

Chapter 9

An Integrated Information System to Support the Management of World–Widely Spread Educational Resources for the Greek Ministry of Education

John Garofalakis

Research Academic Computer Technology Institute, Greece

Andreas Koskeris

Research Academic Computer Technology Institute, Greece

Theofanis-Aristofanis Michail

Research Academic Computer Technology Institute, Greece

Flora Oikonomou

Research Academic Computer Technology Institute, Greece

ABSTRACT

In this chapter, a Government Resource Management System for the efficient organization of wide-spread manpower resources is presented. It concerns the case of the Greek Ministry of Education which manages several educational resources (educational units and teachers) spread around the globe to provide education opportunities for students with Greek origin. After reviewing the problems which have arisen from previous situation concerning the administration of this wide-spread man-power and the primitive tools used to collect information for effective operational activities (e.g. appointment of teachers to several educational units, selection of teachers to be transferred in educational units abroad, payment procedures), an integrated Web-based solution has been designed, developed, and applied. This case study is presented in detail in the following pages along with the benefits of this implementation and the concepts for its further exploitation.

DOI: 10.4018/978-1-60960-839-2.ch009

INTRODUCTION

The purpose of this chapter is to present a specific case of a web based tool aiming to assist the Greek Ministry of Education for the management of widely distributed educational resources (teachers and schools) around the World (for the provision of Greek education for students with Greek origin World Wide). The presented work is based on a complete initial research concerning Governmental Resource Management Systems (GRM) and Governmental Enterprise Resource Planning Systems (GERP).

Based on one of the Greek government's "Digital Strategy 2006-2013" (<http://www.infosoc.gr/infosoc/el-GR/sthnellada/committee/default1/top.htm>) objectives to "let the Greek Public Administration improve its internal procedure by effectively using new Information and Communication Technologies", and in combination with the above mentioned initial research, an "umbrella" of applications have been developed and integrated to one Information System. This information system is used in order to help the Greek Ministry of Education for the daily activities related with the management of the educational units offering Greek education around the Globe.

The functional requirements of the system were based on the detailed study of the way the whole operation management worked until now. This includes the way that teachers were selected to be transferred outside Greece, how they were appointed to specific educational units, how the daily education operation was assessed, as well as issues concerning payment procedures administration. The functional requirements were also based on the conclusions obtained from the problems of the non-ICT based approach which was followed in the past. This analysis led the research team to design several applications to focus on each procedure, dealing with all of its specific problems and difficulties. However, in order to be able to establish a "new way of administration" it was

important to integrate all these applications in one Environment adapted to the user level.

Through an evaluation of System's operation until now, this paper also attempts to suggest a set of methodological guidelines that could be used in the future by organizations with similar widely spread resources, in their effort to follow an ICT-based resource planning and management approach.

The methodological approach for contents of the forthcoming sections includes the following:

- Firstly, we present a Framework of Analysis including an overview of the situation world widely, in relation with Governmental Resource Management and Resource Planning systems.
- In the Sections to follow, the specific case study of the Greek Ministry of Education, is presented in detail, along with an evaluation (in qualitative and quantitative basis) and suggestions for further work

THE USE OF GOVERNMENT RESOURCE MANAGEMENT SYSTEMS

Resource management is the efficient and effective deployment for an organization's resources (human capital, infrastructures etc) when they are needed (Project Management Institute, 2004). Current Research and Practice in Resource Management, and especially in Human Resource Management, are targeting to the identification of practices and tools adapted to context specific nature of different organizations (Budhwar, P., Debrah, Y., 2008), resulting to optimal Organization performance (Boon, C., Boselie, J.P., Dietz, G., 2005).

Information and Communications Technologies (ICT's) can play a very important role towards the achievement of this goal and there are several *resource management software tools* available

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/integrated-information-system-support-management/56391

Related Content

A Stakeholder Analysis of the Artificial Reefs in Edremit Bay, Turkey: Social, Economics, and Management Aspects

Sezgin Tunca, Jose Luis Sanchez Lizasoand Vahdet Ünal (2022). *Impact of Artificial Reefs on the Environment and Communities* (pp. 48-68).

www.irma-international.org/chapter/a-stakeholder-analysis-of-the-artificial-reefs-in-edremit-bay-turkey/303897

Adoption of E-Government in Africa: Challenges and Recommendations

Priti Jainand Akakandelwa Akakandelwa (2015). *Public Affairs and Administration: Concepts, Methodologies, Tools, and Applications* (pp. 1070-1092).

www.irma-international.org/chapter/adoption-of-e-government-in-africa/127896

Implementing Social Media: Practical Reflections From County Governments During Hurricane Matthew

Wanzhu Shiand Pamela Medina (2021). *International Journal of Public Administration in the Digital Age* (pp. 1-18).

www.irma-international.org/article/implementing-social-media/281234

Using Web 2.0 to Reconceptualize E-Government: The Case for GovLoop

Leila Sadeghi, Steve Resslerand Andrew Krzmarzick (2012). *Public Service, Governance and Web 2.0 Technologies: Future Trends in Social Media* (pp. 153-166).

www.irma-international.org/chapter/using-web-reconceptualize-government/61857

Food Apartheid and Food Insecurity: Public Health Concerns in Urban, Low Income, and Minority Communities

Darrell Norman Burrell (2022). *International Journal of Public and Private Perspectives on Healthcare, Culture, and the Environment* (pp. 1-11).

www.irma-international.org/article/food-apartheid-and-food-insecurity/306209