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126. Public Sector Innovation and Diffusion Processes – Preliminary Results of a Qualitative Study in Japan

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Abstract

Electronic Government (eGovernment) and New Public Management (NPM) have been subject to numerous innovation studies. However, the question of how such single-organisational innovations diffuse throughout the public sector still remains unanswered. Here, we analyse public sector innovations and identify politico-administrative system dynamics shaping the processes of their emergence and diffusion. By means of expert interviews in Japan, we seek to elaborate our argument that system dynamics, such as recent efforts to decentralise and localise governance, have significant impact on how innovations and the diffusion of innovations take place. This research-in-progress paper contains preliminary results.

Keywords: Reform Policy Innovation, Electronic Government, New Public Management, Japan.

Introduction

Various studies productively contributed to analysing IT innovations as well as innovation and diffusion processes in the public sector from specific perspectives. Nonetheless, 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 extent. Hence, we seek to address the question of eGovernment and NPM innovation and diffusion processes in the public sector. At this point, 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. Moreover, we embed our study in a broader investigation of the surrounding politico-administrative system. The case of Japan is selected as example and will be approached by the means of a series of qualitative-empirical expert interviews conducted in Japanese public organisations. The Japanese politico-administrative system is characterised by recent intensive reform efforts, especially central-local decentralisation approaches. Such high-impact dynamics will potentially shed new light on eGovernment and NPM innovation and diffusion processes.

In the following, we will thus first briefly analyse related work and presents a framework for analysing the politico-administrative system. The following sections will then describe the Japanese case and present key findings from the qualitative-empirical interview series. The following discussion section seeks to reveal general and generalisable issues on the basis of the Japanese study. The final section summarises our findings and presents potentially fruitful avenues for future research.

Research Framework

Based on an extensive literature review, we sought to identify relevant circumstantial dimensions which acknowledge the embeddedness of eGovernment and NPM innovation and diffusion processes in the politico-administrative systems. Here, Pollitt and Bouckaert (Pollitt & Bouckaert 2004) provide a comprehensive and detailed framework for understanding public

sector reforms in their specific national context. Major dimensions of analysis comprise 1) external influences to the politico-administrative system, e.g. change events, 2) political system characteristics, e.g. party system, 3) administrative system characteristics, e.g. federal or unitary structure, and 4) system dynamics:

1. **External factors to the politico-administrative system.** External factors often influence politico-administrative systems in and initiate system internal dynamics and changes. Such external factors include change events, such as elections and scandals, but also broader socio-economical developments, such as aging populations or economic recessions. Moreover, general modernisation policies, such as NPM or eGovernment can be considered to have an external influence.
2. **Political system characteristics.** A political system may be shaped, for instance, by its party system, political actors, or lobbies.
3. **Administrative system characteristics.** An administrative system consists of, for instance, its inner structure (federal or unitary), administrative decision-making characteristics, or administrative culture.
4. **System dynamics.** (Politico-administrative) system dynamics often trigger changes in public sector innovation and diffusion processes. This might be the case, if decision-making competencies (with regard to eGovernment and NPM innovations) are shifted from one to another entity. At this point, public sector reform approaches, such as eGovernment and NPM, reveal a duality. On the one hand, they represent specific policies; on the other hand, they reshape the politico-administrative system itself. Consequently, public sector innovations influence the context for their own emergence and diffusion. Here, the analysis of system dynamics addresses those reform approaches which have impact on the politico-administrative system.

These dimensions will guide our further analysis in terms of the case study.

Public Sector Reform Dynamics in Japan

Japan is regarded as a late adopter of NPM-oriented approaches while, however, societal and economical challenges have triggered major reform efforts since the late 1990s (Muramatsu & Matsunami 2003). Furthermore, after nearly 50 years of LDP-prime ministers being in office, oppositional parties gained power from 1993 to 1996 and intensified the reform discussion, for instance, regarding decentralisation. While the Japanese politico-administrative system is a unitary system, strong emphasis of recent public sector reforms is put on decentralisation. These decentralisation efforts comprise agencification (here: "Incorporated Administrative Agencies (IAA)" (Ministry of Internal Affairs and Communication 2007)) as well as vertical decentralisation in terms of a central to local shift of authority. Niikawa (Niikawa 2006) identifies two major streams of action underlying to such governance structure reform: (1) The first stream of action aims at strengthening and enabling local governments for larger governance tasks. Such reform efforts include, for instance, building up an operable unit size, here in terms of municipal mergers (1999: 3.229 Japanese municipalities, 2007: about 1.800). Furthermore, a variety of NPM and eGovernment reforms is performed in order to increase Japanese local government managerial efficiency and effectiveness. Examples for such NPM-oriented approaches are project & policy evaluation systems and strategic management while major eGovernment projects address Business Process Management, Open Source Software, and data standardisation issues. (2) Alongside with strengthening local governance capabilities, the central-local relationship is changed in terms of vertical decentralisation. Such decentralisation comprises the transfer of tasks and functions from central to local entities, but more and more also the transfer of genuine authority accompanied with a significant change of the fiscal system ("Trinity Reform") (Doi 2004). Regarding the research framework (see Section 3), major circumstantial dimensions to public sector innovation and diffusion in Japan include:

