8 The Role of Institutional Entrepreneurs in Enabling the Adoption of E-Governance Systems

Anuradha Mundkur

INTRODUCTION

Not enough attention is paid to how information systems used by governments are designed, adopted, and institutionalized. Since information systems 'encapsulate the structures, routines, norms, and values implicit in the rich contexts within which they are embedded' (Benbasat & Zmud, 2003, p. 186), they are shaped by social factors (key stakeholders, conflicts, power moves, symbolic acts, etc.) and technological factors (existing technology infrastructures, technical know-how, skills). The trajectory from design to adoption to institutionalization is not pre-determined but contingent upon broad social contexts, specifically the significant role by institutional entrepreneurs. Institutional entrepreneurs can be described as e-champions—'leaders with vision who put e-governance onto the agenda and make it happen' (Heeks, 2001, p. 20). Institutional entrepreneurs may purposively or unwittingly encode structural biases into information systems (Winner, 1986), as a result of which these systems structure subsequent actions in particular ways, creating a path-dependent development trajectory. This chapter moves away from treating information systems as a black box. In doing so it unpacks how information systems become institutionalized rather than assume embeddedness.

To highlight the dynamic relationship between the design, adoption, and institutionalization of e-governance systems and the role of institutional entrepreneurs, this chapter uses the deployment of a financial management system by an Urban Local Body (ULB), the third tier of government (local government), in a southern city in India as its case.¹

OVERVIEW AND BACKGROUND

There is little doubt that information and communication technology (ICT) enables us to disseminate large volumes of information in a timely and cost-effective manner. For many governments the technology push argument, that ICTs can be used to make them more efficient (through enabling

cross-agency functioning), transparent, and accountable, led to significant investments in implementing e-governance systems. E-governance was also perceived by policymakers as an opportunity to deal with performance and confidence deficit (Nye, 2001) and to realize the goals of administrative reform movements such as New Public Management, which advocates a business-oriented approach to government (Boston, Martin, Pallot, & Walsh, 1996; Hood, 1995; Ingraham, 1997).

Over the past few years, India has registered significant improvements in e-governance rankings (Hafeez, 2004) and won awards, such as the Stockholm Challenge and Commonwealth Award, for its efforts in applying information technology to create better services for citizens. This chapter looks at one such project implemented in a city in the southern Indian state of Karnataka. This city has emerged as a global technology center, and the financial management system deployed by its ULB was part of an effort to create a SMART (Simple, Moral, Accountable, Responsive, and Transparent) government (Sachdeva, 2002).

In 2000 the ULB began reforming its financial management practices. The introduction of an e-governance system, namely a financial management system, which combined modern accounting practices with a management information system (which I will call F-MIS), was an integral part of the reform. To achieve this transformation, the ULB partnered with a task force (TF) established in 2000 by the head of state at that time. The TF comprised a voluntary group of information technology companies and eminent citizens. Its mandate was to upgrade and enhance the managerial and administrative capabilities of various civic and administrative bodies such as the ULB. Working with the ULB to streamline its financial management system was one of TF's first projects. A core project team was established comprising members from the ULB's executive, a member from the TF who took on the role of the project team leader, a consultant hired by the TF, two retired State Accounts Department officers and 20 young graduates.

The F-MIS was designed such that all types of users, from citizens to policymakers, could access information in formats that they could easily understand and interpret. Backed by a single database, F-MIS allowed all levels of management to access information in a timely manner as there were no longer any delays in compiling information from various sources. It also provided a base for reviewing and monitoring past decisions taken by the ULB's senior and executive management. ULB employees could access information regarding the status of various financial records they updated and managed reducing their workload on routine items; decision makers could access various reports needed for planning; policymakers and funding agencies could access reports to evaluate the performance of the ULB.² At the time of conducting this study (2005–2006), there was talk of creating a web-enabled section of the F-MIS through which citizens could access information about the revenue planning, actual collection, details on budgeted projects, and project status.

94 Anuradha Mundkur

Supporting F-MIS was a citizens' movement for transparency and accountability, PROOF (Public Record of Operations and Finance). Launched by four city-based non-government organizations, PROOF used the quarterly statement of the ULB as a starting point in an exercise to track financial statements, develop performance indicators for different expenditures, and create a space for dialogue between the ULB and citizens on whether the expenditures on development projects were adding any value. Another spin-off was the 'Arthika Darpana' (Financial Mirror). Under this initiative, complete financial information about each ward³ was given to the elected representative, including information on budget allocation, progress of development projects, and status of revenue collection. The same information was also available to the public (NIUA, 2004; Vithayathil, 2004).

THE ROLE OF INSTITUTIONAL ENTREPRENEURS

E-governance literature, both academic and anecdotal, points to the important role played by e-champions (or institutional entrepreneurs) in pushing e-governance projects like F-MIS to their logical conclusion (Narayan, Nerurkar, & Mehta, 2006). Studies have suggested that, among other factors, the loss of e-champions (or institutional entrepreneurs) often results in the failed implementation of e-governance projects. However, what these studies have failed to explore is how e-champions bring about institutional change. The work of institutional entrepreneurs is the focus of this chapter.

