

Research In Progress: A Preliminary Theoretical Framework For Understanding E-governance Initiatives

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ABSTRACT

A critical component that has been missing from the e-governance literature in general is theorising about the design of the information system itself. Since information systems used by governments “encapsulate the structures, routines, norms, and values implicit in the rich contexts within which they are embedded,” [1] they must be seen as a development project shaped by social (key stakeholders, conflicts, power moves, symbolic acts, etc.) and technological factors (existing technology infrastructures, technical know-how, skills). The development trajectory of such a project is not pre-determined but contingent upon broad social contexts.

To highlight the dynamic relationship between the way in which information systems used by governments are designed, the manner in which they are institutionalised and the impact of these two processes on governance practices and structures, I present a theoretical framework that combines social shaping of technology theories (from science and technology studies) and institutional theory (from sociology) and social movement theory.

Categories and Subject Descriptors

H.4 Information Systems— *types of systems, decision support*
J.1 Administrative data processing – *government*

General Terms

Design, Theory

Keywords

E-governance

1. INTRODUCTION

Most e-governance studies have focused on events occurring *after* the introduction of the information system. There has been much less systematic study of how the information systems that are used by governments are designed. Fountain (2001) points out

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that “the ways in which information technologies interact with ongoing social relations, organizational structures and processes have yet to be adequately conceptualized,” [2]. She goes on to say that research on e-governance has thus far been largely concerned with traditional information resource management issues, emphasizing that information technologies procured by the government are “subject to extensive design of their use within an organization,” (ibid). Her Technology Enactment Model (TEM) is an attempt to address this gap in the literature. Using institutional theory from sociology as her theoretical framework she attempts to show that government actors, embedded in cognitive, cultural, social and institutional structures, influence the design, perception and use of the Internet and related information technology in government.

While Fountain’s work is one of the early attempts to deliberately theorize the use and impacts of information systems within governments, McLoughlin (2004) points out that since the focus is on implementation and effects, the concept fails to show in detail how technology (rather than its implementation and use) can be enacted in different ways. In addition, Norris (2003) argues that the focus on ‘project failures’ does more to highlight the nature of organizational politics in such projects rather than show how institutional structures, influence the design, the adoption and the use of IT by governments [3] [4].

2. RESEARCH QUESTIONS

My study attempts to understand how information systems used by governments are designed and institutionalized. Since I am interested in the information system itself I need to know which social groups were involved in the design of the system. Thus, my first set of questions include: (a) who proposed the system and why, and (b) what initial institutional logics framed the system.

Second, in trying to understand how the system was institutionalized, my questions focus on the stabilization of the information system both intra-organizationally and inter-organizationally. Hence, I ask (a) what staff roles, interaction rules, norms, and control systems were introduced/modified by the information system; (b) what provisions and procedures were instituted in participating organizations to ensure their reproducibility. Finally, my focus is on understanding the broader social consequences of the information system’s (the technology and its social organization) implementation. Thus I ask has information system changed work processes, work relations and

division of labor (a) within organizations (b) between organizations? If so, how? Who stands to benefit from these changes and why?

3. THEORETICAL FRAMEWORK

In order to answer my research questions I draw on social construction of technology theory, institutional theory and the notion of framing from social movement theory. I suggest that e-governance systems are designed and implemented with the context of existing institutionalized social structures, which constrain the actions of relevant social groups that come together to build and implement the new system. These constraints can be coercive, mimetic or normative (*new institutionalism*) in nature. However, this does not mean that these relevant social groups are mere puppets. They are capable of strategic action and can choose whether to reinforce the existing institutionalized set up or to change it (*old institutionalism*). In either case (reinforcement or change), these constrained entrepreneurs build coalitions by using strategic and assumptive frames (*social movement theory*) in their attempt to move from interpretive flexibility towards closure and stabilizations (*social construction*). This process may be visualized as follows.

4. REFERENCES

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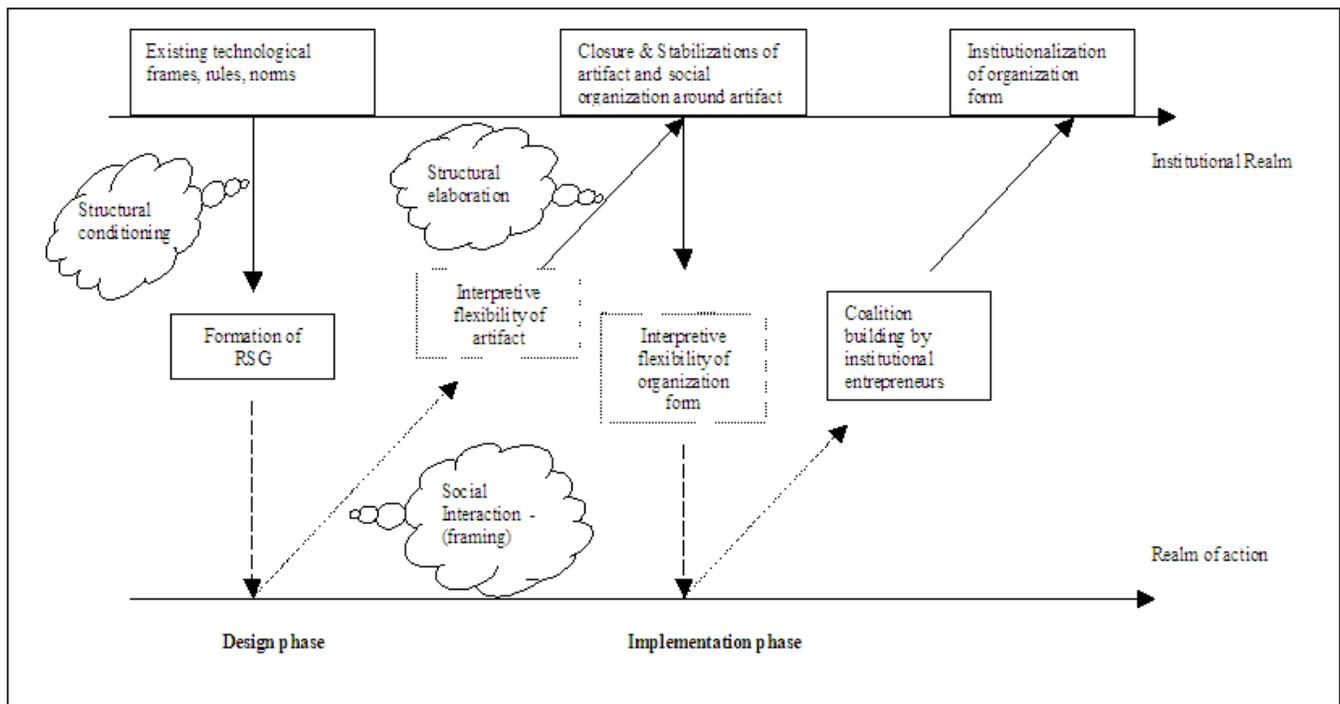


Figure 1: Proposed framework of the study