1. **External factors to the politico-administrative system.**
 - a) Economical challenges, also as a consequence of the burst of the Japanese “Bubble Economy” in the early 1990s (Yamamura 1997).
 - b) “Aging Society” phenomenon hand in hand with a decline of the population (Oe 2006)
 - c) A series of corruption scandals among high officials lead to a decrease of trust in the Japanese government
 - d) Lack of (local government) accountability (as a result of high government-internal financial transfers, e.g. Local Allocation Tax)
2. **Political system characteristics.**
The Liberal Democratic Party (LDP) has strongly dominated the political landscape in Japan, having a LDP prime minister in office from 1955 to 1993 and from 1996 onwards. However, during Hosakawa (1993 to 1994) and the Murayama administration (1994 to 1996) several steps have been undertaken which shape today’s public sector reform in Japan, for instance, the decentralisation promotion program (Institute of Administrative Management 2006).
3. **Administrative system characteristics.**
The Japanese administrative system consists of the central government and local governments. The latter is organised as a two-tier system consisting of prefectures and municipalities (Institute of Administrative Management 2006). Japan can be considered as a unitary system where, in contrast to, for instance, German federal states, ‘local’ entities are not the state constituting elements. However, issues of local autonomy are covered by law.
4. **System dynamics.**
Japanese reforms heavily emphasise decentralisation. Such efforts comprise, for instance, the decentralisation of functions as well as authority and responsibility or the fiscal “Trinity Reform” which shifts tax income from central to local entities (Doi 2004).

The resulting decentralisation of decision-making and governance competencies changes the basic outline for the emergence and diffusion of eGovernment and NPM innovations themselves. First, a growing accountability in local entities increases the motivation for local governmental reforms. Second, a greater financial independence fuels such decentralised local reform initiatives. Here, the question arises of how central and local actors make use of such new opportunities in terms of pursuing eGovernment and NPM innovations.

Institutions in Japanese Public Sector Innovation and Diffusion

Against this background, a series of 10 expert interviews was conducted within a 3 months-timeframe. Local government (4) as well as central government/ministerial experts (6) were interviewed while 6 out of those 10 held positions of department heads or division deputy directors. It was specifically investigated into how decentralisation of governance opens up for a decentralisation of innovativeness. Here, several institutions have high impact on current streams of innovation and diffusion, including:

- *Statutory-based measures by the central government.* Central government requires local governments to develop a NPM-oriented “Intensive Reform Plan”. Here, certain categories of reform have to be covered, including, for instance, policy and administration evaluation or personnel management issues.
- *Personnel measures by the central government.* The Japan-specific “amakudari”-system allows for central government officials to temporarily work in local governments, habitually on the top management level.
- *Know-How-oriented measures by the central government.* A recently started central government measure is the distribution of comprehensive best-practice reports on innovative NPM as well as eGovernment projects. Both types of reports follow a similar

schema: Central government requests prefectures and municipalities to report about their ongoing reform efforts. The resulting project descriptions are collected and constitute the basis for best-practices selection, a process which is performed by the central government Ministry of Internal Affairs and Communication (MIC). Subsequently, a best-practices case book is compiled and distributed among local entities on a nation-wide basis. Both types of reports have been introduced recently, the first NPM-oriented report (about 100 case descriptions) was issued in 2006, the first eGovernment-oriented report (about 40 cases) in January 2007. Remarkably, the two types of reports are accounted by two different divisions in the central MIC (the former by the Local Administration Division on NPM, the latter by the Division of e-Local Government).

- *Financial measures by the central government.* Financial incentives for local eGovernment projects that comply with central government requirements in terms of, for instance, free of cost Open Source Software or funds for joint IT outsourcing projects
- *Educational measures.* Such measures include educational scholarships for (central and local) government officials, often Public Administration Studies in the US or at Japan-based graduate schools. Furthermore, education of local government officials is conducted in often central government-related educational institutions, for instance, Local Autonomy College (www.soumu.go.jp/jitidai), Japan Academy for Municipal Personnel (www.jamp.gr.jp), or Japan Intellectual Academy of Municipalities (www.jiam.jp)
- *Mass media.* Public administration-specific mass media, for instance “Government Technology”, regularly provide information about best-practices in public sector reform and undertakes various ranking efforts. But also the internet is an important institution in diffusion of innovations: most leading local government reform projects provide extensive information on their websites.
- *Local-horizontal relationships.* Local-horizontal relationships include, for instance, institutional relationships such as working group collaborations, and personal contacts.

