Maria A. Wimmer
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Preface

The annual EGOV conference assesses the state of the art in e-government/ e-governance and provides guidance for research, development and application in this fast-moving field. EGOV 2005 in Copenhagen built on the achievements of the preceding conferences (EGOV 2004 in Zaragoza, EGOV 2003 in Prague, EGOV 2002 in Aix-en-Provence). The EGOV conferences have become a reunion for academics and professionals worldwide. In that way, EGOV conferences provide both an exchange on the state of affairs concerning e-government developments and a basis for networking and building the community.

EGOV 2005 brought some changes in the outline and structure of the conference. In line with the growing number of submissions the conference was more structured and the reviewing process was more formalized, adopting a double-blind peer-review procedure.

The new design of EGOV safeguards the scientific quality and guarantees up-to-date information together with a discussion of the state of the art and of emerging themes in the field. Hence EGOV 2005 had both research sections and a workshop part. It comprised completed research and research in progress, workshop and poster presentations, and a PhD student colloquium. The proceedings volume published by Springer, Heidelberg includes the papers presented in the conference part. The volume published by Trauner, Linz contains the EGOV workshop and poster contributions.

This year's conference bore the message: *E-government is Both a Vision and a Construction Site.* Consequently, a considerable set of themes was covered in several streams:

- Visions, challenges and frameworks
- Policies and strategies
- Methods and tools
- Technologies
- Design aspects
- Interoperability and standards
- Knowledge management and semantic modelling
- E-participation
- Electronic services
- GIS (geographical information systems)
- Monitoring and performance indicators

Many people worked to form the conference and to prepare the program and the proceedings. So the members of the Program Committee and Gabriela Wagner who headed the DEXA organization deserve acknowledgement. In particular, the editors express thanks to Gerti Orthofer and Michael Leitner;their

exceptionally engaged assistance in preparing both the program and the proceedings was decisive for success.

Vienna, Linz, Ørebrø, Copenhagen
August 2005

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Organizational Transformation Through E-Government: Myth or Reality?

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Abstract. The field of e-Government (e-Gov) is still in the phase of finding and defining its research agenda and its accepted research standards and methods. How does e-Gov research differ from traditional public management information systems (PMIS) research? Also, to what extent does e-Gov represent a new tradition of research in terms of the subject area and the research paradigm? To what extent does government change through e-Gov? While one group of e-Gov researchers emphasizes the transformational impact of e-Gov on the business of government, others have squarely questioned this assertion. This paper contributes to the debate and to the definition of the research agenda by discussing various dimensions of organizational transformation, and how they relate to the phenomenon of e-Gov. It suggest that e-Gov, at least in the short term, has the capacity to transform the business of government in mode rather than in nature.

1 Introduction

Traditional PMIS research has studied the use and impact of information technology (IT), now commonly referred to as information and communication technology (ICT), in government for decades (for example [4], [5], [7], [8], [43]). Accounts of fundamental transformation in government through the use of traditional PMIS are in short supply. By and large, PMIS it appears had just an incremental effect on the business of government through automating ("manumating", [31]) or computer-aiding existing processes and procedures, while processes and structures basically remained unchanged.

In a larger, sector-unspecific context, the capacity of ICT for bringing about organizational change, and in its wake also more fundamental organizational transformation, has been questioned altogether [48]. As the authors point out the magic trick assumption, according to which the introduction of new ICT systems deterministically induces organizational change lacks empirical support. Several recent empirical accounts seem to suggest similar low-impact outcomes for e-Gov projects [24], [27], [32], [33], while others observe and document change in government business processes [16], [45], [46], [47]. Hence, the extent of e-Gov induced transformation, if any, is unclear. However, should further empirical evidence confirm the non-transformational impact, then the fledgling academic field of electronic Government would lose its claim to originality and relevance

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as a discipline in its own right. At best, e-Gov would be considered a sub-department of existing PMIS research, amounting to little "more than good practice in ICT-enabled change" [27].

This paper discusses the elements, indicators, and dimensions of organizational transformation in general and develops a framework, which helps distinguish the transformational dimensions in government through e-Gov projects and practice. By so doing, it also paves the way for further debate on the foundations, methods, and the research agenda of e-Government as a discipline. The paper is organized as follows: First, the concepts of organizational transformation in the literature are discussed. Then, those concepts are related to ICT-enabled change as observed in e-Gov practice. Finally, propositions for empirical testing are proposed, and suggestions for an e-Gov-related research agenda on organizational transformation are made.

