an important step forward in availability and accessibility, as it could provide access to information along with a certain degree of interaction among the citizens and the authorities

involved. In particular, both the Internet and the current state of Information and Communication Technologies (ICT) allow public authorities to adopt a citizen-oriented approach, providing public services (García-Arribas and López-Crespo, 2003). Furthermore, e-Government and e-Democracy presuppose that the services provided and the information management is supported by efficient and reliable information systems which enable public administrations to interact electronically with individuals. As stated in Pizarro and De la Torre (2003), these presuppositions are based on another important hypothesis: "online administrative procedures are subject to sets of explicit rules, based on standards, which are systematically applied with no scope for arbitrariness or discretion in their application".

As far as it concerns e-Government, it should be mentioned that it is a tool, not a goal itself and it should therefore assist the delivery of better government by (Liikanen, 2003): (a) increasing democratic participation and involvement; (b) providing to citizens personalized public services that meet their specific needs; (c) increasing efficiency and productivity by digitizing information and processes. e-Democracy practices support a variety of ways for political participation, from access to public information via formal and informal participation in planning and decision-making processes, to online voting in elections (Kubicek et al., 2003).

In this paper the effort to e-Government made from a Greek party is presented. The objectives of this effort were twofold: on one hand the development of a system that could form a communication medium between the party and the citizens and on the other hand the adoption of a system, as a supplementary medium, for the support of the internal processes and actions within the party was sought.

The remainder of this paper is structured as follows. In section 2 related efforts from other political parties are presented, while in section 3 a proposed methodology for designing e-services for political parties is described. Section 4 is dedicated to the case of a Greek party. Following this, the functional specifications, in terms of the unified administrative framework and the services provided are presented. Section 6 continues with the technical specifications of the developed system. Finally, some concluding remarks are briefly described.

2. E-DEMOCRACY SERVICES AND POLITICAL PARTIES

Many countries have made remarkable attempts in order to organize their domestic offices and their parties through the internet or intranet. The use of intranet may lead to increase of productivity and efficiency of the employees, better classification of an organization, simplification of actions and procedures, and to better organization of the information (Pastore, 2003; Chin P., 2004). Some of the organizations that have adopted e-services in an optimized way are the Defense Finance and Accounting Service in U.S. (www.dfas.mil), the Department of Transport in U.K. (www.dft.gov.uk); and the Government Offices in Sweden (www.sweden.gov.se). The basic points that lead them to success are: (a) Definition of the number of people who will participate; (b) Encouraging the users to use the system; (c) Central Information; (d) Use of CMS; (e) Avoid activity overlapping; (f) Provide help to the lower sections; and (g) Test before use.

All the above lead to the extraction of the following conclusions on the metrics that were applied on the aforementioned systems: (a) Increase of productivity, decrease of functional cost; and (b) Better organization, reduction of information loss.

The aforementioned cases are just few of the successful in the world concerning intranet. Besides, these systems are until now "up and running" with great success and with increasing number of users and can become models for further spreading of automation through organizations.

3. PROPOSED METHODOLOGY

This paragraph is dedicated on describing shortly a proposed general methodology for designing and adopting e-services for political parties. It has to be realized that the technologies will not in themselves cause a technologically-enabled change to happen (Benjamin and Levinson 1993). New technology is not enough to increase productivity. Organizational and process changes must also take place.

Thus, changes from the current state are inspired by a vision. The vision is used for motivation and a level of transformation is reached. To affect the levels of change it is necessary to use a very comprehensive

methodology (Figure 1). The next step is the research and survey of the current status within the party. After tracing the current status an assessment is required in order to define the strengths, weaknesses, opportunities and threats. The next step is to define a general strategic approach for applying the change in the party concerning the transition from traditional services to the provision of e-services. Based on the results extracted from the survey of the current status of the parties, the objectives and the strategic approach should be defined. After that we propose to define the criteria for the selection of the technologies. The final step to be defined is an implementation plan, which should be appropriate according to the strategic approach and the priorities defined by the party.
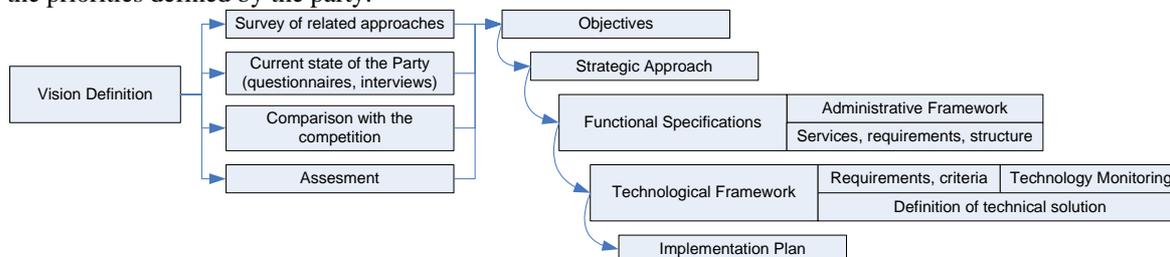

