

**ICEG 2007**  
**The 3rd International**  
**Conference on**  
**e-Government**

Université du Québec à Montréal,  
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Edited by

Dr Dan Remenyi  
Trinity College Dublin, Ireland

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# ICEG 2007

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## Preface

Welcome to the 3rd International Conference on e-Government (ICEG 2007) hosted this year at the Université du Québec à Montréal. The Conference Chair is Christian Boudreau and the Programme Co-Chairs are Michel Plaisent and Jacques Ajenstat.

The opening keynote address is given by Bernard Landry, Former Premier of Québec on the topic *"Information Technology and the Public Sector"*. The second day of the conference is opened by Eric Lacroix, Directeur des enquêtes et de la veille stratégique, CEFRIO, Québec who will address the subject *"The CEFRIO Surveys: Measuring the Expectations of Québec's Citizens regarding e-Government"* and a plenary session will be led by Yvan Lauzon, Assistant CiO, Government of Québec (MSG-SMERI) on the topic of *"Modernization, e-Government and Information Resources Management"*.

The main purpose of the Conference is for individuals concerned with current research findings and business experiences from the wider community which is now involved in the management and study of e-Government to come together to share knowledge with peers interested in the same issues.

A key aim of the conference is about sharing ideas and meeting the people who hold them. The range of papers will ensure an interesting two days. Alongside the main conference there are four mini tracks on Le cybergouvernement dans le monde francophone, chaired by Pascal Pecquet; e-Government around the world, chaired by Shauneen Furlong, University of Toronto; e-Government Implementation, chaired by Olga Soukhovtseva, Carlton University, Ottawa and Scaleable Architectures, chaired by Peter Salhofer, University of Applied Sciences FH JOANNEUM in Graz, Austria.

With an initial submission of 88 abstracts, after the double blind, peer review process there are 40 papers published in these Conference Proceedings. These papers represent research from Austria, Belgium, Canada, Cyprus, France, Greece, Hungary, Indonesia, Ireland, Italy, Japan, Luxembourg, Lybia, The Netherlands, Norway, Romania, Russia, South Africa, Switzerland, Tunisia, United Kingdom, USA and Uzbekistan.

I hope that you have an enjoyable conference.

Michel Plaisent  
Programme Chair  
[Michel.plaisent@uqam.ca](mailto:Michel.plaisent@uqam.ca)

## Conference Executive:

### Conference Executive

[Professor Jacques Ajenstat](#), University of Quebec in Montreal, Canada

[Professor Christian Boudreau](#), ENAP Public Administration National School, Quebec, Canada

[Professor Toni Carbo](#), University of Pittsburgh, USA

[Shauneen Furlong](#), Territorial Communications, Ottawa, Canada

[Gabor Laszlo](#), Budapest Tech, Budapest, Hungary

[Dr. Laurence Monnoyer-Smith](#), University of Technology of Compiègne, France

[Dr Pascal Pecquet](#), Montpellier 1 University, France

[Professor Michel Plaisent](#), University of Quebec in Montreal, Canada

[Professor Serge Proulx](#), University of Quebec in Montreal, Canada

[Professor Dan Remenyi](#), Trinity College, Dublin, Ireland

[Professor Peter Salhofer](#), University of Applied Sciences FH JOANNEUM, Graz, Austria

[Professor Ken Sochats](#), Director of the Visual Information Systems Center, University of Pittsburgh, USA

### Committee Members

The conference programme committee consists of key people in e-Government around the world. The following people have confirmed their participation:

Jacques Ajenstat, University of Quebec in Montreal, Canada; Saleh Al-Turki, King Faisal University, Saudi Arabia; Hans Arents, Ministry of Flanders, Belgium; Dan Batista, Government of Canada, Canada; Lasse Berntzen, Vestfold University College, Tonsberg, Norway; Todd Boyle, St Francis Xavier University, Antigonish, Canada; Christian Boudreau, ENAP, Quebec, Canada; Jonathan Calof, University of Ottawa, Canada; [Toni Carbo](#), University of Pittsburgh, Pennsylvania, USA; Amanda Coe, Harvard Business School, USA; José Manuel Esteves de Sousa, Instituto de Empresa, Madrid, Spain; Patricia Fletcher, University of Maryland, Baltimore, USA; Shauneen Furlong, Territorial Communications Ltd, Canada; Dave Garson, North Carolina State University, USA; Mila Gasco, International Institute on Governance at Catalonia, Spain, Gerry Grant, Carleton University, Canada; Dave Griffin, Leeds Metropolitan University, UK; Yonas Hagos, Overtone Software, USA; Panos Hahamis, Westminster Business School, UK; Matthew Hibberd, University of Stirling, Scotland, UK; Mike Hine, Carleton University, Canada; Patrik Hitzelberger, Centre de Recherche Public Gabriel Lippmann, Luxembourg; Shaobo Ji, Carleton University, Canada; Bettina Kaffai, German Research Centre for Artificial Intelligence, Germany; Aqueo Kamada, Ministry of technology, Brazil; Zeinab Karake Shalhoub, American University in Sharjah, UAE; Peter Knight, Carleton University, Canada; Bernt Krohn-Solvang (Agder University College, Norway); Uma Kumar, Carleton University, Canada; Vinod Kumar, Carleton University, Canada; Gabor Laszlo, Budapest Tech Keleti Karoly Faculty of Economics, Hungary; Thomas Lauer, Oakland University, USA; Michael Lavine, Towson University, Maryland, USA; JinKyu Lee, Spears Business School, Oklahoma State University, OK, USA; Howie Macumber, Public Works and Government Services, Canada; Thevarkalathil Madanmohan, Indian Institute of Management, Bangalore, India; Bharat Maheshwari, Carleton University, Canada; Blessing Maumbe, Cape Peninsula University of Technology, South Africa; Laurence Monnoyer-Smith, University of Technology of Compiègne, France; Jon Morell, Policy Analyst, Michigan, USA; John C. Nash, University of Ottawa, Canada; Andrew O'Baoill, University of Illinois, USA; Norm O'Reilly, Ryerson University, Canada; Siva Pal, Carleton University, Canada; Ajax Persaud, University of Ottawa, Canada; Serge Proulx, University of Quebec in Montreal, Canada; Alex Ramirez, Carleton University, Canada; Jeffrey Roy, University of Ottawa, Canada; Dan Remenyi, Trinity College Dublin, Ireland; [Umar Ruhi](#), Wilfrid Laurier University, Canada; Peter Salhofer, University of Applied Sciences FH JOANNEUM, Austria; Carmine Scavo, East Carolina University, USA; Satgin Seraj, University of Louisville, USA; Ken Sochats, University of Pittsburgh, USA; Olga Soukhovtseva, Carleton University, Canada; Jacqueline Spencer, University of Aberdeen, UK; Genie Stowers, San Francisco State University, USA; Arthur Sweeny, Griffith University, Australia; Andrew Szende, University of Toronto, Canada; Susan Thorne, Public Works and Government Services Canada; Peristeras Vassilios, National University of Ireland, Ireland; Burke Ward, Villanova University, USA; Christine Williams, Bentley College, USA; Les Worrall, University of Wolverhampton, UK.

## Biographies of Conference Chairs, Programme Chair and Keynote Speaker

### Conference Chair



**Christian Boudreau** is a full professor at the National School of Public Administration (ENAP), part of the University of Quebec. His teaching responsibilities are in Information management and new technologies, New technology and Human Resources management, with particular interest in the areas of Information management in the health sector; Monitoring and governorship: Reform of the State Government on line (e-Government)

### Programme Chairs

**Michel Plaisent** is a full professor in the [Département de management et de technologie](#) of the University of Quebec in Montreal and former director of the MIS program. His Ph.D. in IS Administration is from the University of Quebec in Montreal in 1987; as is his M.Sc. in Project Management in 1980, his B.Sc. in Computer Sciences from University of Montreal in 1971, and his B.A. from Sainte-Marie College in 1968. He has held positions with governments and enterprises as system programmer, analyst and CIO from 1971 to 1987, before he joined the faculty of University of Quebec in Montreal. He still works as consultant for many small business and non-profit organizations. His doctoral thesis (1987) was on the use of e-mail as a management tool. Dr. Plaisent's research focus is on the concept of cognitive ergonomics, learning problems and personal productivity tools for managers. He has published several books and articles.



**Dr Jacques Ajenstat** has an engineering degree in Physics, a masters in computer sciences and an advanced degree in Artificial Intelligence. He also holds an MBA and a Doctorate degree in Decision Support Systems. He started his career as a junior scientist with the National Research Center in France studying automation optimality principles. His industrial experience followed with Bell Canada, a communication carrier, starting as a senior engineer and then holding several management positions with a stated goal for an

early introduction of decision support technologies as strategic and competitive weapons. In 1978 he obtained a teaching and research position at the University of Quebec at Montreal (UQAM) where he gained full professor status since 1993 that he is maintained till now.

### Keynote Speakers

**Jean-Bernard Landry**, is a Quebec lawyer, teacher, politician, past Premier of Quebec, Canada, (2001–2003), former leader of the Opposition (2003–2005) and former leader of the Parti Québécois (2001–2005). He speaks three languages fluently: French, Spanish and English. Bernard Landry received a degree in law from the Université de Montréal in Montreal, and a degree in economics and finance from Institut d'Etudes Politiques de Paris in Paris. Since September 2005, he has been a professor at UQAM in the business strategy department.





