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## Editorial

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**Biographical notes:** A. Ant Ozok is an Associate Professor at the Department of Information Systems, UMBC. His research includes web design and usability, usability and user preferences on the internet and in electronic commerce, usability design for the elderly population and user performance and satisfaction evaluation techniques. He has published numerous articles in refereed international journals and presented his work in international conferences. He has several ongoing projects funded by a number of government agencies including the National Science Foundation (NSF). He currently serves on the Editorial Board of the *International Journal of Human Computer Interaction*, among others.

Ayse P. Gurses is an Assistant Professor in the Department of Anaesthesiology and Critical Care Medicine at the Johns Hopkins University School of Medicine. She received her PhD in Industrial and Systems Engineering at the University of Wisconsin–Madison in 2005. Her current research focus includes improving patient safety in the cardiac operating room; handoffs, transitions of care and care coordination; providers' compliance with evidence-based guidelines and nursing working conditions. Her research has been funded by the National Patient Safety Foundation, Agency for Healthcare Research and Quality, National Science Foundation and Robert Wood Johnson Foundation. She currently serves as the Chair of the Health Care Technical Group of the Human Factors and Ergonomics Society.

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## **1 Introduction**

It would probably be naïve to state something as obvious as ‘Today, we are surrounded by technology’. Today, technology is an integral part of most methods we employ without thinking to get us where we want. While technology has gained increasing importance for us probably in the last few millennia, it can be argued that the seamless integration of electronic and particularly web-based technologies into our daily chores has started happening maybe in the last ten years or so. Mobile and web-based technologies have almost systematically invaded most, if not all, of the segments of our daily lives, some of which would not be imaginable 10–15 years ago. Fifteen years ago, contacting our state governor, filing our taxes or reaching all of our pay roll stubs for the last ten years without using a single sheet of paper would seem impossible, and also a bit scary. These and many other examples lead us to believe that, just as in many other segments of life, technology allowed for a tremendous convenience in dealing with government-related issues, be it G2C (government to citizen), G2G (between governments) or G2E (government to employees). Today, legislators are trying hard to ‘digitise’ the government, allowing for potentially large cost savings. Providing information and services to citizens, allowing electronic voting and tax filing, collecting census information and brokering contracts are just a handful of functions that can exemplify the potential e-government can offer to citizens, businesses and many other entities.

Looking at e-government as a vast opportunity with no major challenges would surely be a mistake. Dealing with highly sensitive information such as salaries, benefits and social security information makes this digital environment extra-sensitive in terms of privacy, security and trust. Even small mistakes involving data input, output and storage being intolerable may be a roadblock in front of swift development and adoption of e-government (e-voting being a good example). Security in relation to e-government is a concept that rapidly changes and requires extra attention due to critical potential consequences. Additionally, usability and user issues may play an important role in allowing secure e-government transactions to be completed with optimal performance and satisfaction on the users’ end.

This special issue therefore aims at exploring the e-government issues from a critical perspective; that of the users. We hope that this special issue will allow the reader to realise the critical success factors of e-government from users’ perspectives on the international arena.

## **2 Inside this issue**

We aimed at using a prominent group of international articles authored by prominent academic scholars and industrial experts to shed light on critical user and security issues in e-government.

The first paper, titled ‘A user-centric and federated Single-Sign-On IAM system for SOA e/m-frameworks’, authored by Athanasios Karantjias and Nineta Polemi from the University of Piraeus and Teta Stamati and Drakoulis Martakos from the National and Kapodistrian University of Athens in Greece, aims at exploring the interesting issue of Single-Sign-On systems (where the user does not have to do multiple Sign-Ons following the initial sign-on) within the e-government context. They indicate that the need for privacy-aware transactions raises challenges that Service Oriented Architectures (SOA)

need to address. Some of such problems include managing users' personal identification information and ensuring privacy and anonymity in the e/m-environment. They propose a targeted, user-centric and federated Single-Sign-On Identity Management System (IAM) called *SecIdAM*, and a mobile implementation framework for building privacy-aware, interoperable and secure mobile applications. They analysed a user-transparent m-process, simulating the registration, negotiation of policies and identification information preferences, and user's authorisation sessions, as integrated in a public sector programme.

The second paper, titled 'Quantifying ergonomic quality of governmental websites', by Gülçin Yücel and Ahmet F. Özok (from Istanbul Technical University and Istanbul Kültür University of Turkey, respectively), takes a more user-centric approach and suggests an evaluation method for both e-government and e-health websites. They defined some attributes for evaluating these sites, including linguistic terms. Their method can combine linguistic variables and give an overall score of ergonomic quality of e-government services, as well as areas of potential improvement.

The third paper, authored by Maria Emmanouilidou and David Kreps from the University of Salford, UK, and titled 'A framework for accessible m-government implementation', was aimed at exploring accessibility issues involving the mobile branch of e-government, looking at m-government accessibility from six special groups' perspectives: Visually Impaired, Hearing Impaired, Motor Impaired, Speech Impaired, Cognitively Impaired and Elderly. They discussed m-government issues involving these groups and proposed a framework for m-government implementation with reference to the W3C Mobile Web Best Practices.

The fourth paper was authored by Joanne Kuzma from University of Worcester, UK, and was titled 'An examination of privacy policies of US Government Senate websites'. The author studied privacy policies of 50 US Senate sites and concluded that few had comprehensive elements of privacy policies. She concluded that there was a general lack of protection concerning personal data. The study reviewed which specific privacy elements are most often mishandled, as well as suggestions for improving an overall online privacy practice.

The fifth paper was authored by Krystle Escarfullet, Cristina Jantzen, Shari Tucker and June Wei, and was titled 'A mobile taxing system from usability perspective'. The authors proposed a computer taxing system specifically designed for mobile services targeting individual taxpayers. The authors based the system on a conceptual model, exploring data processes and data flow from usability and design perspectives. With their study the authors aimed at benefiting mobile system developers in the taxing arena.

## Acknowledgements

The editors would like to express their sincere appreciation to all authors and reviewers who participated in this special issue. They would also like to thank June Wei, the Editor-in-Chief of *Electronic Government, An International Journal*, whose endless support, understanding and knowledge of the area made this special edition possible. Finally, the editors would like to thank the e-government specialists around the globe as well as all the readers of this special issue for their interest in the topic. They hope that it will be useful to all researchers in the area of e-government in their current and future research endeavours.