# PEGOV 2013: 1st International Workshop on Personalization in eGovernment Services and Applications

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## 1 Preface

The advent of e-government (e-Gov) initiatives has changed the interaction between governments and citizens. Services can now be delivered by means of virtual channels, e.g., through Web portals or mobile apps, or even online communities, and citizens can exploit these channels to interact with public administration. In this new reality, governments can innovate in order to facilitate the access to services by reducing the red tape that usually characterizes the public service provision.

Collecting, understanding and leveraging the characteristics and preferences of citizens is strategic to deliver services and applications of higher value. Only in this way, services and applications can target individual needs, e-Gov offerings can be extended to complex services delivering life-long assistance to citizens and the design of services and applications can be better tailored to citizen requirements. In order to realize this vision, e-Gov services and applications must undergo a personalization process that makes use of automatic user modeling and profiling techniques and delivers solutions that adapt to specific users profiles and follow the citizen along her several and multi-faceted interactions with public administration.

Even though several personalization methods and user modeling techniques have been proposed and successfully applied in several domains (e.g., e-commerce), the application of these approaches in the eGovernment domain is still in its infancy. Personalization in e-Gov is potentially different than in other domains, due to a number of factors. As an example, while, in an e-commerce, we can quite easily catch user preferences and subsequently make suggestions according to the user profile, in the e-Gov domain the concept of preference itself is difficult to define. As another example, personalization methods specific to the eGov domain might consider the obligations and roles that mediate the interaction between a citizen and Governments (e.g., one citizen playing the roles of tax payer and mother), and other domain-relevant characteristics (e.g., demographic features). There are also potentially ethical (including privacy) issues related to the fact that citizens might be in a dependence relationship with governments, and automatic user profiling might be considered big brother and not desirable.

The purpose of the Personalization in eGovernment Services and Applications (PEGOV) workshop is to provide a forum for stimulating the attention of the scientific and business community on the aforementioned issues in order to move towards the desirability, design and evaluation of user-aware and adaptive services in e-Gov. We are specifically interested in the role of user modeling and profiling in advanced public service design and delivery by dealing also with aspects related to privacy, security, and multilingualism.

The contributions to PEGOV 2013 mainly address four relevant topics:

- Participatory e-Gov,
- Citizen-centered service design,
- Citizen segmentation,
- Personalized e-Gov services.

Most submitted papers were from researchers of the e-Gov community. Since the workshop addresses a rather new topic and a research area that has to be shaped yet, submissions generally presents research at an early stage. However, those ongoing work, methodological approaches and discussions about issues that potentially involve personalization in eGovernment were deemed valuable to workshop attendees. Additionally to the presentations of 5 accepted papers, PEGOV 2013 featured a special event: an invited talk by Adegboyega Ojo, who currently leads the E-Government Unit at the Digital Enterprise Research Institute (DERI).

PEGOV 2013 took place in Rome, Italy, in conjunction with the 21st Conference on User Modeling, Adaptation and Personalization (UMAP) on June 14, 2013.

## 2 Accepted Papers

- Authors: Liliana Ardissono, Angioletta Voghera and Mauro Velluto Title: Selecting People for Involving Them in Participatory Decision-Making Processes
- Authors: Alessandro Bianco, Paolo Campegiani, John Forrester, Leo Iaquinta and Maria Alessandra Torsello

**Title**: SMART project: industrial and academic collaboration for service design

- Authors: Sanat Kumar Bista, Surya Nepal and Cécile Paris Title: The Human Touch of Government Services
- Authors: Leo Iaquinta, M. Alessandra Torsello, Marco Comerio, Anna Maria Fanelli and Giovanni Semeraro

Title: User Segmentation in e-Government Services

#### 3 Invited Talk

**Author**: Adegboyega Ojo, Digital Enterprise Research Institute, National University of Ireland, Galway

Title: Towards "Deep" Personalisation of E-Government Services

A Co-evolutionary Perspective on Electronic Public Service Personalization

Abstract: Next Generation Electronic Public Service Infrastructure are expected to provide highly personalized, context-aware services to citizens and businesses; exploit feedback and comments about public services on social web for continuous service improvement and enable the participation of citizens in the re-design of existing services or design of new value-added services of interest. In the area of service personalization there are at least two major active streams of research. The first stream of work which is carried out by the Computing and Informatics community attempts to transfer ideas on personalization and recommender systems from domains such as e-commerce and e-learning to the public sector domain. These efforts have delivered some results on self-adaptive government websites, personalized citizen searches and dialogues, and co-design of e-government services. The second stream of work involving personalization of public services is carried out within the Public Administration (PA) practice and research community. The goal of the PA community in the Personalization Agenda is to tailor public services to individual beneficiary needs as much as possible. This is done through a number of related approaches including connected government, participatory public service development, and provision of peoplecentered services. Interestingly, there is yet to be any significant interactions among these two closely related research communities. In this talk, the speaker argued that developing a viable personalization program for e-government services is contingent on its careful alignment and co-evolution with supporting PA personalization efforts. This viable personalization program, which he call "Deep Personalizatio" entails delivering personalized e-government services over Flexible and Adaptive Public Services. Consequently, he further argued that while the development of effective citizen models and acquisition of functional and behavioral data from citizens are critical for delivering personalized citizen e-services, the fundamental challenge is in ensuring that the underlying public service is sufficiently flexible and adaptive.

#### 4 Workshop Chairs

- Nikolaos Loutas, PwC, Belgium
- Fedelucio Narducci, University of Milano-Bicocca, Italy, Swap Research Group, University of Bari Aldo Moro, Italy
- Matteo Palmonari, University of Milano-Bicocca, Italy
- Cécile Paris, CSIRO ICT Centre, Australia

## 5 Program Committee

- Nathalie Colineau, CSIRO ICT Centre, Australia

- Marco Comerio, University of Milan-Bicocca, Italy
- Amanda Dennett, Australian Government Department of Human Services, Australia
- Stijn Goedertier, KU Leuven, Belgium
- Julia Hoxha, AIFB, Karlsruhe Institute of Technology (KIT), Germany
- Leo Iaquinta, University of Milano-Bicocca, Italy/Swap Research Group University of Bari Aldo Moro, Italy
- Cataldo Musto, University of Bari Aldo Moro, Italy
- Surya Nepal, CSIRO ICT Centre, Australia
- Adegboyega Ojo, DERI, NUI Galway
- Vassilios Peristeras, European Commission
- Karen Purser, Australian Centre of Excellence for Local Government
- Marco Rospocher, Fondazione Bruno Kessler, Italy
- Michael Sheng, University of Adelaide, Australia
- Efthimios Tambouris, University of Macedonia, Greece
- Mike Thacker, Porism Limited, United Kingdom
- Jeroen van Grondelle, Be Informed, The Netherlands
- Keith Vander Linden, Calvin College, USA
- Tomas Vitvar, Oracle, Czech Republic
- Maciej Zaremba, DERI, NUI Galway

## 6 Additional Reviewer

- Lukasz Porwol, DERI, NUI Galway