**Eric Lacroix** occupe le poste de directeur des enquêtes et de la veille stratégique depuis l'été 2000. À ce titre, il est responsable des grandes enquêtes et du service d'analyse stratégique du CEFRIO. Au cours des dernières années, il a entre autres supervisé les enquêtes NETendances, NetAdos, NetGouv, NetPME, NetPub ainsi que l'étude du Web municipal au Québec. Il a aussi coordonné plusieurs mandats de recherche et d'analyse stratégique dans des domaines aussi variés que l'apprentissage en ligne, le déploiement du gouvernement électronique, les affaires électroniques et les PME ainsi que les impacts technologiques sur le monde de l'éducation et celui de la culture. Avant de se joindre à l'équipe du CEFRIO, Eric a occupé divers postes dans le domaine de la recherche statistique, notamment à l'Institut de la statistique du Québec, chez Impact Recherche, filiale du Groupe Cossette communication marketing, et au sein de divers ministères et organismes gouvernementaux. Détenteur d'un baccalauréat en statistique et d'une scolarité de maîtrise en mathématiques de l'Université Laval, il a aussi été chargé de l'enseignement en statistique au sein de cette même institution.

**Yvan Lauzon** has over 25 years of experience working in the field of information technologies (IT) in both the private and public sectors. In 1985, Yvan started to work to coordinate IT activities at the Government of Quebec. In January 2006, Yvan was appointed Assistant Chief Information Officer (CiO). In November 2006, Yvan was appointed as an Expert for OECD in eGovernment



## **Biographies of contributing authors (in alphabetical order)**

**George Aichholzer**, PhD in Sociology, is project director and senior researcher at the Institute of Technology Assessment (ITA), Austrian Academy of Sciences, and senior lecturer at Vienna University of Economics and Business Administration. He has extensive research and teaching experience on interrelations of ICT and society, including related policies. A major focus is on e-government, governance and democracy.

**Farrukhjon Akramov** was born in 1985 in the Republic of Uzbekistan. At the moment I'm a second-year student in Tashkent State institute of Law. I'm interested in information technologies and that's why i have chosen my research theme as "Information-communicative function of the state". I have been working on this theme for two years and wrote more than 10 articles about informatiozation processes in Uzbekistan and Central Asia, the role of the state in formation of Information society and so on. I have participated in rhe republican students confererence and awarded with certificate for the best lecture.

**Lars Baacke** works as doctoral assistant at the Institute of Information Management at the University of St. Gallen (Switzerland). During his studies of Information Management at the University of Leipzig (Germany) he continuously focused on the field of eGovernment. Since 2006, he works at the Chair of Prof. Dr. Robert Winter and is mainly involved in the EU project PICTURE.

**Alexandre Barbosa** has 27 years of experience in IT and telecom. Since 2003 has been working in large-scale projects of e-government in Brazilian governmental agencies. He holds a BsC in Electrical Engineering, MsC in Computer Science and in Business Administration, currently is a PhD student in Business Administration and is conducting an academic research on e-government performance measurement models.

**Tuna Baskoy** is Assistant Professor in the Department of Politics and Public Administration at Ryerson University. His fields of research and teaching interests are comparative public administration and policy, statistics, theories of market competition, EU competition and telecommunication policies, e-government and e-democracy.

**Gerd Bauer** is A consultant for new medias in the Main Associatin of the Austrian Social Insurance. He is, among other things, responsible for the technical coordination, the development of Userinterfaces and modelling of digital process of the electronic workflow of the Code of Reimbursement.

**Francesco Bof** is Assistant Professor of Public Procurement Management at SDA Bocconi School of Management (Milan, Italy). He is a Public Procurement Master Coordinator and he is Researcher for CERGAS (Research Centre on Health Care Services Management) Bocconi He has also been lecturer of Iacocca Institute, Lehigh University (PA, US), and Evening Mba Adjunt Faculty Member of Moravian College (PA, US). He published a book on public process management and several papers on public (e)-procurement and public management.

**Xiaoyi Chen**, who got her Bachelor and Master Degree of Computer Science from Wuhan University, China, and is a Doctoral Course Student (Sep 2005) in Japan Advanced Institute of Science and Technology (JAIST) now. Research interests are Formal Methods, E-Commerce, E-Government and Digital Rights Management.

**Sergey Chernov** is a PhD in Jurisprudence, History; Professor. In 1979 graduated from Petrozavodsk State University with honors. In 1987 defended candidate thesis, and in 1999- doctoral thesis in History. In 2005 defended doctoral thesis in Law. Presently the Dean of the Faculty of Law of Petrozavodsk State University; member of the Presiding Committee of the Association of Law Schools.

**André Fayaud**, enseignant et doctorant en sciences de gestion, est rattaché au CEREGE de l'IAE de POITIERS. Son travail de recherche porte sur le management par la qualité au sein des organisations publiques. L'auteur a prioritairement focalisé ses travaux sur les démarches qualité mises en œuvre au sein des collectivités territoriales.

**David Ferbas** is a research assistant at the University of Applied Sciences FH JOANNEUM, Graz, Austria, degree program information management. In the research group software engineering he deals with software design and architecture, especially in the field of e-government applications.

**James Gamble** is a physician and the inventor of PoliticalSheepdog.com. He studied welfare economics and intellectual property economics as a hobby, because he wanted to know why Elvis Presley made so much money and why his middle school teachers did not. He practiced medicine in the 1980's and 1990's, but has spent the last several years developing PoliticalSheepdog.com.

**Karl Gangle** is Working on Doctorate in Computer Science from Illinois Institute of Technology. United States Peace Corp Volunteer (93-95) in Bulgaria and Czech Republic. Received MS in Computer Science (92) from Illinois Institute of Technology. Software Engineer at Gaertner Scientific Corporation (86-91).

**Patrik Hitzelberger** is a project manager at the "Centre de Recherche Public - Gabriel Lippmann" in Luxembourg" (CRP-GL). He has worked for several years as a software developer and project manager in industry and science. Since joining the CRP-GL in 2001, his research interests have included interoperability of IT systems and one-stop-government and business process modeling for public administrations.

**Ilie-Nemedi Iulian**, PhD. Student in Business Informatics. Graduated in 2003 from the Academy of Economic Studies, Business Informatics Department. 8+ years experience in C, C++, C#, .NET Technologies, Java, Web Services, Web Technologies. Currently teaching assistant at Business Informatics Department, ASE Bucharest.

**Kathleen McNutt** is an Assistant Professor in the Graduate School of Public Policy. Specializing in policy analysis, information governance, and social policy Kathleen's work is being published in the Canadian Journal of Political Science, Global Social Policy, The Russian Journal of Political Science, and Federal Governance.

**Diane Mercier**, Ph. D. en sciences de l'information, est conseillère en gestion des connaissances à la Direction des technologies de l'information de la Ville de Montréal (Québec). Sa thèse de doctorat porte sur le transfert des connaissances tacites chez des gestionnaires municipaux en situation de coordination. Elle détient aussi un baccalauréat et une maîtrise en informatique de gestion (1989, 1994 : UQÀM).

**Charles Mitchell** has presented papers at several IPSA World Congresses. He has presented at the APSA Meeting almost every year since 1988. His academic work is predominately in the areas of international collaboration, information technologies, political communications, and methodology. He is an associate professor at Grambling State University and has a Ph.D. from the University of Tennessee.

**Goonasagree Naidoo** is currently employed as a lecturer at the University of Cape Town. She has published widely, both nationally and internationally on Information and Communication Technology and Policy and Institutional Reform. She has been awarded numerous awards and scholarships for her contribution towards research.

**Paul Nixon** is a Senior Lecturer in Political Science at the The Hague University of Professional Education, the Netherlands. Haagse. He has contributed chapters to many edited collections on the use of ICTs particularly in the fields of political parties, electronic democracy and social welfare. He has co-edited three previous collections for Routledge E-Government in Europe (with Vassiliki Koutrakou 2007), Political Parties and the Internet for (with Steve Ward and Rachel Gibson 2003.) and Cyberprotest (with Wim van der Donk, Brian Loader and Dieter Rucht, 2004) He has also published in the fields of culture and literature including editing a collection entitled Representations of Education in Literature (Edwin Mellen Press 2000). He has recently been appointed as an Editorial Member for the Routledge Journal 'Information, Communication & Society'.

**Panayiotis Panayiotou** was born in Limassol, Cyprus on June 5, 1965. He received the Diploma (M.Eng) in Electrical Engineering, from Demokriton University of Thrace, Greece in 1990, the M.Sc. degree in Information Technology from Loughborough University of Technology, UK, in 1991 and the PhD degree in immovable property taxation and the development of an artificial neural network valuation system for residential properties for tax purposes in Cyprus from University of Glamorgan in 1999. He is currently a Land Officer in the Lands and Surveys Department, Cyprus. His main duties include research for the development of Land Information Systems and the introduction and supporting of

computerised methods and procedures in the Lands and Surveys Department. At present, he also collaborates with Intercollege, as a part-time researcher, in the project entitled "Development of e-Government system for local self-government", funded by the Research Promotion Foundation of Cyprus. He is MIEEE and Member of the Scientific and Technical Chamber of Cyprus.

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# **Opening the Black Box: Economic and Organisational Effects of e-Government**

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**Abstract:** This paper aims at reducing the lack of overview on economic and organisational effects of e-Government. It identifies theoretical arguments linking e-Government with public sector efficiency and organisational change and provides an overview on qualitative and quantitative empirical findings, drawing on a review of research at international level. Methods used are an extensive review of the relevant academic literature, research reports and government documents, complemented by own case studies in Austria. Some reflections on the understanding of the relation between process and impacts are provided as a basis to explain the approach chosen. A theoretical model is outlined explicating causal linkages (such as economies of scale, scope, depth and co-ordination) between e-Government, organisational change and economic effects for government, its constituencies and economy at large. The empirical overview on economic effects represents a major part of the paper. The majority of sources are case studies; more aggregate assessments are less frequent and underpin the demand for more holistic evaluations. Comprehensive measurement frameworks are being developed but often lack adequate data. Overall, there are numerous examples showing various forms of efficiency gains and improved service quality, e.g. based on reduced transaction costs and rationalised process and information management. However, many reports are biased towards demonstrating positive effects and are silent on potential project failures or other negative outcomes. This raises questions of quality and comparability. Based on more balanced and reliable sources, efficiency and productivity gains tend to be confirmed with important qualifications (e.g. some cases with negative net effect; longer payback periods for positive benefit/cost ratios; conditioned on reorganisation). Empirical evidence of organisational effects shows that there is no radical change or administrative reform but a variety of incremental changes is observable. The results contribute to the scientific assessment of hypotheses on e-Government impacts and to identifying specific research gaps. Public sector managers can profit from strategically relevant information such as required action related to evaluation activities, investment decisions or administrative innovation.