Compared with the situation five years ago, the central ministry influence on local government innovation and diffusion processes diversified in its appearance. Here, traditional measures of taking influence, such as the personnel exchange system ‘amakudari’, are complemented by new measures, including, for instance, best-practice reports on NPM and eGovernment or financial support for local eGovernment projects that comply with central government requirements. Consequently, we could identify a multitude of factors that influence NPM and eGovernment innovation and diffusion in Japan. Such factors include traditional as well as new measures undertaken by the central government, but also a growing trend towards local-horizontal cooperation and diffusion processes.

Public Sector Innovation and Diffusion Processes in Japan

Public sector reform in Japan, especially decentralisation, has significant impact on the governance structure. There is a growing trend towards strengthening local governance capabilities and shifting tasks, functions, authority, financial revenues, and responsibility from the central to the local government level. Such changes in the governance structure have a strong effect on eGovernment and NPM innovation and diffusion processes. First, decentralisation creates a greater motivation for local governments to innovate and adapt innovations (accountability). Second, financial and managerial reforms support a decentralisation of innovativeness. Here, for instance, greater financial autonomy allows for a decentralised establishment of eGovernment and NPM knowledge in local entities, e. g. in terms of own research units. Furthermore, managerial and educational reforms build up a greater body of NPM and eGovernment knowledge among local government officials.

As a consequence, traditional top-down innovation and diffusion processes are increasingly complemented by bottom-up approaches:

- a. Innovation and diffusion processes in the Japanese government have a strong top-down tradition (Jain 2002; Westney 1982). Japan is often referred to as the “Catch-up state” (Jain 2002) that adapts other nation’s best-practices to Japanese requirements (e. g., Prussian governmental system). Hence, also eGovernment and NPM ideas have been taken from other national practices, for instance, the British government agency system (in Japan: Incorporated Administrative Agencies (IAA)). Such top-down approach was tied to a strong central government decision-making power and an accordingly strong central government influence on local government NPM and eGovernment innovation and diffusion.
- b. In the tide of decentralisation, an emergence of bottom-up innovation and diffusion processes can be observed. Here, the central government might play the role of a multiplier by collecting best-practice knowledge and distributing it among other governmental entities. In that regard, NPM (2007) and eGovernment (2006) best-practice case books play an important role. An example of such local innovation and central-local diffusion are performance measurement activities first carried out by Mie-Prefecture and today transformed into a national standard for all local governments.
- c. In addition, horizontal-local diffusion of NPM and eGovernment innovations is characterised by a quasi-absence of central government influence. One reason for this might be that the particular innovation is still in an early phase and that the central government does not yet intend to promote this or competing approaches as ‘best-practice’. Also, particular innovations might not lie in the focus of central government attention.

The diversification of innovation and diffusion processes can be explained by decentralisation and capacity building efforts among local governments. Here, innovative local governments might perceive central government influence as (too) strong as local innovativeness still depends on central financial support to a great extent. On the other hand, at the moment central government tries to sustain certain influence on local government decision-making arguing that local government capabilities might not yet comply with a fully decentralised governance system. For that reason, central government, until now, plays an active and important role in NPM and eGovernment innovation and diffusion in Japan.

Conclusions and Future Research

Regarding the preliminary results from Japan, the study revealed a diversification of innovation and diffusion processes. 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. Furthermore, decentralisation increases local accountability and consequently raises motivation for local governmental innovations. Further research might quantify the impact of particular factors.

Studying NPM and eGovernment innovation and diffusion 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. Such insights open up for further research which might aim at analysing how such multiplication can be improved or how particular innovation practices might be designed in order to function as role model and best-practice for other settings. Such question potentially bridges between a managerial-organisational and a multi-organisational/sectoral perspective on NPM and eGovernment innovations. Furthermore, the presented analysis framework and the Japanese case study

provide a starting point for further comparative studies on IT innovation and diffusion processes in the public sector. Here, especially a comparison with federal governmental systems, for instance, in Germany or Switzerland, might be of great interest.

Moreover, future research might differentiate between distinct types of innovations with regard to their organisational extent, single-organisational and cross-organisational innovations, e.g. cross-agency reengineering. Here, centralisation could be assumed a positive factor as it might be necessary to overcome single-organisational responsibilities.

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