Regional Sustainability:
National Forest Parks in Greece

Christiana Koliouska, Laboratory of Forest Informatics, Department of Forestry and Natural Environment, Aristotle University of Thessaloniki, Thessaloniki, Greece

Zacharoula Andreopoulou, Laboratory of Forest Informatics, Department of Forestry and Natural Environment, Aristotle University of Thessaloniki, Thessaloniki, Greece

Rosa Misso, Department of Economic and Law Studies, University of Naples "Parthenope," Naples, Italy

Irene Paola Borelli, Simone Cesaretti Foundation, Naples, Italy

ABSTRACT

Regional sustainability promotes an integrated approach to planning and development in regional communities. European Union legislative acts bring together all levels of government to achieve a holistic approach to sustainability using Information and Communication Technologies tools for better delivery of services. Today, there has been observed an increasing interest in applying e-government to different business sectors such as the environmental sector. Sustainable management of National Forest Parks relies on a complete understanding of the goods and services, which are provided to the society. This paper aims to study e-government websites concerning the 10 Greek National Forest Parks and analyse the websites as to their qualitative and quantitative features. Then, the electronic services model adoption of the websites is assessed. The e-government websites are classified in electronic services adoption stages starting from a simple presence of the government agency in the Internet to the total electronic services integration through multiple ICT tools and applications provision according to content features accomplished by the websites. The findings can be helpful for managers, policy makers, web designers, environmentalists and government agencies.

KEYWORDS

E-Government, Electronic Services Adoption, Information and Communication Technologies, National Parks, Regional Sustainability, Website Assessment

1. INTRODUCTION

The conditions of sustainability are the cornerstone on which to build a Sustainability Empowerment strategy (Cesaretti, 2014; Cesaretti et al., 2015). In terms of sustainable development, by definition it is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs', in other words, should be taken the fact that the actions that we take now must not adversely affect the possibilities of future generations (UNWCED, 1987; Oprea et al., 2015). Regional economic integration institutions, such as the European Union, have become more and more consolidated like real territorial reservoirs in which to activate the required dynamics for the pursuit of global goals (Cesaretti et al., 2014).

The environmental governance and the management issues related to decisions, which verify performance, have also gained a continuously growing focus. Governance constitutes a distinct policy regarding management issues and designates processes focusing on decision making. At the same time, governance indicates the total sum of given and anticipated mechanisms, too. Information and

Communication Technologies (ICT) have become the means to make government more accountable, transparent and effective. ICT are key elements supporting the growth of electronic governance (e-governance) initiatives and projects (Andreopoulou et al, 2011).

Electronic government (e-government) has been defined as "the use of ICT, and particularly the internet, as a tool to achieve better government" (OECD, 2003). In Europe, governments are under intense and sustained pressures to remain competitive on a global level, in responding to a variety of now well-known and profound challenges, such as: demographic change, environmental impacts, natural resource shortfalls, social cohesion and worrisome waste streams (European Union, 2013a). Considering that state and local governments need to provide better public services with fewer resources, they have started using Web 2.0 tools and applications. Nevertheless, very few of these governments have established a clear interaction strategy (Sandoval-Almazan & Gil-Garcia, 2012).

ICT are now a major part of Europe's economic growth strategy (European Union, 2013b). These modern technologies present very substantial opportunities for us to advance in all areas. They can help to enhance the quality of life of the elderly; make things very much easier for the operation of businesses; help citizens participate in the governance of their community; enable living, working, studying across borders (European Union, 2013c). Furthermore, by using ICT infrastructure, companies can achieve higher productivity, economic growth, national competitiveness and efficiencies in the public (Koliouska and Andreopoulou, 2013). The provision of long distance services is possible through internet technologies such as internet (Andreopoulou et al., 2014). Some of the most common web-based products of the suite of electronic services (e-services) are electronic learning (e-learning), electronic working (e-working), electronic banking (e-banking), electronic voting (e-voting), e-government, electronic commerce (e-commerce), electronic shop (e-shop), electronic research (e-research), electronic medicine (e-medicine) and electronic payment (e-payment) (Andreopoulou, 2012).

