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Neoinstitutionalism and E-Government

Beyond Jane Fountain

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This article addresses the evolution and implementation of e-government with a neoinstitutional perspective. It starts with a critique on Jane Fountain’s technology enactment framework in that the framework fails to show how elected officials, public administrators, and citizens can facilitate e-government toward better democratic governance. This problem reflects the immaturity and ambiguity of neo-institutionalism in accounting for institutional change. The author argues that a balance between agent and institution, between strategic choice and institutional constraint should be maintained in analyzing the evolution of e-government as a long-term institutional change. This balanced approach would give public administration a more optimistic future of e-government.

Keywords: e-government; neoinstitutionalism; information technology; change

INTRODUCTION

Jane Fountain’s (2001) Building the Virtual State: Information Technology and Institutional Change is widely acclaimed for its neo-institutional analysis of the use of information technology in government agencies. Emphasizing institutional constraints, Fountain’s technology enactment framework shows that “the embeddedness of government actors in cognitive, cultural, social, and institutional structures influences the design, perceptions, and uses of the Internet and related [information technology]” (p. 88). By introducing three well-chosen and carefully honed case studies, she proved that e-government efforts will not live up to their expectations if organizational and social institutions remain the same.

In an era excited by the dotcom bubble, Fountain (2001) sent an important and in-time message to those e-zealots: “The Internet does not, however, substitute for the development of social relations” (p. 80). The challenge to build a virtual state or a fully developed e-government is not about technological capability but about overcoming entrenched organizational, social, and political institutions. The implication to public administration is clear: Technology, institution, and organization must coevolve; as a result, e-government is not simply introducing web-based technologies.

In the meantime, Fountain’s (2001) work is better considered as a start rather than a destination. Along with other problems, one limitation of—or an issue that is not discussed by Building the Virtual State—is its failure to show how elected officials, public managers, technology providers, and citizens can work together to overcome institutional obstacles (Hoetker, 2002). Scholars and practitioners have made sense of the trials and errors of e-government and recognized the technical, structural, and cultural difficulties in this great transformation. Therefore, the most important and urgent question that public administration is facing now is how to make web-based technology work for democratic governance.
Fountain’s book contributes to the sense-making process, but we need more practical strategies to move forward.

Fountain (2001) concluded at the end of the book that “building a virtual state is about the process and politics of institutional change rather than a set of predictions about the end result” (pp. 203-204). Clearly, we should view this conclusion as a starting point for our analysis: What processes and institutions should be changed? And how can we achieve that? This article does not aim to answer all these questions; rather, it intends to outline several directions in which we might go. In particular, the author attempts to demonstrate how e-government could be better approached with an institutional perspective.

This article has five sections. The first section provides a general assessment of Fountain’s (2001) use of neoinstitutionalism and common critiques on neoinstitutionalism. The second section focuses on the relationship between institutions and technology, an area in which Fountain overlooked some literature. The third section relates some new developments in institutional change research to our understanding of e-government. Subsequently, a research agenda is outlined for future studies, followed by a short conclusion.

WHICH NEOINSTITUTIONALISM?

Fountain (2001) primarily relied on neoinstitutionalism in organizational theory and sociology (e.g., March & Olsen, 1989; Powell & DiMaggio, 1991), although she also cited “path dependency” and “sensitive reliance on initial choice” from North (1990), who is often viewed as in the camp of neoinstitutional economics. Her use of neoinstitutionalism causes several concerns.

One concern is considering the fact that neoinstitutionalism has many variations such as historical/rational-choice/sociological (Hall & Taylor, 1996), rational-action/social-constructionist/mediated-conflict (DiMaggio, 1998), and other more sophisticated typologies (Nielsen, 2001). Although some scholars are optimistic about potential collaboration among different approaches (DiMaggio, 1998), others are more pessimistic considering different theoretical assumptions and preferences (Nielsen, 2001). Reich (2000) concluded that specific forms of institutionalism are best suited to addressing particular types of questions. For example, historical institutionalism is most appropriate to redistributive polices, whereas new institutional economics is most appropriate to regulatory polices.