**Keywords:** e-Government, economic impact, service productivity, service quality, benefits, organisational change

# The e-Government in Uzbekistan: On a way to Information Society

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**Abstract:** New technologies cardinaly change the life, and in this view the information society is a society in which every citizen can improve his life at least by getting access to huge amount of information - education and cultural values. Today's stage of development of the information society in Uzbekistan affects everyone, especially those who work with the information.

The new information and communication technologies used in various areas of human life are being applied even in the sphere of politics. The informatization of political processes has led to formation of the concept of electronic government implemented in many countries of the world. Creation of the electronic government is objective, as it answers the demands of time and the changes in public life.

The following priorities in formation of the e-Government in Uzbekistan are outlined in the research:

- Creation of modern reliable and safe national information resources and databases

- Development of the market of information resources and services

- Stage-by-stage transition to electronic forms of information exchange

- Introduction of electronic technologies in the activity of the government.

At present 97,8 % of state bodies and authorities have placed their own websites in the Internet. But well-timed parameters of updates are observed not in all of the state bodies.

For example, in Syrdarya region a pilot project on introduction of the electronic government is being directed. This project aims on construction of system providing openness and transparency of state bodies' activity, creation of a portal of Syrdarya region, introduction of electronic document circulation and other measures promoting closer interaction of local authorities with citizens and businesses.

**Keywords:** Information society, e-Government, electronic document, informatization

# Measuring Impacts of ICT on the Process Landscape of Public Administrations

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**Abstract:** Efficiency, effectiveness and transparency are key objectives of e-Government. Modern information and communication technologies (ICT) provide means to improve quality of service rendition in public administrations and availability of information across organizational boundaries. The required investments to realize these potential benefits, e.g. for license, implementation, training, operation or maintenance of ICT, can be calculated quite accurately prior to purchase. Significantly more difficult is an assessment of attainable quality improvements, cost savings and utility potentials of newly introduced ICT, which is however a prerequisite for sound investment decisions.

The European Commission-funded research project PICTURE addresses this challenge by developing a methodology and a tool for measuring qualitative and quantitative impacts of ICT on the process landscape of public administrations. The methodology is based on predefined and semantically standardized Process Building Blocks (PBB) that represent typical domain-specific activities as well as dynamic attributes designed for each PBB in order to define required information to be provided by modelers. The resulting consistent process models built with PBBs enable an administration-wide analysis regarding e.g. media breaks or organizational inefficiencies as well as a usage potential analysis of ICT functionalities (such as ePayment or eSignature) across process boundaries. This paper describes the fundamental methodology of PICTURE and demonstrates a real-world example.

**Keywords:** Process modeling, process landscaping, impacts of ICT, measurement methodology

# **Electronic Government in Brazil: A Historical Perspective of its Development Based on a Structured Model of Analysis**

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**Abstract:** Initiatives of reform and modernisation of the public sector in Brazil have intensified, not only as a consequence of the fiscal crisis that occurred during the 1980s, but also as a result of the exhaustion and collapse of bureaucratic management and government interventionist models. The development of the Brazilian e-gov programme officially started in 2000 and today is in its third phase after two different government administrations. It plays an important role in the modernisation of the public sector in the country and faces the challenge of giving proper support to public policies to universalise opportunities that promote economic and social development. The currently available literature analysing the history of the Brazilian e-gov programme focuses too narrowly on the identification of relevant technological aspects affecting its designing and development, failing to use a theoretical framework that takes into consideration social actors and other intervening factors. This article presents and employs an approach that takes into consideration the relevant social groups involved in each phase of the construction process of e-gov programmes, the intervening factors impacting this construction, and the strength of the relationships among them. Based on qualitative empirical research, this article discusses the validity of the proposed model for studying the history of e-gov in Brazil. As a result of an in-depth documental analysis and interviews with key actors throughout the different administration tenures, this article identifies important intervening factors that guided successful and unsuccessful government initiatives in the e-gov programme.

**Keywords:** Electronic government, e-Gov analysis model, public policy, evaluation of e-Gov program history

# **The European Union and e-Democracy: Interactive Policy-Making Initiative (IPM)**

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**Abstract:** There are two major arguments with respect to the European Union's (EU) e-Government initiative in the literature. The first one is that the EU launched e-Europe because information communication technologies (ICTs) could enhance democratic participation. Contrary to this the second position claims that the primary goal of e-Europe is to deliver public services efficiently at lower costs rather than encouraging citizens to take active part in policy making. The problem with the existing literature is that surprisingly students of e-Europe did not analyze the European Commission's Interactive Policy Making (IPM) initiative = which was launched in 2001 in their study before reaching such conclusions. The goal of this essay is to assess IPM with respect to its potential to promote democratic participation and re-assess the EU's position. It is argued in this paper that the EU is an example to the consultative, if not participatory model of e-democracy. In addition to getting regular information about activities of the EU posted on the website, European actors can express their opinions and concerns via the Internet and make their voices heard in specific public policy initiatives. This does not mean that IPM is free from criticisms. Despite the existence of the digital divide in the EU and the problem with 'consultation' practice itself, IPM offers a positive opening for e-democracy. The first section reviews the existing literature on the implications of ICTs for democratic participation in other jurisdictions, which is followed by a brief history of e-Government and e-democracy in the EU since the early 1990s to contextualize the IPM initiative historically in the second section. The third section analyzes the IPM project in detail by describing its components such as consultation, feedback mechanism, and online discussion before discussing the issue of digital divide as well as the problems with the nature of consultation. The last section evaluates findings and implications of IPM for democratic participation in the EU.

**Keywords:** e-Government, e-democracy, Interactive Policy Making(IPM), European Union(EU), European Commission, e-consultation

# **Model Project: Workflow for the Austrian Social Insurance Code of Reimbursement**

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**Abstract:** The Main Association of Austrian Social Insurance Institutions is, among other things, responsible for publishing the so-called “Code of Reimbursement”, a list of all medicinal products, which have a marketing authorization in Austria or the EU, a guaranteed supply and which are reimbursable. In order to keep this list up to date as regards scientific findings and practical experience, there must be a permanent exchange of information between senior clerks and specialized departments of the Main Association, consultants and representatives of the pharmaceutical industry and members of an independent Drug Evaluation Committee.

New legal provisions introduced in 2004 made it necessary to amend procedures and communication processes for drawing up and monitoring the list. Communication, which had previously been mainly analogous, was to take place as of day X solely via the Web portal of the Austrian Social Insurance ([www.sozialversicherung.at](http://www.sozialversicherung.at)). Therefore, internal and external cooperative procedures had to be realigned. The Main Association saw itself faced with challenges of the technical, communicative, strategic, organisational and social kind. It reacted unilaterally by setting up a team of experts from various disciplines to establish an electronic workflow system.

All new procedures for adding medicinal products to or amending data in the Code of Reimbursement have been fully digital since September 2005. Members of the Drug Evaluation Committee have also had electronic access to the records since January 2006. In the past six months, the experts have succeeded in evaluating and further optimising all business processes as regards workflow, interfaces and communication channels.

The experience gained in the above digital workflow project can be transferred perfectly to projects also concerning communication via the Internet between different groups with heterogeneous interests. This applies not only to communication between government institutions and bodies themselves but also to communication with business enterprises and private citizens. The experience gained can also be transferred to the B2B sector; it was the maxims of this sector, which also inspired the project team.

**Keywords:** Citizen card, digital legally valid signature, security and trust, code of reimbursement, digital workflow, communication process, e-Information, digital business model, service orientation

# Digital Planning Dialog

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**Abstract:** "Digital Planning Dialog" is a joint project between twelve Vestfold municipalities, Vestfold County Municipality, the County Governor of Vestfold, Vestfold University College and the Norwegian Mapping Authority. The project aims to integrate existing municipal geographic information system with other relevant applications and data sources to improve current planning processes and increase citizen influence on municipal planning.

The paper gives a detailed account of the planning process, the requirement specification and how different relevant systems are integrated to provide the desired results. The prototype is described in detail, including an innovative use of a map based interface.

**Keywords:** municipal planning, spatial planning, geographic information systems, integration, e-government, citizen influence, transparency, web services

# **Is e-Government on the Agenda of Small Municipalities? Empirical Evidence from an Italian Case Study**

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**Abstract:** The growing relevance of e-Government has raised much attention in practice and the academic literature, often relating to the experiences of local governments (e.g. large/medium municipalities). Moreover, out of 8101 Italian municipalities, the majority (72%) are small municipalities accounting for 10.590.728 inhabitants out of a total of 58.571.711 national (source: Italian Institution of Statistics – ISTAT, survey 2005). In this setting, the aim of the paper is to explore the stage of e-Government adoption in Italian small municipalities, coherently with the suggested actions of the main National Institution (CNIPA) on the subject. Adopting an empirical approach, we conducted a survey on 49 of them (located next to the metropolitan area of Milan), through a questionnaire and in-depth interviews to political and managerial decision makers and IT officers.

In spite of the efforts by both Government and the EU, the quali-quantitative results show that the adoption of e-Government has not taken off in Italian small municipalities. The findings of the survey suggest technical and managerial reasons for this: a) the technical reasons concern a lack of infrastructure and IT services (e.g. back up, security, disaster recovery) while b) the managerial reasons are related both to a lack of strategic vision of information needs and to an inadequacy of requested skills and competences. The findings suggest that Institutional actions at a central level are important but not sufficient. Recommendations are made for facilitating the development of local e-Government in order to reduce the existing gap between medium/large and small municipalities.