The combination of new technologies open specifications, innovative architectures and gives the availability of greater value public sector information delivering to citizens with fewer resources (European Union, 2010). In this century, governments worldwide are under pressure to change and innovate the way in which their bureaucracies relate to citizens. E-government is defined as the employment and use of ICT in public administrations combined with organisational change and the integration of new skills (European Union, 2004; Andreopoulou et al., 2007). E-government services strengthen the internal market and complement European Union legislative acts and their effectiveness in a number of domains where ICT can improve delivery of services such as in procurement, health, environment, mobility and social security, and support the implementation of citizens' initiatives with ICT tools (European Union, 2010). The Organisation for Economic Co-operation and Development (OECD, 2003) identified four broad external barriers to e-government; legislative and regulatory barriers and budgetary barriers (the responsibility of higher levels of government in Australia), technological change, and the digital divide. Implementation of e-government can produce a form of relationship such as: Government to Citizen (G2C), Government to Business (G2B) and Government to Government (G2G) (Widodo et al., 2013; Hazlett & Hill, 2003).

Portals play a key role in e-government, as they are the main access points for citizens to local, regional and national electronic administration (e-administration). The portals are the front office of public administration and provide tools for the formulation and submission of citizen's questions by composing and presenting the answers as results (Bournaris et al., 2011). The development and the impact of information society infrastructures on local level can be studied and analyzed by the assessment of local authority websites. It relates, on the one hand, to the reach and content of the information provided and exchanged, including quite definite functionality, and, on the other hand, to the effectiveness thereof, as perceived through the association between this information and the characteristics of the socio-economic development within the respective local area (Owsinski & Pielak, 2011).

10 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/article/regional-sustainability/176436

Related Content

Composite Identity of Things (CIDoT) on Permissioned Blockchain Network for Identity Management of IoT Devices
Anang Hudaya Muhamad Amin, Fred N. Kiwanuka, Nabih T. J. Abdelmajid, Saif Hamad AlKaabiand Sultan Khalid Abdulqader Rashed Ahli (2021). *Role of IoT in Green Energy Systems (pp. 59-80).*
www.irma-international.org/chapter/composite-identity-of-things-cidot-on-permissioned-blockchain-network-for-identity-management-of-iot-devices/272390

Provincial Linkage Characteristics of Hog Price in China Based on Linkage Social Network Analysis Method
Jiyun Bai, Muyan Liu, Li Maand Jun Meng (2020). *International Journal of Agricultural and Environmental Information Systems (pp. 61-74).*
www.irma-international.org/article/provincial-linkage-characteristics-of-hog-price-in-china-based-on-linkage-social-network-analysis-method/256991

Spatial Pattern Mining for Soil Erosion Characterization
Nazha Selmaoui-Folcher, Frédéric Flouvat, Dominique Gayand Isabelle Rouet (2011). *International Journal of Agricultural and Environmental Information Systems (pp. 73-92).*
www.irma-international.org/article/spatial-pattern-mining-soil-erosion/55954

Statistical Learning Methods for Classification and Prediction of Groundwater Quality Using a Small Data Record
Mohamad Sakizadehand Hassan Rahmatinia (2017). *International Journal of Agricultural and Environmental Information Systems (pp. 37-53).*
www.irma-international.org/article/statistical-learning-methods-for-classification-and-prediction-of-groundwater-quality-using-a-small-data-record/188645

The Optimizing WEB: A Green ICT Research Perspective
Aditya K. Ghoseand Graham Billiau (2011). *Handbook of Research on Green ICT: Technology, Business and Social Perspectives (pp. 184-196).*
www.irma-international.org/chapter/optimizing-web-green-ict-research/48427