# Chapter 20 The Challenge of Bringing User and Development Communities Together

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#### **ABSTRACT**

Work reported in this chapter relates with work carried out in the context of the European IST Project SemanticGov (www.semantic-gov.org). The project aims at implementing a set of advanced Semantic Web technologies for adoption in the European public sector to advance the level and expand the volume of e-government solutions in the EU. This research elaborates on the need to (re)position the idea of providing an advanced solution for an ideally functioning e-Gov island within a sea of noninteroperable e-Gov process frameworks, to become parts of open-ended ventures to allow the creation of collaborative networks for electronic governance.

#### INTRODUCTION

What has become obvious to us as result of our exposure to several e-Gov adoption pitfalls, is that we are not facing a lack on enabling technologies but on paradigms to successfully deploy them.

In this context, the main aim of this work is to provide a new open development paradigm on how user and development communities can coexist and co-work for the definition of new e-Gov missionoriented application concepts. At a second level, what is important is to help the organization of the requirements elicitation processes, the compliance validation and quality checking processes in a synergetic way with both users from the European public sector and developers' communities forming essential part of the intellectual service and software engineering processes.

The vision is to understand how to capitalise on the interactions between e-Gov users and developers as part of a value chain that creates new intellectual capital for new e-Gov application types by exploring problem-solving principles in computer science and other disciplines.

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This necessitates the existence and fostering of closer links between the sides of the users and the developers, both of which need to share a space for expressing as well as exploring their own modes of thought and help improve their problem-solving paradigm.

Better understanding and communication with the future users of the systems requires the software creation to be placed at the level of abstraction the users can understand. Better communication between IT- and application field-specialists will lead to avoidance of misunderstanding, loss of time and resources and in the effect to systems that better address the needs of the end users. This refers to the creation of policies, processes and practices that will enrich the people in both communities of users and developers to coexist smoothly and gain from their interactions.

#### THE CONTEXT OF RESEARCH

#### The SemanticGov Project

SemanticGov aims at building the infrastructure (software, models, services, etc) necessary for enabling the offering of intelligent services by public administration (PA) through the use of the semantic web (Peristeras & Tarabanis, 2006). Through this cutting edge infrastructure, SemanticGov will address longstanding challenges faced by public administrations such as streamlining cooperation (e.g. through achieving interoperability) amongst PA agencies both within a country as well as amongst countries, easing the discovery of PA services by its customers, facilitating the execution of complex services often involving multiple PA agencies in interworkflows. More importantly, this infrastructure will exploit SemanticGov as an enabler for total reengineering of PA service provision and propose a paradigm shift from today's modus operandi.

To achieve this, the SemanticGov project aims at capitalizing on the Service Oriented Architec-

tures paradigm (Peristeras & Tarabanis, 2004), implemented through state-of-the-art Semantic Web Services technology and supported by rigorous and reusable public administration domain analysis and modeling, while being in line with all major European programmes and initiatives in the field such as the European Interoperability Framework and the recent work conducted by the EU IDABC Programme (IDA and CapGemini, 2004), the forthcoming i2010 group of Member States representatives and the Competitiveness & Innovation (CIP) Programme.

As a wider impact, SemanticGov is expected to enhance the administrative capacity of national public administration systems by providing a new paradigm for service provision, and pave the way to the administrative dimension of European seamless collaboration (aka "Common European Administrative Space") (Olsen, 2003) by facilitating the cooperation amongst EU national public administration systems.

#### The Miranda Modeler

Miranda is the acronym for an e-Government model, "mission-oriented application modeler empowering user and development communities involvement". The basic goals for such a facility is twofold:

- On the one hand to provide a new open development paradigm on how user and development communities can coexist and co-work for the definition of new e-Government mission-oriented application concepts,
- While on the other hand help the public sector organizations on the requirements elicitation processes, the compliance validation and quality checking processes in a synergetic way with both users and developers communities forming essential part of the intellectual service and software engineering processes.

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