Business process management capabilities in local governments: A multi-method study

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ABSTRACT

Business Process Management (BPM) is a topic of greatest relevance to government innovation. While the concept originally stems from the private sector, public sector organizations have established BPM capabilities and are in the move of developing these further. Despite the importance of the phenomenon, literature does however not yet provide a comprehensive picture of BPM capabilities in governments. In this paper, we thus examine BPM capabilities on the local government level by means of an intertwined quantitative survey and (representative) qualitative in-depth case study. We identify a set of BPM challenges and reflect on the power of prevalent BPM capability assessment and development models, mostly maturity models, to provide good guidance. We suggest taking into account organizational positions in order to overcome the significant shortcoming of the 'maturity' concept, especially the focus on convergence towards an "ideal" state. Thus, we argue for developmental models following divergence theories. Implications for practice and potentially fruitful avenues for future research are discussed in the light of our findings.

1. Introduction

Business Process Management (BPM) is an established approach to managing and improving organizational processes in both the private and public sectors. The improvement of business processes is currently the top priority for CIOs around the world (Gartner Inc., 2010). BPM is a means of improving business processes, thus improving efficiency and effectiveness, and ultimately gaining and sustaining competitive advantage (Broadbent, Weill, & St. Clair, 1999; McKinsey, 2008). The concept has its roots in Total Quality Management (TQM) and Business Process Reengineering (BPR). As such, it is a well established approach, combining both incremental and radical measures of process change. Notably, BPM is not only applied in the private sector: It is a key concept in e-government and public sector reform (Becker, Algermissen, & Niehaves, 2006; Kubicek, Millard, & Westholm, 2003; Niehaves, Plattfaut, & Becker, 2012; Scholl, 2004; Scholl, Fidel, Liua, Paulsmeyer, & Unsworth, 2007; Stemberger & Jaklic, 2007; Weerakkody, Janssen, & Dwivedi, 2011). It appears to have established as common sense that public sector organizations need to reevaluate their business processes: cost-cutting, especially in times of the financial crisis, citizen and service quality-orientation, electronic government (Becker et al., 2006), transformational government (Irani, Elliman, & Jackson, 2007), and other reform concepts

have called for a program of business process change in public organizations (Scholl, 2004). Most recently, for the case of European governments, the European Union (EU) Service Directive (the so-called Bolkestein Directive) requires the establishment of a single point of contact for all administrative services and provides yet another major impulse for BPM initiatives (Weber & Sure, 2009).

Developing BPM capabilities constitutes a key challenge for organizations. BPM being an established concept, contemporary research in the field revolves around the development of organizational BPM capabilities (Fisher, 2004; Rosemann & De Bruin, 2005; Rosemann, De Bruin, & Power, 2006; Zwicker, Fettke, & Loos, 2010). Several models exist for assessing and guiding the development of BPM capabilities, a comprehensive picture of BPM capabilities in the public sector is however still missing in the extant literature. We seek to address this research gap by means of a multi-method approach that involves an intertwined quantitative survey (n = 357) and an in-depth qualitative case study (12 interviews). Our research objectives are a) to provide a comprehensive picture of public sector BPM capabilities as well as related problems and b) to discuss normative models, especially maturity models that claim to be of help when it comes to further BPM capability development.

The remainder of the paper is structured as follows. In the next section, we discuss the concept of BPM capabilities and review prevalent BPM capability assessment and development models. We then set out the methodology and the results of a quantitative survey on BPM capabilities in local governments. Based on our survey data, we identify a representative case organization that bears the potential to reveal typical BPM capability issues in local governments. The methodology and the findings of the in-depth case analysis are

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Table 1
BPM capability assessment models.

References	Name (and type)	Concept	Sector	Theoretical foundation	Imperative for development
(De Bruin & Rosemann, 2007; Rosemann & De Bruin, 2005; Rosemann et al., 2006)	Business Process Management Maturity Model (BPMMM)	5 stages, referring to the CMM (Paulk et al., 1993); 6 capability areas	Private	Previous studies on BPM and/or maturity models	Develop until level 5 is achieved, following the prescribed path.
(Zwicker et al., 2010)	Public Administration BPM Maturity Model for the 48-h-service promise	Builds on Rosemann et al.'s BPMMM, 5 stages, 6 capability areas	Public	Previous studies, design science approach, but purely descriptive evaluation	Develop until level 5 is achieved, following the prescribed path.
(Fisher, 2004)	Business Process Maturity Model	5 stages; "5 levers of change"	Private	None	Develop until level 5 is achieved, following the prescribed path.
(Weber, Curtis, & Gardiner, 2008)	OMG Business Process Maturity Model	5 stages, referring to the CMM; a multitude of action fields	Private	None	Develop until level 5 is achieved, following the prescribed path.
(Hammer, 2007)	Process and Enterprise Maturity Model	4 stages; 4 capability areas	Private	None	Develop until level 4 is achieved, following the prescribed path.

presented in Section 4. The final sections are concerned with the theoretical and practical implications, limitations, and future research.