Neoinstitutionalism in organizational theory and sociology has its limitation compared to other approaches. Emphasizing the homogeneity of organizations and the stability of institutional components, DiMaggio and Powell (1991) claimed that the new institutionalism is concerned with “persistence” rather than “change” and that “the legitimacy imperative” acts as a source of “inertia.” In their view, changing technical environmental factors are relatively unimportant sources of organizational change in a mature organizational field (Kraatz & Zajac, 1996). Thus seen, it is no wonder that Fountain (2001) drew a picture of weak agency, endogenous interests, constructionist schemata, and diffusing changes.

Another concern is about neoinstitutionalism’s immaturity and ambiguity in accounting for institutional change. Neoinstitutionalism has a relative inattention to institutional change and its process, which remains a “black box” (Zucker, 1991). As Abbott (1992) said, “the problem of how to theorize stability without untheorizing change remains a central difficulty for new institutionalism” (p. 755), and “if one takes institutional theory seriously, one has to make it a process theory” (p. 756). The theoretical formulations of neoinstitutionalism are often too idealistic and broad to direct empirical research (Hasselbladh & Kallinikos, 2000).

Admittedly, it would be unfair to claim that neoinstitutionalism pays no attention to institutional change at all. In their theories, they attribute institutional change either to rational
strategy, diffusion, or political conflict, but these notions of change are ambiguous and contradictory. In particular, as to DiMaggio and Powell’s (1991) theory, empirical analyses reveal mixed results. For some scholars, they find little support for DiMaggio and Powell’s propositions, including organizational inertia, institutional isomorphism, and the legitimacy imperative (Kraatz & Zajac, 1996). Although La Porte, Demchak, and De Jong (2002) argued that bureaucracies adopt web technologies as a function of emergent institutional isomorphism, the argument is centered on an “iron cage” of efficiency. It is not really different from a rational choice framework addressing efficiency concerns. Similar to other sociological neo institutionalists, Fountain (2001) theorized institutional change mechanism as diffusion or contagion out of legitimacy concern, but such a treatment is insufficient for practice because it neglects the role of strategic choice.

North (1990) provided many insights into institutional change, but he did not establish a theory convincing to all. As Hira and Hira (2000) contended:

By setting up a model that explains institutional constraints on decision makers, the new institutionalism correctly points out the limits of a rational choice framework of economic decision making. However, by failing to explain the sources and avenues of modifications of those constraints, the new institutionalism is unable to provide a satisfactory explanation of change. Instead, we find a patchwork of exogenous factors, such as technology, culture, and ideology, which feed into institutional change in unclear ways. (p. 267)

As a result, it is not surprising that Fountain (2001) attended only to the “stability” and “resistance” of institutions and did not tell us how to overcome the problem and facilitate the e-governing process. Fountain seemed pessimistic about the possibility of institutional change related to e-government. The case studies in her book indicate that public organizations successfully resisted fundamental institutional changes. Fountain sent an unbalanced message to us: She overemphasized the persistence of institutions while overlooking the potential of human agents’ strategic choice. Lawson’s (2003) critique on most institutionalist frameworks applies to Fountain:

If the introduction of culture in the institutional framework has caused the individual and specifically the idea of individual behavior in effect to disappear, with both the individual and his or her behavior effectively culturally determined, how do the cultural features themselves experience change? (p. 191)

Two lessons could be drawn. First, in accounting for a fundamental transformation such as e-government, other neo-institutional approaches may also contribute. As Hall and Taylor (1996) concluded, each approach “seems to be providing a partial account of the forces at work in a given situation or capturing different dimensions of the human action and institutional impact present there” (p. 955). For example, the role of interest groups and intergovernmental relations as documented in the International Trade Data System (ITDS) case could be more clearly explained via the mediated-conflict institutionalism in political science. Second, new theoretical developments about institutional analysis and institutional change should not be ignored.

