



**Proceedings of the**  
**14th European Conference**  
**on eGovernment**  
**Spiru Haret University**  
**Faculty of Legal and Administrative**  
**Sciences**  
**Braşov, Romania**  
**12-13 June 2014**



**Edited by**  
Alexandru Ionas  
Spiru Haret University  
Braşov, Romania

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## Preface

These proceedings represent the work of authors at the 14th European Conference on e-Government (ECEG 2014).

The Conference this year is hosted by the University Spiru Haret University, Brasov, Romania. The Conference Chair is Prof.dr. Carmen Costea and the Programme Chair is Alexandru Ionas, both are from the University Spiru Haret University in Romania.

ECEG brings together, researchers, Government officials and practitioners in the area of e-Government from around the world. Participants are able to share their research findings and explore the latest developments and trends in the field which can then be disseminated to the wider community.

With an initial submission of 97 abstracts, after the double blind, peer review process there are 30 research papers, 12 PhD papers, 3 Masters papers, 2 non academic and 2 Work in Progress Papers published in these Conference Proceedings. These papers represent research from many countries including Australia, Belgium, Canada, Egypt, Finland, Germany, Greece, India, Iran, Lebanon, Luxembourg, New Zealand, Nigeria, Pakistan, Poland, Romania, South Africa, Spain, Sweden, Switzerland, Taiwan (R.O.C.), Thailand, The Netherlands, Tunisia, Turkey, UK, USA

This will ensure a very interesting two days.

Selected papers will be published in special issues of the Electronic Journal of e-Government ([www.ejeg.com](http://www.ejeg.com)) and the Journal of E-Government Studies and Best Practices.

We hope that you have an stimulating conference, and enjoy your time in Romania.

Alexandru Ionas

Programme Chair  
May 2014



## Biographies

### Conference Chair



**Prof.dr. Carmen-Eugenia Costea** professor/vicerector at USH Bucharest in charge with International Relations; PhD Supervisor in Business Administration (ASE Bucharest); member in ASE Scientific Council of Doctoral Institute; Chair of Entrepreneurial Education Commission of National Council and Special Ambassador of Romania for Danube Strategy; Founder of Alternative Sciences Association; Associate researcher at the IPE-Romanian Academy (of Sciences). Research interests include: Business administration, International relations, Systems of Business Intelligence, Socio-economic risk management. Awards: 2007 International Peace Award for outstanding in education of Youth United Cultural Convention N.Carolina USA, 2007 Excellence in teaching ASE, Diploma Nicolae Georgescu Roegen Excellence in Research (ASE) Diploma and silver medal 2000 Outstanding intellectuals of the 21st century, IBC Cambridge. Research experience includes, among others, management and scientific activities in: BaSeFOOD "Sustainable exploitation of bioactive components from the Black Sea Area traditional foods"; Physics of Competition and Conflicts, Physics of risk ESF/COST; AS-SYST Action for the Science of Complex Systems and Socially Intelligent ICT; NEST General Integration of the Applications of Complexity in Science. International teaching experience: Visiting Professor la OU London; Visiting Lecturer la National Cheng Chi Univ. Taipei; Intervenient at France Business School; Visiting Lecturer UNAM Mexico City; Visiting Scholar UWS Australia.

### Programme Chair

**Dr Alexandru Ionas** holds a PhD in Law and is a professor at and Dean of the Faculty of Legal and Administrative Sciences, Spiru Haret University, Romania. During 2002 and 2008 he was the Head of Public Law Department at Transilvania University of Brasov. His research interests focus on penal law, administration and government. He has led and participated in international research projects fighting against crime, coordinating criminal investigations against organised crime, leading the investigation unit monitoring the illicit trafficking between Ukraine and Moldova. He was a counsellor on international relations with the Ministry of Administration and Interior (Ministry of Internal Affairs) – Romanian Government. He is one of the founders of the international organisation Southeast European Cooperative Initiative (SECI) Centre in Bucharest.



