

# Public Sector Innovation Studies and eGovernment Research

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## Introduction

In times when budgetary and performance situations deteriorate and citizen expectations grow simultaneously public sector reforms head the political and administrative agenda. eGovernment managers – on an individual-organisational as well as, for instance, on a national level – have great interest in managerial and technical innovations that seek to improve the effectiveness or efficiency or public service delivery. Here, eGovernment research already provided fruitful and feasible solutions in terms of socio-technical innovations, but rather falls short when it comes to taking into account a meta-organisational perspective on the politico-administrative system. On the other hand, political science research takes such perspective and analyses various policy fields, including social or environment policies and information disclosure acts (Ito 2006). However, such research did not yet provide a comprehensive body of knowledge in innovation and diffusion processes of public sector Information Technology (IT). As information systems (IS) research has proven, analysing IT innovation and diffusion processes often necessitates a broad technological knowledge as well (Cooper and Zmud 1990). As a result, various academic disciplines productively contributed to analysing innovations and their diffusion processes in the public sector from specific perspectives (see Tab. 1).

Perspectives of Analysis	Single-organisational/ Managerial Perspective	Multi-organisational/ Public-Sectoral Perspective
Result-oriented Perspective (Innovation and Acceptance)	1) eGovernment and NPM innovations, such as managerial (Kaneko 2006) business process-oriented (Becker, Algermissen et al. 2006), hardware-oriented (Mentzel and Reichstaedter 2002) or information system innovations (Scherlis and Eisenberg 2003)	2) eGovernment and NPM adoption-studies addressing issues of, for instance, eReadiness (Lee-Kelley and Kolsaker 2004) or certain technology-specific usage/adoption (Henriksen and Andersen 2003)
Process-oriented Perspective (Innovation and Diffusion Processes)	3) Inner-organisational IT innovation and diffusion processes, mainly shaped by general Diffusion of Innovation Theory (Moore and Benbasat 1991)	4) General public sector studies of policy diffusion, for instance, social, environment, or information disclosure policies (Ito 2001; Ito 2006) →Shortcoming of eGovernment and NPM innovation processes studies

**Tab. 1. Analytical Perspectives on Public Sector Innovations**

An integrated and interdisciplinary analysis of (1) IT-related (2) innovation and diffusion processes (3) in the public sector politico-administrative system is not yet to be found to a necessary extend. Therefore, we sought to address the question of eGovernment and NPM innovation and diffusion processes in the public sector. At this juncture, we took a stance that draws from several relevant academic disciplines. First, our research question spans both technology- and management-oriented innovations in terms of eGovernment and NPM; innovation streams which habitually correlate in public sector practice. Second, we embedded our study in a broader investigation of the surrounding politico-administrative system. Here, we heavily draw from political science research in order to investigate into the policy field of public sector IT. In order to substantiate our analysis, the case of Japan was selected as first example and was approached by the means of an extensive literature review and a comprehensive series of qualitative-empirical expert interviews conducted in Japanese public organisations.

## Case Study Results

Regarding the Japanese case, our study revealed a diversification of innovation and diffusion processes. The Japanese politico-administrative system is characterised by recent and intensive reform efforts, especially central-local decentralisation approaches. Such decentralisation and localisation tendencies in the Japanese governance structure open up for a decentralisation of NPM and

eGovernment innovativeness. From the perspective of local government innovators, a multitude of information sources comes into play including, for instance, central government information material such as NPM and eGovernment best-practice reports, central government statutory requirements such as an obligatory "intensive reform plan", but also mass media and horizontal-local information sources.

### **Discussion Points for Innovation and eGovernment Research**

The political science-oriented study on NPM and eGovernment innovation processes revealed that the politico-administrative system entails greatest relevance for public sector innovations, let it be in the field of NPM and/or eGovernment. Studying such NPM and eGovernment innovation processes, the Japanese case exposed the significant effect of decentralisation efforts and changes of governance structures. Traditional top-down approaches are complemented by bottom-up innovations and imply a central government in the role of an innovation multiplier. This calls for further interdisciplinary research that appreciates the politico-administrative embeddedness of socio-technological innovations.

- A multi-organisational/sectoral perspective on innovation and diffusion processes provides a fruitful starting point as it addresses the question of innovation multiplication and economies of scale from a national perspective.
- Further research might aim at analysing how such multiplication can be improved or how particular eGovernment innovation practices might be designed in order to function as role model and best-practice for other settings.
- Here, governments might investigate into which measures stimulate a sustainable innovativeness among governmental entities: a) Large central government-funded pilot projects, b) original means of understanding genuine (local) innovation and its multiplication, or c) establishing innovation networks that combine bottom-up and top-down approaches ("3<sup>rd</sup> generation innovation policy", European Commission 2007).

Here, the following questions might act as starting points for the discussion:

- 1. Where is the borderline of eGovernment research and innovation management, public management, or IT research?**
- 2. What can eGovernment research contribute to public sectoral innovation studies?**
- 3. How to deal with the diversity of national setting and disciplinary perspectives in eGovernment research?**

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