The Role of New Technologies in Reshaping Governance Platforms

Ari-Veikko Anttiroiko, University of Tampere, Finland

ABSTRACT

Models of public governance are changing profoundly due to global and digital transformations and various context-specific societal pressures. One direction of development is the increased utilisation of ICTs (Information and Communication Technologies) in facilitating governance practices. Such changes are intended to improve the performance of public organisations, the quality of democratic governance, and the cost-effectiveness of service delivery. This article outlines the potentials of technological trends in building governance platforms. The discussion is based on such influential trends as open source movement, Web 2.0, geoinformatics, and ubiquitous technologies. An approach that takes into account such e-enabled platform solutions is called platform orientation in public governance, which offers a framework for supporting policy and governance informatics. It's supposed to provide new tools to create structured environments for governance and the capacity to increase the flexibility and responsiveness of public organisations as governance actors. Such e-enabled governance platforms are an answer to the needs of a highly complex and technologically meditated society with a special view to providing easy access to governance processes, encouraging creativity, sharing information in a cost-effective way, and integrating services and governance processes so that the processes are comprehensible, easy, and value-adding for citizens and other stakeholders.

Keywords: Geoinformatics, Governance, Informatics, Open Source, Platform, Ubiquitous Technologies, Web 2.0

INTRODUCTION

Current developments in the public sector invite us to consider major government functions from a contextual point of view, which implies a shift from internal processes of public organisations to the interaction between public organisations and their external environment. Internal processes are of vital importance when considering the performance of any organisation, but just as most of the processes of strategic importance are rather about how organisations interact with their stakeholders and wider environment, external governance relations are also critical to the success of public sector organisations.

One expression of this shift is crystallised in the phrase "from government to governance", which reflects the change in the public sector that started to pervade the Western world in the early 1990s. In the 2000s the very question of governance seemed to become more complex and, as a consequence, perspectives to gover-

DOI: 10.4018/jicthd.2012070101

nance also started to diversify, as reflected in such concepts as open government, joined-up government, collaborative governance, holistic governance, network governance, connected governance, platform governance, and the like.

A fresh perspective on change in the recent discussion about governance emphasises steering and coordination functions on a nonhierarchical basis in a multi-sector stakeholder field for the purpose of promoting collective interest. One of the recent concepts reflecting this change is connected governance, which is built upon interoperability, i.e., the ability of public agencies to share and integrate information using common standards (Dais et al., 2008, p. 377). This change reflects an important shift, namely the increased role of systems and platforms that are used to facilitate collaboration and contribute to the increase in and utilisation of systemic intelligence. This has given rise to a new methodologically and technologically oriented idea of platform governance. It reflects the environment of power shared among interdependent actors faced with 'wicked' problems that cross organisational and institutional boundaries. A platform approach to governance offers a framework for supporting policy informatics, which is supposed to bring changes notably on two fronts: first, technology can replace structure as a means of control (i.e., employing technological rather than bureaucratic gatekeepers or facilitators), and second, the platform approach has the capacity to increase the flexibility and responsiveness of public organisations involved in governance processes (Wachhaus, 2011, p. 3, p. 7).

Governance issues are becoming increasingly connected with technology, not least because our societies and lives are increasingly technologically mediated. In general, there has been a continuous transition from the internally oriented view of the automation of government operations and computerisation of public agencies to e-enabled interactions and transactions between government and various stakeholders. Such changes in governance were associated with the paradigm shift in public administration, i.e., a transition from 'e-government' to 'e-governance' (On e-government and e-governance, see Fang, 2002; Brown, 2003; Grönlund, 2007; Anttiroiko, 2008). *E-governance* can be defined as the steering and coordination of multi-sectoral stakeholder relations on a non-hierarchical basis with the help of ICTs for the purpose of designing and implementing public policies and taking care of the basic governance functions of government (Anttiroiko, 2008; Fang, 2002; Kolsaker, 2006; Anttiroiko, 2004).

Throughout the 1990s the approach to egovernment was fairly supply or government oriented. In the academic world and in civic discourse some radical approaches were developed, though, such as transformational politics, teledemocracy, open source democracy and other ideas of citizen-centric governance, but in the hands of governments the utilisation of e-tools has not resulted in particularly radical change (Srivastava & Teo, 2007; Peristeras et al., 2002; Centeno et al., 2005; Hinnant & Sawer, 2007; Becker & Slaton, 2000). The approach to the utilisation of ICTs in government for long followed a kind of Web 1.0 paradigm, which was hierarhical, linear and one-dimensional, until new uses of the Internet started to change the views of the potential use of Web in the public sector. A new perspective opened in the mid-2000s with the so-called Web 2.0 trend. It was a big step towards a new approah to e-governance. For the first time the power of sharing, collaboration and co-production became an important part of the e-governance agenda. Later an important new aspect of this paradigm shift was the increased role given to systemic intelligence, which is associated with Web 3.0 and similar trends.

This article discusses the new visions for the facilitation of public governance opened up by recent technological trends, such as open source software, Web 2.0 and social media, geoinformatics and ubiquitous technologies. The fundamental question is: how can new technologies improve our ability to facilitate governance processes? Special attention is paid to platform design as a practical technologyrelated issue of such a facilitation.

Copyright © 2012, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <u>www.igi-</u> <u>global.com/article/role-new-technologies-reshaping-</u> <u>governance/69970</u>

Related Content

Recent Advances in Cyber Security Laws and Practices in India: Implementation and Awareness

Neyha Malik, Firoz Husain, Anis Aliand Yasir Arafat Elahi (2023). Advances in Cyberology and the Advent of the Next-Gen Information Revolution (pp. 220-241). www.irma-international.org/chapter/recent-advances-in-cyber-security-laws-and-practices-in-india/325554

Steps Toward Real-World Ethics for Self-Driving Cars: Beyond the Trolley Problem

Tobias Holstein, Gordana Dodig-Crnkovicand Patrizio Pelliccione (2021). *Machine Law, Ethics, and Morality in the Age of Artificial Intelligence (pp. 85-107).* www.irma-international.org/chapter/steps-toward-real-world-ethics-for-self-driving-cars/265715

A Proposal for UTAUT Model Extension in the Virtual Learning Environments use as Presential Learning Support Context

Ivo Pedro Gonzalez Juniorand Ernani Marques dos Santos (2017). *International Journal of Technology and Human Interaction (pp. 33-46).* www.irma-international.org/article/a-proposal-for-utaut-model-extension-in-the-virtual-learning-environments-use-as-presential-learning-support-context/181659

Contribution of Information and Communication Technologies to Malaria Control in Tanzania

Restituta T. Mushiand Wanyenda Chilimo (2011). *International Journal of Information Communication Technologies and Human Development (pp. 52-60).*

www.irma-international.org/article/contribution-information-communication-technologiesmalaria/54339

Gender Wage Differentials in Information Systems: 1991 – 2008 A Quantitative Analysis

George Nezlekand Gerald DeHondt (2011). *International Journal of Social and Organizational Dynamics in IT (pp. 13-29).*

www.irma-international.org/article/gender-wage-differentials-information-systems/50532