Figure 1. Proposed methodology

4. THE CASE OF A GREEK PARTY

The Greek party which is participating in this research is one that is changing itself in order to facilitate an effective dialogue between politicians and citizens. This party is realizing the complexity and the different challenges regarding the development of e-Democracy. Based on the above the party proceeded with the development of an informational system, which aims at the facilitation of the information circulation and disposal within the boundaries of the party.

As it becomes clear, the e-Party system is an important investment for the future for the party. In particular, it will be an Informational System, based on the World Wide Web and will constitute for the party: (a) A communication medium for the President, the Officers, the Members, the Friends, the Local Authorities, the Prefecture Committees, the Members of the Parliament and the European parliament, independently from the geographical location; (b) an information space, and a training medium for everyone, without prohibitions; and (c) a tool for the organization of the party and for supporting its operations. In addition, e-Party will support the employees in their every-day tasks by contributing in the cooperation of the different sectors in the handling of reports safely, quickly and effectively.

4.1. Assessment of Current State in the Greek Party and Objectives

The next step according to the previous described methodology is based on the research and survey of the current status within the party as well as on its needs, the analysis of better practices and the bibliographic research. The method adopted defines the weaknesses, the strengths and the opportunities from the internal part of the party and the opportunities and threats from the external part of the party. For the realization of the above method, questionnaires were formed and sent out to the employees of the party. This action formed the primer step for the collection of both data and proposals for the creation of an effective and usable system that, based on the Internet, will provide information services to all in real time. The step that followed the questionnaires was the conduction of interviews with the basic Sectors of the party. The results of the questionnaires and interviews performed have been elaborated according to SWOT analysis.

According to the afore-mentioned methodology, it is fundamental to explicitly define the objectives of the party for the new informational system to be developed, based on the World Wide Web. These objectives are: (a) Global Presence; (b) Accessibility through the friendly disposition of information; (c) Quick access to information; (d) Personalization; (e) Training for everyone; (f) Collaboration and participation; and (g) Transparency.

4.2. Strategic Approach

The strategic approach implies the need for a set of processes that have to be performed for the digitalization of the content and the transformation of services to "electronic" form. These processes involve the collection of the available information, the digitalization of information as well as its management through the informational system. The process that finalizes the procedure is the publication and provision of information. Therefore, certain structures and models need to be clearly identified for the definition of the technological framework, upon which the system development will be realized.

5. FUNCTIONAL SPECIFICATIONS

Based on the results extracted from the survey of the current status of the party, the basic components of e-Party have been defined, in terms of the Unified Administrative Framework of the Informational system.

Regarding the Unified Administrative Framework of the Informational System, it was important to define the processes from the initialization of the developed system until the final stage of the information disposal. In particular, for the end user the system constitute a set of services, each of which can support certain functionality. The user, in regard to his/her access rights can realize certain actions and exploit either a subset or all of the provided functionalities. However, the content, the information and the functionality that each user can access constitute only the final point of the informational system. Thus, there is a whole life-cycle that need to be followed so as a service to operate effectively. This life-circle is the following for each service: (a) Definition of the objectives; (b) Definition of the Content types; (c) Definition of the functionalities; (d) Definition of the roles and the access rights; and (e) Definition of the available working groups.

After defining the framework of the Informational system, the step that followed was to actually define the services and functionality that the system would offer, as these were extracted from the employees and citizens needs. From the interviews and questionnaires the categories of services that were proposed as critical for the success of the Unified Informational System are: (a) Personalized Access Services; (b) Back-Office Services; (c) Content Management Services; (d) Internal Organizational Services; (e) Information and Participation Services; and (f) Communication and Collaboration Services.

6. TECHNICAL SPECIFICATIONS

The next step was to investigate a technological approach and finally a technological solution. This step includes the definition of the technical requirements, the criteria for the selection of the technical solutions as well as the technology monitoring.