**INSTITUTIONS AND TECHNOLOGY: UNDEVELOPED?**

Fountain (2001) asserted that “institutional theory has not accounted for information technology (IT) and its multifaceted role in changing the contours of the landscape within
which rules and structure influence perception and action” (p. 193). This judgment ignores a huge literature on social analysis of technology that may contribute to our understanding of e-government.

Antitechnological determinism is not new. For example, one set of studies could be labeled as social shaping of technology (Williams & Edge, 1996), investigating how “social, institutional, economic, and cultural factors shape the direction and rate of innovation and the overall form of technology” (Williams & Edge, 1996, p. 55). In particular, social construction of technology, a framework introduced into technology research in 1984, has become well established (Bijker, 1995; Pinch & Bijker, 1984). This framework views technology as social artifact that has different meanings to relevant social groups, and the interaction between those groups eventually determines the evolution of technology. Many other theories share the constructivist thinking with this framework, such as the new sociology of technology (MacKenzie, 1990; Winner, 1993).

The constructivist approaches take technology as a dependent variable that is shaped by social factors. In contrast, although Fountain (2001) admitted that information technology is subjectively perceived, she implicitly assumed that the “hard core” of technology is pregiven. She did not discuss how perceptions of the Internet and interactions between social groups shape the development of web-based technologies. In this view, e-government will not be based on a set of technologies that are “out there” and constant; rather, those applied technologies are socially evolving. This constructivist view enriches Fountain’s enactment framework in that it shows that technology is not only perceived and used differently in organizations but also further shaped and innovated because of different social perceptions.

Fountain’s (2001) framework and this constructivist view, however, could be criticized for lack of explanatory power, blindness toward technological factors, and leading to a social determinism. Therefore, Werle (1998) contended that “the argument that technology is socially constructed has to be considered as the starting point and not the result of social theorizing about technology” (p. 6). Alternatively, he introduced an analysis of technology change based on actor-centered institutionalism as a variant of the institutionalist approach (Scharpf, 1993). Actors, public administrators in our case, are not determined completely by institutions. Institutions only define “a scope of acceptable action leaving room for diversity of strategy and choice” (Werle, 1998, p. 7).

Within institutional analyses, Fountain (2001) actually followed the old institutionalist theorizing in economics that tends to view institutions and technology as dichotomous (the Veblen dichotomy). For example, Ayres (1944) said that “the history of the human race is that of a perpetual opposition between . . . the dynamic force of technology continually making for change, and the static force of ceremony—status, mores, and legendary belief—opposing change” (p. 176). Institutions are considered as constraints (rigidity and stasis), whereas technology is considered as associated with change and dynamics. The difference is that those old institutional economists normally argue that without technology there would be no change, but Fountain argued that with technology there would not necessarily be change. However, they share the same assumption that institutions are always resistant to change.

This dichotomous view is impoverished. Equating institutions with stability or durability results in many neoinstitutionalisms’ dilemmas (Clemens & Cook, 1999). As Lawson (2003) pointed out, “there is no ontological prioritization of continuity over change (or vice versa); continuity and change are ontological equivalent” (p. 184). If information technology is socially constructed and subjectively perceived, then it is incorrect to think technology is a dichotomy to institutions.
The literature on institutions (organizations) and technology is far beyond what we cover here. Barley (1998), after reviewing the history of technology and technology research, identified four epistemological orientations of schools of thought on technological change: materialistic determinism, such as theories of technological discontinuity; materialistic volunteerism, such as human computer interface and political theories of information technology; idealistic determinism, such as Harry Braverman and Jacques Ellul; and idealistic volunteerism, such as social construction of technology. In addition, business administration has long been interested in the question of why information technology usually has not brought benefits in productivity and return on investments (Davern & Kauffman, 2000). Our investigation into e-government will benefit from looking into these fields or disciplines. More practical issues include: Does e-government really improve efficiency, economy, and effectiveness? Does it deserve the tax dollars spent? If not, what factors can we work on to make e-government work?

INSTITUTIONAL CHANGE: HOW?

