Editorial

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Biographical notes: Dr. Miltiadis D. Lytras is a Faculty Member in the Computer Engineering and Informatics Department (CEID) in the University of Patras, Greece. His research focuses on Semantic Web, Knowledge Management and e-learning, with more than 70 publications in these areas. He has co-edited 13 special issues in international journals and has authored/edited six books. He is the Founder of the Semantic Web and Information SIG in the Association for Information Systems (http://www.sigsemis.org). He serves as the Editor-in-Chief for three international journals, while acting as an Associate Editor or Editorial Board Member in seven other journals.

Lakshmi Iyer is an Associate Professor in the Information Systems and Operations Management Department at the University of North Carolina at Greensboro. She obtained her PhD from the University of Georgia, Athens. Her research interests are in the area of e-business processes, e-commerce issues, global issues in IS, intelligent agents, decision support systems and Knowledge Management. Her research work has been published or accepted for publication in *CACM, eService Journal, Annals of OR, DSS, International Journal of Semantic Web and Information Systems, Journal of Global Information Technology Management, Journal of Scientific and Industrial Research, Encyclopedia of ORMS, Journal of Information Technology Management, Journal of Data Warehousing* and *Industrial Management and Data Systems*.

Professor Athanasios Tsakalidis is Deputy Director and Research and Development Coordinator of the Research Academic Computer Technology Institute (RACTI), Scientific Coordinator, RU5. Since 1993, he has been a Professor in the Department of Computer Engineering and Informatics at the

University of Patras, Greece, and its Chairman since 2001. He completed his Diploma in Mathematics at the University of Thessaloniki in 1973 and his PhD in Informatics in 1983 at the University of Saarland, Germany. He is one of the contributors of the *Handbook of Theoretical Computer Science* (Elsevier and MIT-Press 1990). His main interests are data structures, graph algorithms, computational geometry, multimedia, information retrieval and bioinformatics. He has authored three books, two chapters and numerous publications in international journals giving a special contribution to the solution of elementary problems in the area of data structures, also contributing to national and international conference proceedings.

1   Introduction

In the last few years, the Semantic Web and Knowledge Management technologies have provided a new context for transforming policies and social priorities to systems, services and tools aiming to foster the capacity of citizens to pursue a unique fulfilment of personal needs.

In the W3C Semantic Web Activity, a number of critical milestones have been set as the key priorities for the promotion of human centric information systems, even though most people consider SW, as a technical-oriented issue. Objectives such as information flow and collaborative life, ontological evolution, creating a Policy Aware Infrastructure and Web of Trust require a multi-fold approach that brings together research communities such as computer science, semantic web, information systems, social science, etc.

Our AIS SIGSEMIS (http://www.sigsemis.org) – SIG on Semantic Web and Information Systems in the Association for Information Systems, has a key objective and a unique characteristic. To justify through scientific debates how significant changes can be enhanced from the application of the Semantic Web to specific contexts that are related to critical social objectives and emerging information systems.

This special issue is timely since the exploitation of the Semantic Web and Knowledge Management technologies for e-government is a hot topic in the agenda of most governments worldwide.

With an acceptance rate of about 20% and with a key concern to include research works from all over the world we do believe that the final outcome is of high quality and addresses all the various aspects of the key theme.

We tried through a specific editorial strategy to combine articles in three general directions:

- introduction to the convergence of the Knowledge Management and the Semantic Web technologies for e-government

- demonstration, through technical research papers, of the capacity of the Semantic Web to support new approaches to key e-government research issues

- discussion of social aspects that affect the effectiveness of semantic e-government applications.

In the first paper Dr. Miltiadis Lytras, Officer of the AIS SIGSEMIS, provides a rich picture on "The Semantic Electronic Government: Knowledge Management for citizen relationship and new assessment scenarios". Citizen Relationship Management is a

knowledge-intensive task, which requires an in-depth analysis of knowledge infrastructures, knowledge flows and dynamic transformations. The emphasis on Semantic Web provides an introduction for the readers of the *E-Government* journal.

In the second article entitled "Knowledge Management for Government-to-Government (G2G) process coordination", Lakshmi S. Iyer, Rahul Singh, Al F. Salam and Fergle D'Aubeterre from the University of North Carolina at Greensboro, based on the foundations of Semantic Web, including ontologies, knowledge representation, multi-agent systems and web services; Knowledge Management (KM) and G2G processes, they present a vision for Knowledge Management for G2G process coordination.

Christian Wagner, Karen Cheung and Rachael Ip, from the Department of Information Systems, City University of Hong Kong and Stefan Böttcher from the Department of Computer Science, University of Paderborn (Germany) in "Building Semantic Webs for e-government with Wiki technology" propose the design of a two-layer semantic wiki web, which consists of a content wiki, largely identical to the traditional web, and a semantic layer, also maintained within the wiki, that describes semantic relationships.

Wajee Teswanich, Chutiporn Anutariya and Vilas Wuwongse, from Thailand in the fourth paper: "A Knowledge Management system framework for governmental regulating processes" propose a framework for the modelling and management, as well as reasoning with four types, of knowledge (*terminological* (or *ontological*), *factual*, *empirical* and *regulatory*) by means of prominent Semantic Web languages, namely RDF and OWL.

Ljiljana Stojanovic, Nenad Stojanovic and Dimitris Apostolou in the fifth paper entitled "Change Management in e-government: OntoGov case study", they discuss on methods aiming to improve the usability of e-government services. Particularly, they focus on new methods for the semantic service annotation as well as for semantic service discovery.

Jennifer 'Blechar, Ioanna D. Constantiou and Jan Damsgaard contributed the sixth paper on "Understanding behavioural patterns of advanced mobile service users". Through an exploratory analysis of the results of a field study on advanced mobile service use in Denmark, this paper suggests that pricing of services and consumers references to already established service delivery platforms can be important elements influencing consumers' and citizens' behaviours.

The last short article of the special issue by Saggi Nevo and Henry Kim from Canada is entitled "How to compare and analyse risks of internet voting versus other modes of voting" challenges reader to explore further the theme of the special issue on specific contexts such as I-voting.

We do believe that in the next five years the Semantic Web will affect critically the design, implementation and support of e-government services. This special issue is only the beginning of an exciting journey. Join us!!

Acknowledgements

academics and practitioners who contributed the articles to this special issue. Their knowledge, expertise, imagination and inspiration are evident in every line of this edition. We are sure that this journal was only the first part of a long-term collaboration. Last but not least we are grateful to the members of AIS SIGSEMIS who served as reviewers.

Reference

AIS SIGSEMIS, Available at: http://www.sigsemis.org.