**Keywords:** e-Government, local government, small municipalities

# Formalization and Analysis of Public Administration Domain with the OTS/CafeOBJ Method

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**Abstract:** Government transparency should be embedded in the designs of e-Government systems. Lack of transparency can prevent the public from participating actively in government operation, such as by raising questions and protesting ill-advised decisions, which in turn may lead to concealment official graft or favouritism. However, it is also difficult to guarantee that designs of e-Government systems are consistent with real requirements in terms of having desired properties, such as transparency.

In this paper, we introduce formal methods into the field of e-Government (or public administration) for formalizing designs of e-Government systems and analyzing if the designs satisfy desired properties, in particular transparency. To the best of our knowledge, we are the first to try to formally define and analyze the notion of transparency based on the formalized designs of e-Government systems.

The formal method that we used is an equation-based method – the OTS/CafeOBJ method. In using this method, an e-Government system design is first modeled as an Observational Transition System (OTS), a kind of transition system that can be straightforwardly written in terms of equations. The OTS is then specified in CafeOBJ, an algebraic specification language. And lastly, we express the transparency properties as invariants of the OTS, and verify the invariants by using the CafeOBJ system as an interactive theorem prover.

**Keywords:** Public administration, formal methods, the OTS/CafeOBJ method, domain engineering

# **e-Government in Russia: Obstacles on the way to Improve Public Management in a Federal State**

**Sergey Chernov, Alexander Larichev and Tatiana Chernova  
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**Abstract:** The acknowledged goal of e-Government worldwide is the implementation of new technologies into the public management sector, which can improve the quality and effectiveness of public services; fight bureaucracy and promote for greater openness of the government. The theory and practice of e-Government is on a top agenda in Russia, where ineffectiveness of public management has been a long-term problem.

This research examines whether or not Russian efforts to enact e-Government are beneficial, and, if not, what could be done to improve the situation. Several instruments to implement forms of e-Government in Russia are analyzed, including Doctrine on Information Security, medium-term Program for social and economic development of Russia, and several target programs, like Electronic Russia (E-Russia).

The analysis of legal norms and law enforcement practice brings to several findings. Firstly, the introduced scheme of e-Government is not in conformity with the outlines of the general administrative reform, which is underway in Russia since 2004. Secondly, there is no specific assignment of duties and clear division of powers between agencies, which are in charge of innovations in public sector-used information technologies. Thirdly, there is lack of coordination in the discussed area between federal, regional and local levels, whereas such coordination is crucial for the success of the reform in a large federal state like Russia.

With these conclusions, the authors propose specific goals and indicators in various parts of public sector, introduction of which is required for successful implementation of e-Government in Russia. The authors also conclude what needs to be done to consolidate resources and powers to reach these goals and what legal norms, covering public management in the area of information technology innovations, need to be introduced or amended for the benefit of the e-Government reform.

**Keywords:** e-Government, Russia, public services, federal state

# **L'intranet, Vecteur de Partage des Informations au Sein des Collectivités Territoriales**

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**Resume:** La dématérialisation des procédures administratives est à l'origine d'un profond bouleversement dans le suivi de la relation client au sein des collectivités territoriales. Depuis le début des années 2000, l'accueil du public a été l'objet de multiples mutations. La commune d'Issy les Moulineaux, ville pionnière en matière d'innovation locale a piloté un vaste chantier sur ce thème. Cette collectivité a su, en effet, faire muter les principales voies de l'accueil des usagers. L'accueil téléphonique a, en premier lieu, changé d'objet. Le standard est devenu un lieu de réponse davantage que de transfert. Les agents d'accueil ont été formés pour répondre à des questions de plus en plus complexes, de manière à décharger les services. Une plate forme informationnelle, base de connaissances à la fois administrative (formalités de dépôt d'un permis de construire) et événementielle (date du marché de Noël ou date de retour d'un agent de congés), alimentée par les services et utilisée par les agents, a été créée dans ce but. Cette base est fondée sur un logiciel appelé Coheris Portal. En second lieu, pour faire face à l'intensification du courrier électronique (42000 emails entrants mensuels contre 2500 courriers), un accueil électronique centralisé, matérialisé par la mise à disposition des usagers d'une adresse unique pour le courrier électronique, a été mis en place. Le projet isséen a franchi une étape importante en 2006 lorsque les diverses formes de l'accueil (téléphonique, électronique, physique et courriers papiers) ont été consolidées dans un dispositif d'accueil multicanal. Une seconde base logicielle a été créée en cette occasion pour réaliser le suivi du traitement des courriers entrants. Cette manière de guichet unique, appelé IRIS (Information Réception des Isséens), a permis de centraliser dans une fiche citoyen, partagée par l'ensemble des services municipaux, les différentes informations relatives aux demandes des usagers. Ce projet, dont nous nous proposons de présenter les principaux attendus, a fait de la collecte et de la transmission de l'information un enjeu stratégique pour les collectivités territoriales.

**Mots Cles:** Intranet, modernisation, administration électronique, qualité, accueil multicanal

# **Internet Policy Markets to Prevent Legislative Corruption**

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**Abstract:** The theoretical paper will explain how an internet policy market, PoliticalSheepdog.com, can help prevent legislative corruption by special interest groups. The paper opens with a quick description of PoliticalSheepdog.com, an intellectual property system for legislation that promotes net dynamic savings for consumers and an internet market and constituent lobbying system, designed to drive legislation through legislatures. The paper will define corruption as acts that create disloyalty to constituents. Then, it will show that fighting corruption is a non-exclusive good that requires government intervention. Next, it identifies nineteen requirements to fight legislative corruption, including a way to measure what is “good” government. The paper recommends that we use net dynamic savings for consumers to measure “good” government. The paper also explains that we need a market to determine how much to pay to fight legislative corruption. The paper then describes how PoliticalSheepdog.com can meet the nineteen requirements, while CFR and “good” government organizations cannot.

**Keywords:** corruption, legislation, policy market, intellectual property

# Interstellar Government

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**Abstract:** Our galaxy is a vast area. An Interstellar Government structure is absolutely needed for people and ship survival as they fly around. This paper presents a theoretical design of an Interstellar Government organization based on an interstellar computer network (ICN). The interstellar organization is nested government domain levels of galaxy, star system, planet, moon, and nebula. Each domain identifies a location or area by name, boundary, and center buildings. For example our star domain with boundary has a name of Sun. Each government center is responsible for managing, implementing organized research, and enforcing laws protecting the natural environment. Several departments are computer network, medical, weather, traffic, interstellar positioning, emergency/search and rescue, and law enforcement. Each has government information systems (GIS) to implement their operations on the ICN.

The nested government domains form an Interstellar Computer Network. The domain levels form corresponding network tiers of connected computer nodes. Each node is identified by a location name, name constant, address level, and executing concurrent node routing software for Interstellar Network Message (INM) data structures. The INM is composed of a header data structure with source and destination addresses and a protocol union statement with GIS and communication protocols. Example protocols are videophone, iplane traffic, and weather. The Interstellar Network Address is domain levels converted to short variables placed in a data structure. The government domain names are represented by integer constants, for example "const short Sun = 10;". These constants are assigned to INA address fields and node routing software making the selection of direction possible.

Further research is: interstellar position coordinates, interstellar positioning system, transmission system, and exploring neighboring star systems.

**Keywords:** Astronomy, government organization, government information systems

# Dynamic Workflow Generation with Semantic Web Services: A Case Study in Public Administration Service Provision

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**Abstract:** In this paper we present an automated workflow service composition framework for the Public Administration (PA) domain. We define a conceptual model for a Public Administration service workflow. This model can be implemented using existing web service technologies. In the PA domain complex services exist that require inputs evaluated from other services. Such a nested service type can be implemented using an automatic web service workflow composition. Semantic service discovery, which is based on service inputs and outputs, is also used. The final result is the complete service workflow that can be executed in any web service process engine. Our approach is based on a semantically enriched UDDI registry and an automated workflow composition of complex services. A real-life example of our framework is given for a complex Public Administration service in Greece.

**Keywords:** Public service provision, Semantic Web Services, Dynamic workflow generation, UDDI, OWL-S, BPEL4WS.

# **The Integrated Use of Paper and Electronic Processes in a Public Agency in Luxembourg**

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**Abstract:** Moving public services online might be regarded as the main objective of e-Government. However, in many cases, the creating of an electronic communication channel between public agencies and their customers, at least in the short to medium term, will not completely replace the established, paper-based processes.

The article starts by outlining the specific challenges that arise from this complex context, in particular in an international, cross-boarder environment. The paper presents the case of a family benefit (allowances) agency / fund in Luxembourg where an enormous variety of information systems and processes of different maturity levels have to be integrated.

It then outlines in detail why the public sector cannot abolish the issuing and treatment of paper documents yet by discussing the digital divide debate and some other issues. The coexistence of paper and paper-less communication channels is a particular challenge for the public sector. The paper outlines the integration of ICT-enabled, electronic applications, certificates and communication with their paper-based equivalents, including the concepts of electronic document management and delivery. From this perspective, the paper looks at concepts of using paper as secured data storage medium, profiting from electronic signatures originally designed for online services, and using 2D bar codes and other technologies for securing paper documents.

In the final section, the article draws some conclusions with respect to the key issues uncovered, and presents open research questions.

