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Investigating organizational learning in eGovernment projects: A multi-theoretic approach

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Abstract

Organizational learning is essential during eGovernment implementation to leverage the benefits of such efforts. However, there is a lack of holistic understanding of organizational learning in IT-related change in public organizations. Motivated by such concerns, we construct a structurational framework that inter-relates elements pertinent to IT-related change from four theoretical perspectives: organizational politics, organizational culture, institutional theory, and organizational learning itself. Inter-relationships between elements of these perspectives are explicated through the notions of structures, modalities, and actions from structuration theory. Guided by the framework, we conducted a case study to examine the organizational learning occurring during a successful eGovernment project. The analysis indicates the inextricable interactions between elements from the different perspectives during the project implementation. The proposed framework offers both theoretical and practical benefits for understanding and facilitating organizational learning in eGovernment projects.
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1. Introduction

The implementation of a new information technology (IT) has been recognized as an intervention that can induce organizational change (Orlikowski and Robey, 1991). As change occurs, organizations need to learn to adapt to new uncertainties in order to achieve anticipated change benefits (Argyris, 1977; Gregor et al., 2006; Robey and Sahay, 1996). For instance, the implementation of computer-aided design and manufacturing (CAD/CAM) systems requires engineers to collectively learn new modes of communication, so as to reap the systems' benefits of shortening product development cycle time (Black et al., 2004). Public organizations have recognized the importance of organizational learning necessitated by changes (Mahler, 1997) such as the introduction of new technologies through eGovernment efforts.

eGovernment broadly refers to the strategic application of IT to transform the public sector. This involves the use of IT to provide citizens and organizations with better information and services, and for governments

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to interact with business partners and transact internally (Gronlund, 2002; Tung and Rieck, 2005). Implementation of eGovernment initiatives requires substantial learning for public organizations, which have typically been considered as bureaucratic entities with conservative cultures that are resistant to change (Robertson and Seneviratne, 1995). Moreover, public organizations are confronted with multiple and often conflicting interests of different constituents and an institutional context with complicated regulations (Thong et al., 2000; Tung and Rieck, 2005), all of which contribute to the complexity of change and required learning associated with eGovernment efforts. These challenges motivate us to investigate organizational learning in the context of eGovernment implementation.

While organizations recognize the importance of learning, there is a lack of holistic approaches towards understanding organizational learning in IT-related change management. Robey and Boudreau (1999) consider four theoretical perspectives relevant to investigating IT-related organizational change: organizational politics, organizational culture, institutional theory, and organizational learning. The authors show that the four perspectives focus on different, complementary elements of organizations and can better account for complex IT-related change phenomena. However, their study deals with the four perspectives separately and does not explore the possible interplay between them. Yet, inter-relationships among the different theoretical perspectives are evident. For instance, previous studies have emphasized the need to consider the influence of organizational politics (Robey et al., 2002), organizational culture (Mahler, 1997), and institutional conditions (Newman, 2000) on organizational learning in the event of change. This calls for a holistic approach that incorporates the different theoretical perspectives and their inter-relationships. Thus, our research question is: How do relevant elements from organizational politics, culture, and institutional perspectives inter-relate to influence successful organizational learning in response to IT implementation related change?

A problem facing studies aiming to develop a holistic view of complex phenomena is the difficulty to manage the multitude of elements involved. To overcome this problem, we propose a framework that employs structuration theory as a lens to organize and understand the logics of inter-relationships among the elements of organizational politics, culture, institutions, and learning. The structurational framework centers on the structures related to the different organizational elements and the agencies involved in the enactment of such structures favorable to organizational learning. Guided by the framework, we conducted an in-depth case study of a successful eGovernment effort that aimed at improving the internal efficiency of a public organization in Singapore with the ultimate goal to provide better services to its customers (i.e., citizens and businesses). Of particular interest is the observation that the organization started off with low IT proficiency of employees but went on to exploit IT so successfully that it became a leading organization in IT deployment in its sector. We examine the learning that the public organization went through during the implementation of such a strategic information system to fulfill its eGovernment goals. Our analysis informed by the framework reveals that elements of politics, culture, institutions, and learning inextricably interacted during different phases of the eGovernment project implementation that eventually led to its success. The case intends to unveil insights about how successful organizational learning during eGovernment initiatives can be facilitated, particularly amidst the high failure rates of eGovernment projects globally[1].

2. Theoretical background

In this section we will first describe structuration theory and the reasons for using it as a lens to organize elements from the four perspectives of organizational learning, culture, politics, and institutional theory. Subsequently we discuss each of the perspectives individually and then describe the structurational framework that inter-relates these perspectives.

2.1. Structuration theory

Structuration theory was proposed by Giddens (1979) to reconcile the division between structure and agency in social science (Jones, 1999), by re-conceptualizing the two as mutually interacting duality. Structure refers to rules and resources that human agents draw on in their interactions, which both enable and constrain

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[1] An UNPAN (2003) report states that the failure rate for eGovernment projects varies between 60% and 80%.