He is on the list of experts in international cooperation for fighting against organised crime and terrorism in Europe. Although he has a background in law enforcement, nowadays he is involved in the process of administrative territorial reorganisation of Romania.

### Mini Track Chairs



**Dr Ahmed Imran** research emerged from his personal experience that includes e-government and ICT for development. Ahmed had a versatile and challenging experience in the IT sector before his transition to academia. Ahmed's past experience is invaluable for research in understanding and providing rich insight of the context in least developed countries. His PhD research gained an in-depth understanding of impediments to eGovernment adoption in LDCs, which led to a process model for successful eGovernment adoption in LDCs. Part of Ahmed's research has been successfully implemented as an applied international research project that received ANU Vice Chancellor's award in 2010. Ahmed is also the lead author of the text book "eGovernment Management

for Developing Countries".

**Antti Lahtela** works as a project manager at the Regional State Administrative Agency for Eastern Finland, Development and Steering Unit for the Local Register Offices. His main responsibilities include IT strategy implementation, information management development and enterprise architecture. Additionally, Antti is a Ph.D. student at the University of Eastern Finland with a research topic: Improving IT Service Support and Transition Processes. Areas of interest include government administration and healthcare information management.

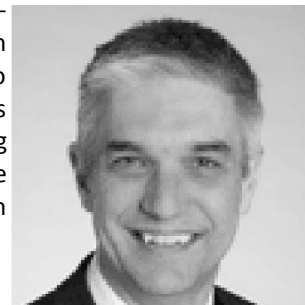


**Dr. Jakob Svensson** is a researcher with a PhD in Media and Communication Studies. Jakob current research revolves around civic communication, political participation and the construction of citizenship through online communicative practices. He is currently involve in a research project studying relations of power, practices of discipline and surveillance among both outspoken political activists in southern Stockholm. Jakob Svensson is currently holding a position of assistant professorship in Media and Communication Studies at Uppsala University and is the Director of Master Program in Digital Media and Society.

**Dr Tim Turner** has been involved in the IT industry for over 25 years, with the focus on e-commerce, and particularly e-government, for over 15 years. He has concentrated his attention on assisting governments at all levels to understand how information technology can be used to enhance effectiveness and efficiency. Recently, that focus has shifted to aiding the governments of least-developed countries. He has played significant roles in several of Australia's leading e-government projects and consults to peak government and industry bodies in the e-government arena. Tim has also delivered significant projects in the private sector in information technology generally and electronic commerce specifically.

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**Abstract:** The issue of gender equality is a very topical agenda of the Millennium Development Goals (MDGs) and is gradually receiving attention among researchers in all spheres of life with a view to bridging the gap. Within the Sub-Saharan Africa (SSA), women are voiceless politically, their population notwithstanding, because they are largely economically and educationally disadvantaged. This paper presents an empirical evaluation of the effect of gender differences and self-efficacy in e-Democracy implementation using an extended technology acceptance model (TAM). Online survey method was employed with questionnaire administered to colleagues on the authors' mailing lists and other recipients on the mailing lists of others in a viral manner to have a reasonable number of respondents. The questionnaire was divided into three sections. The first section consists of demographic profile of respondents, the second section deals with the level of technology usage by respondents, while the third section includes measures of variables to be studied: perceived usefulness (PU), perceived ease of use (PEOU), computer self-efficacy (CSE), attitude (ATT), and behavioral intention (BI). Items of the model's constructs were adapted from existing validated measures, a total number of 339 respondents submitted valid responses and were used for the analysis. To test the formulated hypotheses, a multivariate analytical methodology involving path analysis was used to empirically examine the sets of relationships in the form of linear causal models. Findings revealed that perceived ease of use has a stronger influence on female than male users of e-democracy. Perceived usefulness significantly influence user's attitude while perceived ease of use was found to have a negative effect on attitude. This may be due to high literacy level of the respondents and may be subjected to further research using a different set of population sample. However, self-efficacy was found to have no significant effect on the attitude of both male female users.