**Keywords:** e-Government, Service-oriented architecture, Interoperability, Cross-border interoperability, Digital Signatures

# Virtual Policy Networks: Where all Roads Lead to Rome

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**Abstract:** Governing on the Web is a critical aspect of any e-government project as it is the Web that provides the chief platform through which information is disseminated with websites operating as the main information delivery mechanisms. Governments expend massive public resources to provide the public with information; however, the impact of online information provisioning on actors' behaviors and the policy process remains poorly understood at the macro level. The transference of policymaking from the real world to the virtual requires institutional shifts, modernized information management strategies, and a digital state platform that supports Web-based policy activity. This study analyses policy information on the Web to understand how the hyperlinked organization of webpages, produced by real world, web-enabled policy communities, influences the structure and content of the Web's information supply. It is argued that governing on the Web requires new governing instruments that are designed to manage in technologically-mediated environment which means that governments will no longer simply manage bulk data, but rather govern dense networks of information to manage the information flow. This paper suggests that a centralized position in the network confers power, as actors that are nodal have more access to network resources, more opportunities for exchange and a greater influence on how information flows through the network. Using hyperlink analysis to study network structure and website connectivity this paper considers government nodality in six web-based policy networks including climate change, child tax benefit, foreign policy, equalization, peacemaking and rural health. This research suggests that while the Canadian government's policy making capacity is shaped by the extent to which the state is nodal in online policy communities, the state's influence may also be diminished in policy arenas characterized by higher level of internationalization. The findings do indicate however that the Canadian government's participation in virtual policy networks is significant, with the state operating as an important actor on the policy Web.

**Keywords:** e-Government, government nodality, virtual policy networks, web-based information

# Impact de la Cyberadministration Omniprésente Dans la Coordination d'activités Municipales

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**Résumé:** Le transfert des connaissances intéresse nos organisations, surtout lorsqu'elles sont en transformation et que leurs personnels sont remplacés en nombre important. Notre étude vise à mieux comprendre le transfert des connaissances tacites chez les gestionnaires municipaux en situation de coordination. Elle a examiné leur comportement informationnel à travers certaines théories qu'elle a revisités : la coordination d'activités, la conversion des connaissances, la récursivité des connaissances et l'actualisation de soi. Sa méthodologie est qualitative et valide des techniques de visualisation des connaissances, soit la schématisation heuristique et l'analyse des réseaux organisationnels.

Parmi nos résultats de recherche, le port de dispositifs nomades de communication est apparu comme un élément facilitateur pour partager et utiliser, dans d'autres contextes, des connaissances en situation de coordination. Cette omniprésence informatique en administration, par sa nature flexible et convergente, encourage des reconfigurations et des détournements d'utilisation dont certains améliorent le transfert de connaissances tacites. En portant ces dispositifs, les gestionnaires prolongent la coprésence avec leurs proches dans l'espace et le temps, à travers les structures hiérarchiques et les générations. Ils envoient aussi un message clair de disponibilité en étant « ouverts » par le truchement de ces dispositifs. De plus, l'ajustement mutuel, qui est le plus complexe des types de mécanismes de coordination, est facilité grâce à ces dispositifs sophistiqués qui effacent virtuellement les frontières.

Notre terrain de recherche possède des pratiques exemplaires en transfert des connaissances tacites. Au-delà des particularités contextuelles, il a été possible de dégager des points communs, des principes d'action et des règles pratiques qui conduisent à une plus grande efficacité en la matière. De plus, l'adéquation de nos résultats avec d'autres résultats de recherches empiriques, autorise à proposer notre modèle du transfert contextualisé des connaissances comme représentatif et transposable dans d'autres contextes où les situations de coordination sont complexes.

**Mots-clés:** Informatique ubiquitaire, cyberadministration, théorie de la coordination, transfert des connaissances tacites

# The Effects of Online Groups on e-Government

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**Abstract:** Online groups can take different forms and are the result of substantial developments in information technology (IT). Analyzing the cultural developments occurring in e-groups allows recognizing that several different group phenomena are happening. E-groups are presented as the influence that directs e-Government toward constructive and positive government. Influence is explained as the product of IT and increasingly articulate group reasoning. IT 's successes produce substantial activism in the interaction that occurs between e-groups and e-Government.

Three distinct types of e-groups are presented in this paper. Traditional interest groups that have gone online are a first type of group. The number of interest groups online is astounding. Organized groups in all areas of human activity have established a web presence. Organized interest groups have made a significant migration to the Internet, and organized groups in a diverse number of areas have established a web presence. Unorganized interest groups are explained as a second e-group phenomenon. IT produces changes in who opinion leaders are among amorphous groups. Each change in technology produces influence leaders who have followed recent developments. Whether IT multimedia content is inherently left-oriented is questionable when one analyzes how IT affects changes in opinion leadership. Unorthodox Internet communities are discussed as a third type e-group. Netlog is used as an example of a currently popular Internet community. Systems like Netlog reward members for increasing IT skills and dedication to IT issues. Because unorthodox Internet communities establish some organization and are IT issue oriented, their possible influence is questioned. Internet communities like Netlog may have influence in framing issues that pertain to e-Government.

e-Government is defined with an exchange model focusing on four types of connections: government-to-citizen, government-to-business, government-to-employee, and government-to-government. Since e-Government developed substantially from e-commerce, this analysis considers whether e-Government has propensities to be excessively impersonal in service delivery. e-Government is explained to accomplish successful delivery of outcomes because e-groups help resolve mechanistic problems. The dilemma between outputs and outcomes in service delivery is explained. All three of the types of e-groups analyzed in this paper--traditional organized interest, unorganized interests, and Internet communities--are seen as producing attentive publics capable of providing effective oversight for e-Government projects.

**Keywords:** online groups, e-Government, e-groups, interest groups, Internet communities, framing issues, outputs, outcomes

# **e-Government in Cyprus: The Reality and the Perspective**

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**Abstract:** e-Government initiatives are popular in most countries worldwide, including industrialised economies, emerging economies, and developing economies. An advanced e-Government system is important not only due to the low transactional costs of sharing information and interaction between organisations and individuals, but also due to the social and political changes that information era and digital economy bring. e-Government in Cyprus is a widespread and massive project, in which all (central) government departments are involved with the main actors being the Ministry of Finance, the Planning Bureau and the Department of Information Technology Services. This paper analyzes and evaluates 16 key issues, previously identified by the literature, in the light of the Cyprus e-Government environment. Various authors argued that these 16 key issues have been critical to the success of the e-Government initiative in USA. They are grouped into six interrelated areas, namely: worth, access, relationships, regulation, protection and societal. The results show that Cyprus is at an early evolutionary stage of e-Government development, even though an information technology (IT) strategy exists and legislation framework is already established, while public procurement transactions are expected to be achieved electronically by the end of 2008. Furthermore, protection is under development since the government of Cyprus plans to provide a gateway with authentication. Accessibility is high and comparable with other European Union (EU) countries. Unequal distribution of access to the Internet exists between citizens who live in cities and citizens who live in remote rural areas and urban communities. E-commerce and consumer confidence need to be enhanced in order to achieve e-tailing at its full potential. Moreover, the results show that the private sector and local authority involvements in e-Government transformation are rather poor and hence, there is a high need for leadership and an official national strategy, which will cover all aspects of the development of information society in Cyprus.

**Keywords:** Internet, Government, 16 key issues

# Analyzing and Comparing European e-Government Strategies

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**Abstract:** An increasing number of countries and international organizations are realizing the benefits of e-Government in the economic, social and administrative sector. The drive to implement e-Government has resulted in the formulation of many e-Government visions and strategies, driven by their own sets of political, economic and social factors and requirements. The aim of this paper is to gather and analyze e-Government strategies from the European Commission as well as from the Member States of the European Union, so as to identify their constituent elements, to explore the current European focus and to provide an overview of the issues addressed in the strategic documents concerning e-Government. The identification, content analysis and cross-comparison of e-Government strategies from across the EU enable us to identify some common elements, existing in the majority of the documents. First of all, a common structure has been identified within the documents, consisting of the following sections: an Introductory section which presents the current context and describes the vision of the document, the Objectives and Priorities section which describes what will be pursued under the umbrella of the strategy in order to implement e-Government, the Measurement and Evaluation section which develops evaluation frameworks and key indicators for e-Government and the Sustainability section which aims to ensure that the implementation of e-Government will continue to deliver benefits after the expiration date of the strategy. As regards to e-Government objectives, the analysis of the strategic documents identified 29 common priorities which are pursued, with the most common ones being the set-up of a single access point (portal) in order to deliver e-Government services, the enhancement of ICT skills both for the civil employees and the society. On the other hand, the less common objectives refer to the avoidance of external barriers, which could encumber further progress, the flexibility of achieving targets and so forth. The alignment with the European e-Government strategy has been a major objective for the EU Member States. However, the diversification of the objectives and priorities suggest influence of both the international context and the national setting. Finally, the main focus of most e-Government strategies has shifted from the online provision of services to the transformation of the government services into citizen-centric processes.

**Keywords:** e-Government strategies, analysis, comparison, national, European

# Can e-Government Improve Charities Effectiveness, Efficiency and Communication?

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**Abstract:** Recent history abounds with scandals caused by ill-used donations for charity organizations. In order to evaluate efficiency et effectiveness of management, both donators and government may only rely on a manual form and no on-line database. Examples of data processing by private organizations in the United States suggest that not only such processing is possible based on declaration form but also that those may be used by donators for decision-making. Can the introduction of a model of e-government have an impact on charity organizations management and satisfy the legitimate curiosity of donators on management quality of their donations? Following through an intensive review of the literature on the subject, we propose a project of reengineering for the process of business which may improve communication of information. This model is based on the creation of a gate putting together modern tools of interaction: on-line data acquisition with the help of a Web form with strong validation, tools of research, real time statistics. wikis, blogs, distribution lists, etc. The success of such a project implies on the other hand that a few adjustments should be brought out to the actual form. The main advantages of such modifications are presented: lower costs, precision, relevance, interactivity and liability.