The empirical aspects of neoinstitutionalism generally fail to account for important facets of institutionalization process (Barley & Tolbert, 1997; Gorges, 2001; Kraatz & Zajac, 1996). New theoretical developments on institutional change can help move forward Fountain’s (2001) theory. For example, Diermeier and Krehbiel (2003) proposed that institutional researches should change from “institutional theories” to “theories of institutions,” viewing some institutional features as objects of collective choice, which is subject to second-order institutions. This argument is different from rational choice theories in which behavioral postulates are fixed and then equilibria generated under different institutional arrangements are compared. The latter values institutions because they induce stability in otherwise chaotic situation, whereas the former values institutions because they induce change. Diermeier and Krehbiel contended that now we need not to prove that institutions matter; rather, we should make inquiry into which institutional features are essential to collective choice, outcome, and change.

Fountain (2001) did not present a strong analysis on what institutions in general constrain the development of e-government. To some extent, she oversimplified institutional dynamics in government agencies. For example, one of her propositions, “government agencies will resist the potential for dramatic efficiency gains if those gains translate into loss of resources (budget and personnel) for the agency” (p. 102), is contradictory to the observation that current e-government initiatives are primarily driven by efficiency concerns. Organizational dynamics in public organizations is far more complex than a higher efficiency-less budget assumption. For example, introducing e-government in the name of efficiency alone would make a case for more budgets. Higher efficiency might lead to increased service capacity and citizen satisfaction, which would also legitimize more budgets.

Institutional change cannot be separated from ideologies and discourses. The isomorphism of DiMaggio’s (1998) neoinstitutionalism assumes that there is a dominant discourse in an organizational field. Fountain (2001), although she admitted differences between agencies, also assumed that within a government agency there is a dominant homogenous culture (or discourse). This assumption generally is not true. As Hasselbladh and Kallinikos (2000) emphasized, discourses and techniques of control cannot be understood as organizational environments in the conventional sense; rather, institutions consist of “basic ideas that are developed into distinctive ways of defining and acting upon reality (i.e., discourses), supported by elaborate systems of measurement and documentation for control-
ling action outcomes” (p. 704). As a result, “the conceptualization of institutionalization processes should thus avoid the imagery of transportation, imitation or domination (stratification), underlying the neo-institutionalism research programme” (p. 703).

It is possible that e-government gives birth to a new e-discourse; or it is possible that e-government registers to and serves for different existent discourses. E-government is evolving in the struggle of discourses. For example, based on Quinn and Rohrbaugh’s (1981, 1983) competing values model, four e-government models can be identified as organizational learning model, digital democracy model, information security model, and cost-efficiency model, corresponding to human relation values, open system values, internal process values, and rational goal values, respectively (Kim & Donghwan, 2003). La Porte et al. (2002) observed that both “protective democracy” and “developmental democracy” conceptions (Held, 1996) can support web-supported governance in the name of service efficiency and citizen participation, respectively. Within agencies, program managers and technical experts have different goals, horizons, and responsibilities; as a result, they have different visions, expectations, and understandings of e-government.

Admittedly, Fountain (2001) recognized the link between institution change and norms: “Individuals in institutions tend to enact new information systems to reproduce existing rules, routines, norms, and power relations if institutional rules are clear and no salient alternative uses are visible in the environment” (p. 89).

However, Fountain (2001) could have moved forward by introducing discourse into the analysis. In the field of public administration, there are different discourses at work, and web-based technology could be registered to all of them.

Institutionalization change is sustained by establishing specialized domains of action, codifying rules of conduct, defining elaborate systems of alphanumeric notation for structuring organizational tasks, and specifying standards measuring organizational outcomes. It does not end with the diffusion of rationalized beliefs and practices. It has to be given meaning and sustained in establishing a distinctive behavioral pattern. Such an account requires both action and institution, and combining institutional theory and structuration theory is one of the alternatives (Barley & Tolbert, 1997). In any case, some practical questions have to be asked: How are e-governments discussed by public managers and employees? What kind of metaphors are they using? What kinds of practices or procedures are being considered as best practices? How is e-government being measured?