2 Organizational Transformation (OT)

While the traditional organizational literature influenced by the Weberian research stream sees the organization as a nexus of structure, standard routines, and procedures geared to greatly reduce internal and external uncertainty, provide stability, and organizational self-perpetuation independent from individual human agents [35], newer contributions portray the organization as a locus of and a means for orchestrated and controlled adaptation [44], [52]. In this latter tradition, change is interpreted as a continuous process over time ("becoming") based on an inherent property of human organization to facilitate and breed change, whereas the former research tradition views the phenomenon of change as either a planned and carefully executed sequence of steps from a former state to a more desired state, or as a series of discrete, cataclysmic, and mostly external perturbations, which, at the risk of total disintegration, drive an organizations away from a state of equilibrium, while it undergoes a transitional process from a former to a later homeostatic state.

Most literature on organizational transformation implicitly follows the traditional assumption, although the notion of "loosely coupled elements" ready for re-alignment and re-grouping [54] might be viewed as bridge between the two interpretations of the nature of organization. In this vein, the individual gestalt of organizations has been recognized as influential in organizational transformation, since it consists not only of structural properties but also of overarching patterns rooted in human agents' values, beliefs, and assumptions, which become engrained in structures and systems as an interpretive scheme [20].

Smith distinguishes the dimensions of *morphostasis* and *morphogenesis* in organizational transformation [49]. According to the author, morphostatic changes can either be of only superficial character, that is, no essential change occurs; or, they take on the form of "a natural expression of the developmental sequence" [49], as found, for example, in maturation or saturation processes. In other words, no fundamental change in essence takes place. In sharp contrast, morphogenetic changes are deep, permanent, and irreversible altering the "very

essence" [49] of the organization. Those two dimensions of organizational transformation have also been referred to as "first-" and "second-order" changes [53], the former of which are incremental and planned reaching for "minor improvements and adjustments," while the latter extend to a "multi-dimensional, multi-level, qualitative, discontinuous, radical organizational change involving a paradigmatic shift" [28]. Planned change initiatives as proposed and studied in the Organizational Development (OD) literature [1], [3], [12], [17], [29], hence, mostly fall in the category of first-order change, whereas business reengineering efforts [9], [13], [14], [21], [22] would be geared for second-order change.

The aforementioned newer school in organization theory advocates lending "theoretical priority to *microscopic* change" brought about "by adaptation, variations, rest-less expansion, and opportunistic conquests" [52]. Unlike the traditional structure- and routine-focused view, the process view of the organization as a journey of "becoming" appears to have much in common with first-order, morphostatic change as a maturation and aging process as developed in the earlier organizational transformation literature.

Empirical research on organizational transformation in government has found evidence for successful and effective first-order change [18], [40], [41]. Practical attempts of applying rapid second-order change in the private sector via Hammer-style reengineering have proven mostly unsuccessful [21]. For the public sector such accounts are missing or inconclusive (for example [15]). Systemically, radical and disruptive change in context of the intentional and effective division and distribution of powers as it is characteristic for the public sector seems to be highly unlikely, in other words, the missing of true-to-label reengineering accounts from the public sector is unsurprising.

Second-order change in the public sector, hence, may come about only over long periods of time along with a gradually changing interpretive scheme [20] as for example indicated through the growing influence of principles lent from *New Public Management* (NPM) [25], [38], [39] and according legislation (for example, the Government Performance and Reform Act of 1993 in the US) over those from traditional public ad-ministration (PA) (cf., also [19]). In summary, organizational transformation in the public sector is of comparatively slow pace and is mostly first-order change oriented. Organizational "drift", "spread", "slippage," and "creep" [52], that is, evolutionary transformation, are the much more likely drivers and embodiments of change in the public sector than second-order or revolutionary transformations.

3 Information Technology and Organizational Transformation

MIS scholars have long attempted to demonstrate that ICT is a guarantor of performance improvements as well as other desirable outcomes in OT to the effect that

$$o = f(i) \tag{1}$$

with o as organizational outcome and i as the ICT input.