**Keywords:** Improving service, efficiency, effectiveness, public record archive, private-public

**Sommaire :** L'histoire récente regorge de scandales impliquant une mauvaise utilisation des dons faits aux organismes de charité. Actuellement, pour juger de l'efficience et l'efficacité de leur gestion, les donateurs et le gouvernement disposent seulement d'un formulaire manuel et d'une base de données non en ligne. Des exemples de traitement des informations par des organismes privés américains suggèrent que non seulement des traitements basés sur la formule de déclaration sont possibles, mais que ceux-ci peuvent être utilisés par les donateurs dans leur prise de décision. L'introduction d'un modèle de e-gouvernement peut-il avoir un impact sur la gestion des organismes de charité et permettre de satisfaire la curiosité légitime des donateurs quant à la qualité de gestion des dons? À la suite d'un examen approfondi de la littérature sur ces questions, nous proposons un projet de réingénierie du processus d'affaire actuel susceptible d'améliorer la communication des informations. Le nouveau modèle repose sur la création d'un portail regroupant des outils modernes d'interaction : saisie en ligne par un formulaire web avec une forte validation, outils de recherche, statistiques en temps réel, wikis, blogues, palmarès, etc. Pour y parvenir, cela suppose cependant que des ajustements soient apportés à l'actuelle déclaration des organismes de charité. Les principaux avantages de ce changement sont présentés : économie, précision et pertinence, interactivité et responsabilisation.

**Mots-clés :** amélioration des services, efficacité, efficience, archives publiques, privé-public

# The Austrian e-card as a Citizen Card

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**Abstract:** Official regulations usually lay down certain security requirements that are fulfilled by “official identity documents”, such as passports, identity cards and driving licenses. As the Austrian Citizen Card is an “official identity document” in electronic administrative procedures, its two main functions are “electronic signature” and “identification”. The idea of an “Austrian Citizen Card” does not mean a specific card that is identical for each citizen, such as a passport. It is rather a concept that allows the design of secure electronic public administration services, and hence the performing of administrative procedures, electronically. Several Citizen Cards are now available, such as ATM bank cards, mobile phone signatures and the Austrian health insurance "e-card".

So-called “cryptographic methods” provide the means to create electronic signatures. According to the [Austrian Signature Law](#), electronic signatures fulfil the requirements for personal signatures if certain requirements are met. Assuming these requirements are satisfied, a security level is ensured which prevents the forgery of electronic signatures. These types of signatures are referred to as “secure electronic signatures” which, with a few exceptions (e.g. notary public procedures), are legally equivalent to personal signatures.

A Citizen Card meets the security requirements laid down for signatures and identification in the public administration sector. It can therefore be considered an “official identity document” in electronic administrative procedures and can be used for private or business purposes.

**Keywords:** Personal secure digital signature, electronic identification, digital government, e-commerce, citizen card

# **How Cyberterrorism Challenges e-Government and its Successful Implementation**

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**Abstract:** The role of the Internet in the ongoing 'war on terror' has come under growing scrutiny. Terrorists have been quick to utilise the potential cyberspace has to offer them. Terms first coined in the late eighties, such as 'Cyberterrorism', have become fashionable whilst governments have ensured that scaremongering tactics have helped to fill the media and scare the public. This paper will examine the threat of cyberterrorism and the dangers presented by the use of the Internet by terrorists. It will also analyse the trends in government measures to control hyperspace and question whether these challenge e-government mechanisms and how notions of e-identity and e-democracy may be posed very difficult questions.

**Keywords:** Terrorism, cyberterrorism, Internet, e-identity

# **Lessons Learned From Testing, Analyzing and Problem Solving an Online Military Watchboard Medical Decision Support System (MWMDSS) Application: Potential Implications for Civilian and e-Government Organizations**

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**Abstract:** The Military Watchboard Medical Decision Support System (MWMDSS) is a new and promising online decision making process, that involves medical informatics technology. Given the present military climate, automated medical surveillance capabilities are valuable tools for medical support of the armed forces. MWMDSS promises to enhance medical support for the military. The development of MWMDSS is consistent with the Department of Defense (DoD) directives, which identified medical surveillance as important for maintaining force readiness. This is one of many major differences between a regular DSS and the MWMDSS. This report documents the results of a Subject Matter Expert (SME) survey conducted to evaluate the MWMDSS software and accompanying dashboard. Thirty Nine SMEs agreed to undergo any necessary training to use the software and to provide feedback on its performance during the simulation. While some users did not require follow-up training, others required some refresher training to perform certain functions. SMEs for this exercise were able to quickly and successfully train to use MWMDSS and were satisfied that it performed most of its functions well. They also felt that it could be a useful tool in understanding the common operational picture and had features that would allow users to obtain and present information more efficiently than previous methods. Overall, participants indicated that MWMDSS had significant potential utility for mobile medical informatics. Some of the SME's reluctance to accept new mobile medical informatics may be viewed through a cognitive perspective. The research draws on Kelly's Personal Construct Theory (PCT) to argue that SME's reluctance to use new mobile medical informatics are influenced by their inability to change their established group personal constructs related to information systems development and delivery (ISDD) activities. This need for real-time information and decision support, has been translated into various new information delivery processes and mechanisms/tools for civilian managers and has e-Government applications. It is important to consider at the very outset that business dashboards hold a unique place in information delivery in e-Government and civilian environs. In addition, MWMDSS uses an e-Government application of new ideas for improving military health efficiency and effectiveness, by addressing the military goals of Information Superiority and Full Spectrum dominance. The recent and continuing emphasis on detection and prevention of chemical and biological attacks has made research and development of medical informatics technologies a pressing need for deployed forces. Such technologies offer medical command the ability to integrate and analyze patient data from widely dispersed forces, permitting early detection and rapid response to disease outbreaks. Previous demonstrations and discussions among product developers and medical users at sites have done much to advance the product. However, no independent test and analysis work has been conducted emphasizing military applications of MWMDSS during extended deployments. Based on the performance of the product during previous demonstrations, the military command believed that MWMDSS would benefit from systematic analysis by a Test and Analysis team independent of the product developer. Such an analysis would also allow the Military Command a base from which to make decisions on the suitability of the product for future deployment.

**Keywords:** e-Government, military watchboard medical decision support system

# The Development of e-Government Framework Based on Open Source in Indonesia

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**Abstract:** The Development of e-Government Framework Based on Open Source has been done by establishing e-Government Framework, and then based on the framework the e-government application of Researcher Step Assessment Information system (RSAIS) Indonesian Institute of Sciences is built. On the first year of research, a framework will be built. It consists of vision, mission, strategy, agenda, architecture, and infrastructure that refer to three dimensions: democratic, service, and administration. The three dimensions will be applied in four relationships: government to government, government to public, government to legislative, and government to business. Based on framework as the outcome from the first year, then on the second year of research, the e-government application of Researcher Step Assessment Information System (RSAIS) of Indonesian institute of Science is built. This application is chosen because it fits with competitive research program in which this application is the development priority either in Indonesian Institute of sciences (e-lipi) or other government institutions. The use of open source platform is to give contribution on government program, Indonesia Go Open Source (IGOS), in which the use and the development of many kinds of application based on open source are encouraged from time to time. This paper will explain the result of collecting data step and the portion of analysis step result because the first year of research has been done for 4 months, out of 10 month-research planning, from February until November 2007. The result of collecting data through interview, browsing, study literature, observation, and questionnaires are the data on the development of e-government framework in Indonesia, implementation of e-government in Indonesia, and the development of e-government based on open source in Indonesia. Meanwhile, the rest of analysis step result is some graphics about problem of e-government in Indonesia.

**Keywords:** e-Government, open source, IGOS, e-LIPI, framework, layers

# Leading Factors to Assess and Conduct Effective e-Government Deployment: Modelling, Analysis, and Practice

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**Abstract:** E-government refers to government's use of ICT to provide secured online services to citizens and business organizations. e-government is seen as having an active and effective role in the development of information society and the setup of a government responsive to citizens and business needs. However, innovative organizational and technological changes represent a prerequisite for the success of this role. In addition, a special focus must be placed on security issues in order to assess ICT risks and related costs in the setting of a strategic decision process and to prevent or respond to digital aggressions. The objective of this paper is to identify the key factors to a successful digital government specification, implementation, management and protection which is based on a generic model built on five main activities in order to guarantee reliable and secured e-government services. They are: a) the design of a multilevel trust model according to the features of administrative services provided and required; b) the creation of new certification and audit entities; c) the design of an integrative and distributed structure to respond and monitor security incidents; d) the launching and conducting of online government projects; and e) the training and development of new skills. The aforementioned activities require investments to update information and communication infrastructures for sustainable e-government services, and working procedures reengineering. Moreover, the efficiency of e-government implementation presumes a thorough analysis of the structure and dynamics of IT cost components. Public managers need a cost model to guide their decisions in IT cost-benefits analysis structure, particularly when the level of security required by citizens and business organizations is high. Thus, our contribution in this paper consists in the proposition of a model that allows the provision of a large set of services in an e-government in a way that allows: (a) addition and maintenance of services, (b) cooperative assessment, prevention, and response to digital risks; and (c) computation of several costs involved in the process of e-government management. A case study illustrating the Tunisian situation in the deployment of e-government is presented. In this study, we assess the existing e-government services according to our proposed model and introduce a set of organizational and technical countermeasures.

**Keywords:** Digital government deployment, success factors, cyber-security, multilevel trust model

# **Towards the e-Government Shop: Applying the e-Shop Paradigm to e-Government**

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**Abstract:** Obviously e-Commerce and e-Government are treated as two completely different disciplines by the scientific community and only little comparative research has been done so far. As a matter of fact however, especially governments at local level also provide services that are more likely to fall into the e-Commerce domain than into e-Government. Therefore this paper suggests an approach to integrate both worlds, e-Commerce and e-Government, into a single platform. In doing so, one aspect that needs careful investigation and consideration is the much higher heterogeneity in a public agency's product portfolio compared to the private sector. This diversity does not only cover the variety of different products but even more important the wide range of different product complexities. Based on an analysis of product complexity and its integration in the transaction process, this paper represents a way to introduce the e-Government Shop.