RESEARCH AGENDA BEYOND JANE FOUNTAIN

Institutions not only provide constraints but also offer incentives. They can be used to tell why things have gone wrong, but they can also be used to explain how to make things a success. Public administrators have to remember that it is institutions that define a stage, but it is actors who determine the performance. What is more important to public administration is: What should public administrators do to make the institutionalization of e-government work? Based on the aforementioned analyses, several directions may be considered.

First, e-government has to be differentiated from the Internet and web-based technologies. E-government as envisioned by many is not simply about service delivery. It means a set of innovative institutions. The evolution of e-government is a process of institutionalization. As Lawson (2003) said, institutions exist as a process of reproduction and transformation, and change is their mode of being. The process can be viewed as a social learning process because institutionalizing is government “learning to govern online” (Mahler & Regan, 2002). The issue then is how to facilitate such a social learning process. For example, Coe, Paquet, and Roy (2001) pointed out that to overcome social learning
blockages, three factors have to be considered: (a) the requirement for new social technologies; (b) stronger approaches to awareness, education, and leadership; and (c) an understanding of the omnipresent dangers of the centralized mindset.

Second, practical questions have to be asked about the institutions, institutional features, or second-order institutions that affect the evolution of e-government. For example, Scavo and Shi (2000) identified three major practical challenges to the incorporation of IT in administrative reforms: adoption of IT, application of IT, and management of IT. One General Accounting Office (2001) report identified challenges as

1. sustaining committed executive leadership, 2. building effective e-government business cases, 3. maintaining a citizen focus, 4. protecting personal privacy, 5. implementing appropriate security controls, 6. maintaining electronic records, 7. maintaining a robust technical infrastructure, 8. addressing IT human capital concerns, and 9. ensuring uniform service to the public. (pp. 1-2)

Attention should also be directed to the factors that affect organizations’ adoption and employees’ acceptance of e-government-related transformations. For example, such actors can be grouped into output, workflow, organizational structure, skills and knowledge, and societal and business context factors (Sorge, 1989). Moreover, many reform initiatives, such as reinvention, performance-based budgeting, and citizen engagement, are transforming current public institutions. We could ask how these initiatives can help build e-government and at the same time be reinforced by e-government.

Third, the enactment technology framework can be complemented by an enactment theory of strategic management to use human initiative and creativity. In institutionalists’ or constructivists’ view of technology and change, strategic choice should not disappear. On the contrary, the importance of strategy increases. For example, in Fountain’s (2001) ITDS case, the failure of ITDS is attributed to the power of the U.S. Customs and related interested groups. From another angle, however, the failure actually manifests the ineffective strategic management of the ITDS board of directors and the ITDS project office. They could have paid more strategic attention to building more friendly intergovernmental relations and to building a policy network including interest groups and think tanks.

The challenge is that we need a different type of strategic management. Smircich and Stubbart (1985) proposed that the task of strategic management in enacted environments is organizational making—“to create and maintain systems of shared meaning that facilitate organizational action” (p. 724). It calls for an interpretive style of policy analysis and a cultural perspective of management expertise. It also requires that public administrators should not only adapt to their institutional environments but also reshape them with their discretion. These types of activities can be viewed as “practicing” and “institutionalizing.” It is not a violation of accountability; rather, it is procedural entrepreneurship, a legitimate administrative action (Brower & Abolafia, 1996; Carr & Brower, 2000). Even in Fountain’s (2001) own description of the U.S. Business Advisor case, she mentioned that “in spite of these [institutional] challenges, the site has continued to survive and improve, largely through ongoing social ties among committed public managers” (p. 159). One has to admit that these responsible entrepreneurial public managers successfully made a difference, and in the long run, they will make more fundamental changes.