2. Business process management capabilities

BPM can be regarded as a management approach for achieving both revolutionary and evolutionary improvements in business processes. BPM has its seeds in TQM and BPR, and combines the merits of both traditions (Hung, 2006; Zairi & Sinclair, 1995). Hence, it is a holistic approach to managing organizations (Armistead & Machin, 1998). However, the term BPM is not used unambiguously. As the focus of BPM projects can range between purely organizational and purely technical (Rosemann et al., 2006), some authors understand BPM in a narrower sense as the tools needed to model and execute processes (Smart, Maddern, & Maull, 2009). In contrast, we understand BPM in a broader sense extending this narrow view: it covers other areas as culture, governance, or strategic alignment, too. From a theoretical perspective BPM can be understood as a collection of dynamic capabilities to adapt existing business processes and create new ones to achieve a fit with the organizational environment (Niehaves, Plattfaut, & Sarker, 2011; Niehaves & Plattfaut, 2010; Trkman, 2010; see also Klievink and Janssen (2009) for a discussion of dynamic capabilities in the public sector). Dynamic capabilities are the organization's ability to integrate, build, and reconfigure operational capabilities (here: processes) for the purpose achieving a fit with the market environment (Teece, Pisano, & Shuen, 1997).

The main focus of contemporary BPM research has shifted from BPM as a concept to that of developmental models for BPM in organizations. Today, BPM is no longer new, it rather builds upon more than 20 years of scientific research (e.g., Davenport & Short, 1990; Hammer, 1990). Thus, the academic community now has a fair understanding of the concept BPM. Hence, new streams of research have emerged. A major issue at present is how organizations can and should develop their BPM capabilities. Here, literature provides a prolific discussion of capability assessment and development models in the private (De Bruin & Rosemann, 2007; Rosemann et al., 2006) and in the public sector (Zwicker et al., 2010; see Table 1 for an overview).

As to our best knowledge, extant BPM capability models fall into the class of maturity models which represent a specific class of BPM development models and have been adopted widely. In BPM specifically, literature offers five distinct maturity models (see again able 1). The basic concepts underlying all models are very similar and originate from the Capability Maturity Model (CMM; see Paulk, Curtis, Chrissis, & Weber, 1993). The common elements of extant BPM capability (maturity) models include:

i. Building Blocks: All models have a number of stages (four or five), through which an organization proceeds to the most

beneficial BPM. These stages are intended to quantify and summarize the evaluation, so as to be consistent and comparable (Rosemann et al., 2006). In order to assess the status quo and give directions for future development, the models specify several capability areas, factors, action fields, or levers of change. These concepts represent "important components of BPM and allow a separate evaluation" (Rosemann et al., 2006, p. 5).

ii. Theory Background: The theoretical foundation of existing BPM maturity models is arguably rather weak (see Klievink & Janssen, 2009). Most models are very practitioner-oriented and seldom refer to any body of theoretical knowledge. The BPM Maturity Model of Rosemann et al. (2006) refers to previous studies on BPM and the Public Administration BPM Maturity Model by Zwicker et al. (2010) builds upon Rosemann et al.'s work. However, neither model uses specific theories in terms of causal explanations or testable propositions. This perception is in line with such previous studies as Becker, Niehaves, Pöppelbuß, and Simons (2010, p. 6), who argue that maturity models in general "seldom refer to theories or theoretical statements of relationships".

iii. Imperative for Development: All models propose developing BPM capabilities until the highest level is achieved, following a prescribed (sequential) developmental path. As such, maturity models are prescriptive in nature (Rosemann et al., 2006). This is a direct consequence of defining the last stage as the most beneficial one. Maturity models prescribe organizations to a) reach the highest level possible and b) achieve this by proceeding along a specific path. Any divergence from this prescribed path should be corrected first, before the journey to high maturity can be pursued further (Fisher, 2004). As a result, maturity models prescribe conceptual convergence towards an "ideal" state. This perception is closely related to convergence theory (Meyer, Boli-Bennett, & Chase-Dunn, 1975).

iv. Sector Focus: The original area of application and focus of the majority of capability assessment models is the private sector. For instance, Rosemann et al. (2006, p. 7) explicitly claim validity of their model for the private sector only. Subsequent work of Zwicker et al. (2010) has adapted Rosemann et al.'s BPMMM and created a model for public sector BPM. The authors applied it to assess BPM capabilities relating to the specific issues of the 48-h-service-promise (Zwicker et al., 2010). Overall, the original application area of the models is the private sector or a very limited area of public sector BPM.

Against this background, we can identify several shortcomings in prevalent public sector BPM capability research. First, no holistic BPM capability assessment research has been undertaken in the public sector yet. Zwicker et al. (2010) focus on the specific aspect of