**Keywords:** e-Government, e-Shop, e-Commerce

# Quality-Aware Agents for e-Government Information Systems Architecture

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**Abstract:** The French "heat wave" of August 2003 has illustrated difficulties faced by governmental agencies to manage such emergencies. Many difficulties are related to the need of sharing information provided by huge sets of autonomous and distributed systems. We address impedance mismatch problems occurring when e-Government information systems are plugged together. We focus on the back-office aspects of Government-to-Government that precede decision making for environmental health. Volumes and heterogeneity of data sources are barriers for integration, which is an OCDE guiding principle for e-Government. We propose a quality-aware query tool addressing: (i) the existence of data sets corresponding to requirements, (ii) the quality of selected data and (iii) the capacity to query and merge them. This step-by-step approach uses metadata and complies with international standards, recommended by OGC and INSPIRE.

A suitable global architecture requires advanced multi-agent patterns. The coordination of usability agents must help to reduce the impedance mismatch between the input circuit - global access to resources and catalogs- and the output circuit -expression of user's needs and queries. This coordination must comply with early requirements of the mediation between global queries and local sources, along the main dimensions (space, theme and time). The architecture should also allow traceability, to keep track of bidirectional links between requirements and design, when a query must be reformulated due to a previous failure. It must be adapted to query reformulation retries, when previous answers are unsatisfactory: i.e. by memorizing previous failures, by anticipating possible answers to similar queries on relaxed constraints.

Such design is based on: - a Local As View integration approach, - languages for knowledge representation based on description logics and rules, - appropriate tools (like Protégé and Pellet), compliant with the standards. We illustrate this approach with an example, and we conclude about skills for an e-Government scalable architecture framework.

**Keywords:** e-Government systems architecture, early requirements for integration of information, application ontology, quality-awareness, cooperative multi-agent patterns, environmental health

# **eSV - A Forward-Looking Initiative of all Social Insurance Institutions for Customer-Friendly Service on the Internet**

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**Abstract:** The image of social insurance in Austria has always been characterised by its customer and service-oriented approach. Customer requirements are changing due to the possibilities opened up by new technologies. In response to these changes, the combined Austrian social insurance institutions have initiated the “electronic social insurance” project (eSV, in short) under the coordinating leadership of the Main Association of Austrian Social Security Institutions. eSV is using the possibilities afforded by the Internet to establish new and forward-looking ways of servicing its customers and communicating with them, to offer services from one provider, and to actively include the customer in the handling of his/her requests.

Apart from the mediation of content, eSV considers its main objectives to be interaction and dialogue with the insured, employers and partners.

As a part of public administration, eSV also sees it as one of its most important tasks to offer its customers secure communication and data transfer, and to provide its service with certified authentication and digital signature based on existing European standards and Austrian statutory requirements.

Customer-oriented administration through interactive communication between customer and advisor is the medium-term goal of the project. In the long run, this will lead to freeing up employees from routine procedures that can be very costly, and to cost-reductions in the administrative sector.

**Keywords:** Public administration, service communication, digital signature, interactive communication

# The Aging and Disability Resource Center in Global Perspective

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**Abstract:** This presentation discusses the United States' Aging and Disability Resource Center (ADRC) initiative, with focus on the state of Iowa and places that effort and related efforts in other countries in global perspective. The U.S. ADRC program now includes over 40 states and other units, which have adopted a mix of online, telephonic, and in-person modes of service delivery for disabled and elderly populations, with funding from the U.S. Department of Health and Human Services (Administration on Aging and the Centers for Medicare and Medicaid Services). We focus on ADRC implementation in Iowa administered by the Iowa Department of Elder Affairs, which as adopted an online approach to service delivery through the <http://www.lifelinglinks.org/> Website. Information is provided from: (1) a survey conducted with a sample of n=4,005 households in Iowa regarding service delivery for the elderly, (2) a Website testing survey, (3) telephone interviews with stakeholders and consumers of the Iowa ADRC, (4) ADRC participation in the Third International Conference on Healthy Aging and Longevity, held in Melbourne, Australia, in October 2006, and (5) preliminary efforts to scan U.S. states' ADRC Websites and equivalent Websites in selected other countries. These data are used to investigate (a) the e-readiness of Iowans and (b) the state of Iowa's e-Government approach to providing information and referral services on aging and disability to support community-based care options and long-term care planning.

Age differences were found in (a) the needs for general information about aging and disability resources and services and (b) access to the Internet. Gathering information was the most frequent activity among the survey participants, followed by email and shopping. Half of the elderly respondents indicated they use the Internet for email and/or gathering information. The e-Government efforts pursued by the State of Iowa's ADRC were focused on access, with criteria such as performance measures, ease of use, content and information, and responsiveness and trust. The participants in telephone interviews valued the e-Government efforts by the State agency, but cautioned about e-exclusion, such as limited access, or low e-literacy among those who are elderly, from low-income households, less well-educated, and who were in disability. The results from this study provide comprehensive information about e-Government services and good case study evidence to policymakers and administrators who are endeavoring to implement or initiate e-Government services.

**Keywords:** Aging and disability resource center; service delivery; information and referral; survey research; evaluation

# **e-Government Services to Support Vaccination Programmes: Libya, A Successful Implementation**

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**Abstract:** This paper presents a case study of a novel and successful implementation of an e-government project to support the vaccination of children under 16 years old in Libya. The case study highlights some of the problems technologically developing countries face, such as lack of wider infrastructure (e.g. postal network), access to technology (e.g. access to computers and the Internet) and computer literacy. The case study also identifies some of the benefits that appropriate e-government activity can bring.

The case study involves a novel approach where the Ministry of Healthcare (MH) in Libya uses SMS messaging to inform parents of a vaccination programme (including details of where and when vaccinations take place). It also makes use of 'social networks' by encouraging neighbours, relatives and friends to spread information about the vaccination programme. As such the case study is also an example of using e-government to support community interaction, social responsibility and strengthen community.

The research is based on interviews with key stakeholder groups including government officials, telecommunication personnel and parents using the vaccination information services. This is supported with a wider survey covering 6 cities in Libya and with literature review. A stakeholder analysis is applied to the case study, which indicates there is a win-win situation for each of the key stakeholder groups.

The paper hopes to make a contribution at a theoretical level by modelling social networks to support e-government activity in developing countries as well as on a practical level in providing implementation guidance.

**Keywords:** e-Government, Libya, SMS, vaccination programme, social networks, social responsibility

# **Multichannel e-Government. A Reality Check by way of In-Depth User and Usability Research in Flanders**

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**Abstract:** In the 1990s the Internet promised to be the new channel through which large parts of the population would communicate and interact with government. Many governments rushed to put all services online, and success was largely measured by the amount of services online. The take up of these services by citizens was however disappointing. The concept of multichannel e-government arose out of this experience. The core of the multichannel approach is that services are handled over different channels both electronic and non-electronic. The user and his preferences are to be central. This paper is based on an in-depth study of the user and usability aspects of four less known and used electronic channels i.e. interactive digital television (iDTV), kiosks, smart phones and PCs with an eID reader. The first two of them will be discussed in more depth in this study. Geographically the study focuses on Flanders. The research was dedicated to determining which channels are more accessible and more suitable for which user groups. The study comprises 1) a survey of users in Flanders, 2) desk research of multiple projects in a Flemish context, 3) desk research on the use of channels in a Flemish context, 4) usability research involving different user groups (e.g. users with visual, auditive, motor, or cognitive limitations).

**Keywords:** Multichannel e-Government, user research, usability, iDTV, digital television, kiosk

# Conditions for Creating e-Government

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**Abstract:** Establishing e-Government is still a difficult, complicated process. In these regard the mean question is: "How should the information services at large public organizations be organized". To answer this question a large study is done in the past years. As result of this study it appears to be necessary that the organization of information services is well built up and good care is taken of new demands and developments.

However this is not sufficient. On the one hand, this is because the environment in which the function is performed is very much in a state of flux, and on the other hand because the social and technological developments also influence the way in which the function has to be performed. It is not sufficient to merely improve the products and the operation of the information management function; the correct institutional conditions need to be created in order to make it possible to solve the current issues. This means that the characteristics and intrinsic features of IT in a network society should also be taken into account in the organization of information provision.

With respect to further knowledge development, three central questions must be posed:

How can form and content be given to computerization process architecture in a way that a better connection between ICT innovation and policy renewal can be achieved?

Can rules of conduct help to give direction to the organization of information provision so that the potential of ICT can be better utilized?

How should a competence center be organized within a public organization so that the potential of IT can be better utilized and so that a better connection can be achieved between IT innovation and policy renewal?

**Keywords:** Information management, e-Government, public organizations, information services, IT governance

# **MySpace: My Politics**

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**Abstract:** Numerous scholars have lamented the decline of social capital and civic engagement in the United States. Robert Putnam (1996) examined the possible causes of civic disengagement and brought policymakers and academics together to discuss the issue in what was to become known as the Saguaro Seminars. In their final report (2000), the authors called for social capital to be built from the ground up and highlighted the need for new forms of entertainment and technology that reinforce community engagement rather than forestalling it. Only three years later social networking sites like Friendster, MySpace, and Facebook were becoming a principle element in American homes. Previous theoretical research on computer-mediated communication (CMC) has painted a bleak portrait of online communities' ability to foster social capital given the anonymity of those who participate in listservs, message boards, and online gaming. Online social networking sites like MySpace, however, are not altogether virtual, but rather complement physical (real-life) networks. The issue of anonymity is made irrelevant given that most users create a custom profile complete with pictures, videos, an autobiography, blogs, bulletins, and publicly-viewable comments from the user's friends. This paper establishes a theoretical justification for examining whether or not online social networking communities like MySpace promote civic engagement and explains the difficulties in conducting such research.