Fourth, we have to be aware of different discourses, value orientations, and cultural prejudices in public administration, which provides another context for information technology and e-government. As Barber (2001) pointed out, “new technologies tend to reflect rather than to alter the culture that produces them . . . technology cannot save us from ourselves, it
can only reflect all too candidly who we are” (p. 43). The social learning process is occurring not only at the individual and organizational levels but also at the level of policy networks espousing different frames and core beliefs. Such beliefs are influenced by big social events and crises. For example, the 9/11 terrorism attack, the war on Iraq, and the operation of the Department of Homeland Security have affected the focus and direction of use of information technology in government.

Finally, the author intends to give more attention to comparative analysis of e-government because institutionalism is particularly well suited for comparative research (Diermeier & Krehbiel, 2003). For example, Henman and Adler (2001) analyzed how new and emerging information and computing technologies have been shaped and adopted by social security institutions in different countries and found that national institutions do make a difference in that similar technologies have been adopted in different ways. It must be noted that comparative analysis should be performed in a careful manner not subject to cultural and political prejudices. Fountain (2001), for example, had some problematic observations: “In authoritarian regimes, the Internet threatens domination by the state over information and communication but at the same time, paradoxically, serves as an instrument of consummate state surveillance and control over society” (p. 3); and “the central government of the People’s Republic of China (PRC) enacts networked computing as an instrument of social control and surveillance. Technologies used for jamming, blocking, and filtering information dominate” (p. 33).

The assertion that technologies are used in authoritarian countries such as China primarily for control and surveillance is problematic and simplistic, indicating a dualist view of democratization and related epistemological prejudices. An implicit assumption is that any regimes can be classified into two dichotomous groups: democratic and undemocratic. Regimes different from Western liberal democracy are viewed as necessarily undemocratic, and whatever they do is also undemocratic. This assumption neglects that no regime is perfectly democratic and every regime is practicing democracy. For authoritarian countries such as China, democratization may be a long-term incremental process, and e-government will definitely play a significant role. Technologies used for jamming, blocking, and filtering information do not dominate due to administrative and technical difficulties (Lacharite, 2002).

Although China is lagging behind, it is catching up, following the course of the United States and United Kingdom. According to Brown University’s 2002 worldwide survey, China is ranked 7th in 198 countries, following Taiwan, South Korea, Canada, United States, Chile, and Australia (West, 2002). The survey uses more than two dozen criteria, including the availability of contact information, publications, databases, portals, privacy, security, disability access, and the number of online services. The Internet does serve a surveillance purpose, but it is a surveillance of the bureaucracy to make the government more transparent to avoid nepotism and corruption. Government web sites have become important instruments of agenda setting, communication between citizens and the government has been enhanced via digital networking, and information technology does enable citizens to participate in the implementation of policies (Zhang, 2002).

The use of the Internet can be incorporated into China’s unique democratization process, for example, elections in villages and community governance in cities (Yang, 2002). In major Chinese cities, e-government is promoted not only as an instrument for efficiency and economy but also for participation and communication. For example, Beijing City Government plans to establish a fully developed e-government by 2005, providing all government services online and increasing citizen involvement. It may be too early to see the real effect of
these e-government efforts in China, but totally denying their benefits is unreasonable and may actually do harm to China’s democratization.

CONCLUSION

Fountain’s (2001) enactment framework is an important contribution to information technology research in public administration because most current literature has yet focused on how the technology affects organizations rather than how people and organizations affect the use of technologies. This article has no intention to underestimate her contribution. The author concurs with her that institutions are most important factors in explaining how information technology is being adopted and used in government. However, more challenging work lies ahead for public administration scholars and practitioners: to make the information technology work for democratic governance, to overcome the institutional and other constraints, and to create a new set of social meanings and institutions. To achieve the great transformation made possible by information technology, public administrators’ strategic choice, initiative, and entrepreneurship are necessary. Institutions must be considered in relation to the strong agency of public administrators. Certainly, e-government transformation will not be an easy process. But public administrators must have faith, be optimistic, and act strategically. Whatever is possible depends on people’s vision, belief, and action, not on environmental fiat.

REFERENCES


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