**Keywords:** e-democracy, e-Government, gender, TAM, self-efficacy, e-citizen and feminization

## References

- Adesina A.A., Ayo C.K. and Uyinomen O. Ekong (2008) An Empirical Investigation of the Level of Users' Acceptance of E-banking in Nigeria: Based on Technology Acceptance Model" *In Proc. of 1<sup>st</sup> Int'l Conf. on Mobile e-Services*. LAUTECH, Ogbomoso, Nigeria
- Anita Gurusurthy (2004) Gender and ICTs – Overview Report, Access date: July, 2012, Available at: <http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SHS/pdf/Gender-ICTs.pdf>
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park: Sage.
- Ayo, C. K, Adewoye J. O, and Oni A. A. (2011) Business-to-Consumer (B2C) e-commerce Implementation in Nigeria: The Prospect and Challenges, *African Journal of Business Management*, Vol. 5(13), pp. 5109-5117, 4 July, 2011.
- Ayo, C. K, Azeta, A. A, and Oluwabusola, O.G. (2010) "An SMS-based Framework for Citizen-Oriented Participation in e-Democracy", *Proceedings of the 15<sup>th</sup> International Business Information Management Association Conference*, pp1234-1238 ISBN: 978-0-9821489--5.
- Azeta AA., Oyelami M. O. and Daramola J. O. (2007), "An Architectural Framework for Collaboration of Heterogeneous Communication Devices using WAP and Mobile Device Augmented (MDA) Gateway Integration", *Proceedings of The International Conference & Workshop on 3G GSM & Mobile Computing: An Emerging Growth Engine for National Development* -3129 January, 2007. pp 71-78
- Ki-moon, B (2011) Women's participation crucial for democracies, UN News Centre, Access date: July, 2012, Available at: <http://www.un.org/apps/news/story.asp?NewsID=38275>
- Bandura A. (1982) Self-Efficacy Mechanism in Human Agency, *Journal of American Psychologist*, Vol. 37, No. 2.
- Caldow J. (2004) E-democracy: Putting Down Global Roots. Institute of Electronic Government, IBM.
- Charles K. Ayo, Princely Ifinedo, Uyinomen O. Ekong and Aderonke Oni (2012): "An Empirical Evaluation of the Effects of Gender Differences and self-Efficacy on e-Banking Adoption in Nigeria: A modified Technology Adoption Model", In Abel Usoro, Grzegorz Majewski, Princely Ifinedo and Iwara I Arikpo (Eds), *Leveraging Developing Economies with the Use of Information Technology: Trends and Tools*, IGI Global.
- Coleman S. and Norris D.F. (2005) A new agenda for e-democracy, Oxford Internet Institute Forum Discussion Paper No. 4, January 2005.
- Coleman, S. and Gotze, J. (2001) "Bowling Together: Online Public Engagement in Policy Deliberation". *Hansard Society*. Retrieved 8<sup>th</sup> Oct., 2010 [ [www.hansardsociety.org.uk](http://www.hansardsociety.org.uk)]
- Compeau, D., and Higgins, C. A. (1995) Computer self-efficacy: development of a measure and initial test. *Management Information Systems Quarterly*, 19(2), 189–212. doi:10.2307/249688
- Davis F. D. (1993) User acceptance of information technology: system characteristics, user perceptions and behavioural impacts. *Int. J. Man-Machine Studies*, Vol 38, pg 475 – 487.
- Davis, F. D. (1989) Perceived usefulness, perceived ease of use, and user acceptance of information technology, *MIS Quarterly*, Vol. 13, No. 3, pp. 318-39.
- Dishaw, M. T., & Strong, D.M. (1999) Extending the technology acceptance model with task–technology fit constructs. *Information & Management*, 36(1), 9–21. doi:10.1016/S0378-7206(98)00101-3
- Fishbein, M. and Ajzen, I. (1975) *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*.