**Keywords:** Social capital, online social networking, virtual communities

## **24-7 Government, the Permanent Campaign, and e-Democracy: An Analysis of Massachusetts Governor Deval Patrick's Interactive Website**

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**Abstract:** U.S. elected officials and political candidates lag behind their international counterparts in adopting and adapting to technology that has significant potential to expand and open up the democratic process. In 2006, a businessman, political newcomer, and long shot candidate for the governorship of Massachusetts, Deval Patrick ran a successful, innovative, technology savvy, grassroots campaign that secured his place in history as the second African American to be elected governor of an American state. A few months later, his political committee made his campaign website permanent, turning it into a vehicle for facilitating dialog with constituents through tools that help them identify and organize around issues to which he will respond.

This case study traces the evolution of the Governor's website (<http://www.devalpatrick.com>) through content analysis of its features and functionality, participation rates and website traffic data, community reactions and media coverage, and interviews with the site's designer and director of the Governor's political committee. It begins with a description of other uses of technology by elected public officials to engage and mobilize constituents, and then examines two research questions: (1) Is devalpatrick.com consistent with, or a departure from, the permanent campaign whose preoccupation with polling, fund-raising, and public posturing blur the line between campaigning and governing? (2) Does devalpatrick.com achieve the higher level e-participation goals of interactive democracy, which exploit website personalization, feedback and deliberation tools?

**Keywords:** e-democracy; grassroots political activism; online decision-making processes; social networks; the permanent campaign

# e-Participation in Comparison and Contrast: Online Debates at the EU's Platform *Your Voice in Europe*

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**Abstract:** In 2001, the European Commission (EC) set up the 'Interactive Policy Making' (IPM) unit aiming at the improvement of European governance. Since then, IPM has been operating via the online platform *Your Voice in Europe* offering online debates and online consultations and focusing on EU-related issues. The main goal of these e-participation options is to enhance the involvement of European citizens in the Union's policy-making processes in order to oppose the (widely) discussed democratic deficit in the European Union (EU). In fact, scholars from various disciplines hold that there is a lack of deliberative spaces for citizens enabling them to discuss on political issues. In order to counteract political alienation, the Commission increasingly applies information and communication technologies (ICTs) to involve Europeans in political decision-making. However, such 'novel' participation options are widely contested in terms of the actual quality of the contributions. Several studies dealing with online talk boards showed that most debates fall short of the high expectations linked to e-participation initiatives such as provided by *Your Voice in Europe*. Accordingly, most online debates are dominated by small discussion groups involving uncivil interactions and ill-balanced arguments. Regarding *Your Voice in Europe*, the major questions in this article ask about the extent to which Europeans have deliberated on European concerns and how far these debates have been linked back to the EU's policy-making. The basic assumption underlying this research interest is a lack of empirical analysis on e-participation at the European, supranational level. Indeed, there is still little comparative evidence concerning deliberative, political talk among citizens in online environments. To learn more about the extent of discussants' interactions and rationality at *Your Voice in Europe*, the results of a quantitative content analysis will be presented and contrasted with the findings of seven other studies on political online debates. Moreover, the empirical analysis of the EU's online debates will also consider the organisational and technical design of the discussion platform (e.g. moderation and talk policy) to provide a comprehensive picture of the EC's e-participation initiative.

**Keywords:** e-participation; online discussions; deliberative communication; rationality; interaction; European Union

# **Priorities for e-Government in European Transforming Countries. Example of Romania**

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**Abstract:** The EU promoted the socio-economic development based on building the Information Society. ICT industry, e-Government and ICT systems are main supports for the i2010 Program. Two recent events: the e-Government Forum in Bucharest and the East European e-Government Days in Prague provided fresh news.

The present differences between the EU's national economies are important. They suggests that, in order to achieve the cohesion implicit target in an admissible time interval, it is necessary to consider the problem of accelerating the development of still transforming countries. The representative case of Romania is considered. A brief system analysis suggests the importance of achieving performance of governance, as well as the need to concentrate attention on the main priorities of the societal management, instead of following a necessary slow traditional evolutionary approach. Recent results in the field of public financial information system are shortly presented and discussed. Invariant problems and existing priorities are identified and used in sketching a strategy for governance based on a system engineering approach, supporting both the society as a whole and also the micro-economy, in order to switch towards a new growth path. The need for the transforming economies to adopt the concept of e-Societal Management as an improvement of e-Government is the main message of this paper.

**Keywords:** e-Governance; transforming country: Romania; strategic options; Four key priorities

# **e-Government in South Africa: A Perspective on Issues and Challenges**

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**Abstract:** This paper focuses on e-government initiatives in South Africa. The challenges that the South African government is currently faced with are also discussed. In this respect, this paper provides an overview of where e-government currently stands, what direction e-government is taking in the near and distant future, and what are the implications for South Africa. Some recommendations follow to address challenges that impact on the South African government's ability to effectively implement e-government. One of the successful e-government projects, South Africa (Batho Pele) National Gateway Project, was launched in 2003. This is a single electronic Gateway that facilitates access to all information about, and services provided by the South African government. Another successful initiative is the South African Revenue Service's (SARS) e-filing of tax which is a co-ordinated effort between SARS and private business. A current analysis of e-government in South Africa reveals that despite these and other initiatives undertaken by the government, the challenges facing the South African government in transforming conventional government into electronic government are tremendous. This is more accurately reflected by the Department of Transport's eNatis initiative. Consequently, initiatives over a horizon of ten years will have to contend with the ensuing issues, namely; ICT infrastructure is weak in geographical areas in which the majority of citizens. Some recommendations are put forward to promote effective e-government in South Africa. Amongst others, the success of the electronic model initiatives requires strong and high-ranking political and bureaucratic leadership. In addition, the implementation of the government on-line strategy will require a sustained government wide effort in collaboration with all levels of government namely, provincial, municipal and third parties as well as collaboration with the business sector. There is a need to develop solutions and policies in collaboration among government, the public and industry. Without a cohesive outlook and attitude to these and other challenges, the anticipated benefits of e-government may not accrue in South Africa.

**Keywords:** e-Government, initiatives, successful e-Government, projects, single electronic gateway, challenges, recommendations

# Political Participation and the Internet: Evidence from the 2007 French Presidential Election

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**Abstract:** This paper is about how the internet might be used to foster political participation, based on the case of the 2007 French presidential election. Has the internet intensified the process of electoral competition? Has it helped to pull more citizens into the campaign process? The literature on the topic offers two conflicting views. Against the mobilization thesis which sees the internet as a tool for revitalizing politics and empowering citizens, the normalization thesis holds that the internet mostly reinforces established powers and existing levels of political engagement. In a first part focusing on the supply side of the campaign, we document how the internet has been used by candidates to the election through a content analysis of their web sites. In a second part, we study how different sorts of political web sites have been actually used by French internet users. This analysis is based on different surveys that our research center has conducted during the campaign among representative samples of the whole population of French voters and of the population of French internet users. Our findings both support and challenge the normalization theory. The content analysis demonstrates a gap in online performance between main and minor candidates, which reflects inequalities in resources. It also shows that candidates did not fully exploit the potential of the internet and mostly focused on good delivery of the content rather than on the content itself. In many ways the web campaign replicated offline forms of campaigning. Regarding web usage patterns, we found a strong association between visiting political web sites and interest in politics, which is consistent with the literature. However, the impact of other variables is less clear and, for some of them (especially age), our results contradict previous studies which have found that those using the internet for political purposes are generally young or middle aged, well educated and affluent people. Quite obviously, as the internet develops, the population of internet users is changing and becoming more heterogeneous. Because of the interlinked nature of the internet and of its modus operandi, people who have not necessarily the profile of political activists or who were not especially active in offline or conventional politics may engage in some kind of political activity.

**Keywords:** Election, campaigning, internet, political participation, France

# **New Market Economies: The e-Tax-Administering and the Tax Auditing protocol**

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**Abstract:** In the light of the growing importance of portfolio equity flows to the post-socialist countries and the challenges in the post Enron era, the e-tax-administration and e-tax-audits attract more and more attention. This paper considers the experience of Russia, which is among the leaders of the emerging market economies, and examines the correlation between the level of IT implementation into public sector and tax administration, and the improvement of tax-audit as a tool of tax collection increase, assesses the e-audit perspectives in the framework of the development of the conceptual model of tax audit. It is recognized that the tax audit has three main conceptual dimensions: a “fiscal contract”, a “social contract”, and a “rights and responsibilities contract”. The paper models these dimensions and argues that critical to developing effective and efficient e-tax administration is creation of a taxpayer-tax authority culture (the social contract), and applies the model to the Russian tax administration. The analysis indicates that, although fiscal/legal improvements have been attained, there has been little progress in developing a cultural relationship which allows favorable comparison to Western administrations. The paper also discusses developments with respect to attainment of a modern e-tax audit environment in Russia. Although internationally the role of IT in the progress of the tax auditing protocol appears obvious, the market advanced countries, as pioneers of e-filing and e-protection, are discovering problems in the sustainability of the protection of collected information. They may result in lack of the taxpayer’s confidence to the e-tax-reporting, negatively affect the taxpayer’s choice and behavior, which the author treats as possible “societal costs”. The tax audit is the cornerstone of the tax services and thus, is an immanent part of a fully developed and modern public sector. Presumably it has to be one of the fundamental components of democratic government. However, there is a growing concern that the IT wide implementation, which is usually perceived as a democratic element of E-government, may serve the opposite purposes. Generally saying, the e-tax administration may lead the government control increasing, undermining of individual privacy, misrepresentation, abusive supervision, and public manipulation. In this context the analysis of the mandate of e-tax administration and the perspectives of the IT as a prominent performance driver for tax-audit in new market economies, become critical. While examining the incentives to e-tax-auditing, the paper uses the cost-benefit approach to the e-tax-administering and e-tax-auditing in the large societal context, based on the IT contribution to the creation of a taxpayer-tax authority culture (the social contract), which, the author argues, is crucial for developing effective and efficient tax administration in Russia.

**Keywords:** e-tax-administering, new market economy, tax audit, social contract, effectiveness, efficiency