The specifications of the proposed system were extracted from the questionnaires, the interviews and the discussions conducted, as well as from the design of the system. These basic requirements that define the specifications of the proposed technological solution could be summarized as: (a) A Unified Technological Platform for the development and disposal of new services and integration/adaptation of the existent application to the new unified framework; (b) Modeling and semantic connection of the imported information as well as easy collection of external resources; (c) Unified User Interface for all the services and applications; (d) Single sign-on for access to all of the provided services; (e) Personalized access according to user's access rules and rights; (f) Prompt and cost-effective creation of new services and electronic version of the modeled information with an effective and automatic way and with the adaptation of a unified branding; and (g) Access to all services through different devices, based on the Web.

As it can be extracted from the above, in general terms, the informational system will be comprised of a basic platform, on the top of which the following services will be integrated: (a) a Content Management System (CMS); (b) a Citizen Relationship Management (CRM) and Collaboration system with the citizens/members and cooperators of the party.

The proposed framework is selected to be consistent with the development requirements and the need to avoid highly cost demanding implementation and support of the provided services. The basis of the framework will be constituted by open standards, APIs, tools and development environments that are based on Java (J2SE) and J2EE technology.
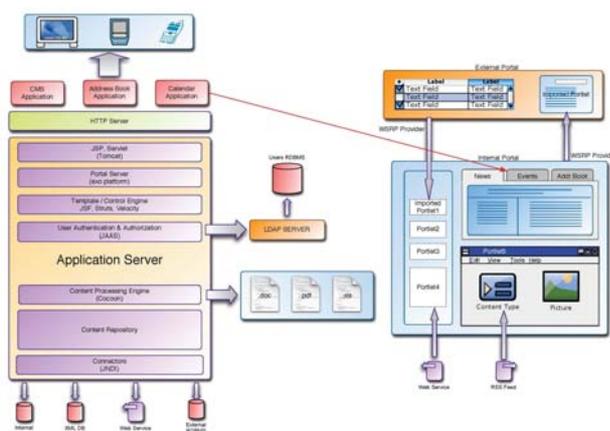
Figure 2. System Architecture

The architecture that the system will be based on is depicted in **Error! Reference source not found.**. Regarding the Content Management System application the basic software component of CMS will be adopted, that is a Content Repository application. The content will be stored in a relational database, while the administration will be performed by this application as well. The storing application will also manage the life cycle of the content, implementing the work flows that are linked to the content. Furthermore, applicable methods and procedures will be developed, which will allow the systematic production, collection, management and publication of content. The content management will be performed with a unified and central way in a content repository, where the different versions will be updated. Finally, the structuring and standardization of the content repository results in added value as it allows the automation of content provision.

7. CONCLUSIONS AND FUTURE WORK

The main objective of this paper was to propose a methodology for designing an informational system for political parties in order to provide e-government and e-democracy services. Furthermore, this paper presented all the steps followed for the design of e-Party, which is a Unified Framework for the Collection, Management and Disposition of Content for the party. The design of this system is based on the needs of the users and the advanced tools and solutions that technology can offer. Our next step is the systematic implementation of e-Party. The implementation plan is based on three main phases: (a) modular analysis and implementation of the system services; (b) step-by-step delivery of the services and internal evaluation and (c) final services delivery and users' training on the usage of the system.

REFERENCES

Benjamin, RI and Levinson, E., 1993, 'A framework for managing IT-enabled change', *Sloan Management Review*, vol. 34, no. 4, pp. 23–33.

Chin P., 2004, "Creating a Controlled Intranet Management Environment", available at http://www.intranetjournal.com/articles/200404/ij_04_16_04a.html

García-Arribas G., López-Crespo F., 2003, "Landscape of e-Government at the Dawn of the 21st Century", *UPGRADE-the European Journal for the Informatics Professional,* Vol. IV, No. 2, April 2003

Kubicek H., Westholm H., Winkler R., 2003, "Prisma Strategic Guideline 9- eDemocracy", INFORMATION SOCIETIES TECHNOLOGIES (IST) PROGRAMME, http://www.prisma-eu.net/deliverables/sg9democracy.pdf

Liikanen E., 2003, "e-Government and the European Union", *UPGRADE-the European Journal for the Informatics Professional,* Vol. IV, No. 2, April 2003

Pastore M., 2003, "Building the Perfect Beast", available at http://www.intranetjournal.com/articles/200309/ij_09_25_03a.html

Pizarro N., De la Torre P., 2003, "e-Government and the "Network Society", *UPGRADE-the European Journal for the Informatics Professional,* Vol. IV, No. 2, April 2003