In this case study, the institutional entrepreneurs were the executive management of the ULB and the TF, particularly the project team leader and the consultant hired by the TF. The project team leader and the consultant acted as catalysts to enable the ULB to reform its financial management practices by providing financial resources, intellectual capital, and labor to engage in the reform process. Citizens, their organizations, and elected representatives from the wards (comprising the ULB Council), were perceived as belonging to a group of stakeholders outside the ULB. That is, they were grouped along with the state and national governments and other financial institutions to which the ULB must disclose its financial position. As a result the involvement of these stakeholders was limited to accessing financial reports generated by F-MIS. From the beginning, the project was conceptualized in two phases—first instituting internal reforms to 'clean up' information bottlenecks in the ULB through the introduction of modern financial management practices led by F-MIS, and second creating a citizen's platform that could use the information to hold the ULB accountable for its actions through public disclosure forums and participative budgeting. Elected representatives of the ULB Council were left out of both processes. Citizens and civil society organizations were excluded from phase one but were seen to play a lynchpin role in phase two.

Why is the exclusion significant? Looking at who was excluded highlights interests that are not inscribed in the systems design. Thus, for instance, initially F-MIS was not web-enabled, which meant that every time an elected representative or citizen or civil society organization wanted information they had to approach the Additional Commissioner of Finance. This perpetuated a dependency relationship that kept existing structural power centers in place. Although the institutional entrepreneurs saw the exclusion of elected representatives as an unintended oversight, evidence suggests their exclusion was deliberate. They feared that the project might be hijacked given the highly political nature of some appointments within the ULB. This is corroborated by the project report on F-MIS where in the section titled 'Lessons Learned', which provides a check list for transforming financial management systems in ULBs, there is a call for implementing changes as 'administrative reforms' rather than as a 'political mandate'. The exclusion of elected representatives is problematic because they play a significant role in the allocation of funds to different schemes and projects acting as links between citizens and the ULB (Benjamin & Bhuvaneswari, 2001; Ghosh, 2005; Vijayalakshmi, 2004).

INSTITUTIONAL LOGICS AND FRAMING

The wider socio-cultural and political milieu provided institutional entrepreneurs with concepts and frameworks to legitimate the push for a change in ULB's financial management practices. National policies such as the 74th constitutional amendment conceptualized local governments, like the ULB, as self-governing units. Not only would they have more control over budget allocations, their access to financial resources was no longer restricted to grants provided by state governments. Coupled with the fact that state grants to ULBs for infrastructure development projects was steadily decreasing, these bodies were forced to resort to market-based financing. However, this required ULBs to be seen as creditworthy.

This notion of creditworthiness became the institutional entrepreneurs' mantra. It is impossible to assess whether or not an organization is creditworthy unless there are modern financial management practices that enable such an analysis. Hence, it became imperative that the outdated manual financial management practice of the ULB be replaced by a more rigorous system. The introduction of F-MIS gained greater legitimacy as institutional entrepreneurs drew on recommendations made by a national level task force on accounting and budget formats for local governments, instituted by the Comptroller and Auditor General of India. Several reform-linked funding schemes such as the National Urban Renewal Mission (NURM), which imposed conditions on receiving funds for infrastructure development projects, such as modernizing financial management practices, provided compelling reasons to adopt F-MIS. Finally, laws and regulations passed at the

state level also provided institutional entrepreneurs with the much needed legitimacy. The Karnataka Right to Information Act (2000) required all government institutions to maintain records of their activities in a manner such that they could be easily accessed by citizens. It also required all levels of government to publish, on a regular basis, relevant facts concerning important decisions and policies affecting the public. In order to comply with this requirement, institutional entrepreneurs argued that the ULB needed to be in a position to access critical information related to its budget, revenue, expenditures, and other financial data. The F-MIS system was designed to do precisely that.

Binding all the previously mentioned arguments together was the compelling institutional logic of good governance characterized by practices that are equitable, accountable, transparent, efficient, and participative. The principles of good governance served as institutional logics to frame the work around F-MIS. Institutional logics act as 'organizing principles that are accessible for organizations and individuals in terms of further development of micro-processes through which the meaning of what has happened, what is happening, and what is going to happen is constructed' (Hwang & Powell, 2006, p. 196). Drawing on existing notions of good governance as articulated by organizations such as the World Bank and Asian Development Bank, institutional entrepreneurs believed that good governance could be achieved through effective management, whose dimensions included public sector management, accountability, a legal framework for development, information, and transparency (Asian Development Bank, 1995). Finance-related information was made central to each of these dimensions. Thus, accountability 'is facilitated by evaluation of their economic and financial performance ... and efficiency in resource use' (Asian Development Bank, 1995, p. 9). Participation implied that government structures are flexible so that they can provide citizens the opportunity to improve the design and implementation of public programs by voicing their priorities in budget allocations. Transparency was linked to the availability of information 'especially relevant in the case of those sectors that are intrinsically information intensive, such as the financial sector' (Asian Development Bank, 1995, p. 12).

The problem facing the ULB was defined as the lack of information needed for good decision making. Good decision making, which lies at the heart of good governance, is characterized by accountable, transparent, and participative decision-making processes. Since most of government decision making concerns the efficient allocation and monitoring of resources, institutional entrepreneurs argued that what the ULB lacked was a system providing timely and accurate financial data on which to base decisions. In turn, this lack of financial information made it difficult for citizens to evaluate the performance of the ULB resulting in a lack of accountability and transparency. Where the TF and the ULB differed was on what good decision making meant. For the TF an integral aspect of good decision making was the participation of citizens in the process, but for the ULB good decision making implied the ability to respond in a quick and efficient manner to demands for changes in resource allocation. So while the TF emphasized that in order to consistently make good decisions there is a need for good quality information as well as a rigorous and transparent process by which decisions were made, for the ULB the emphasis was on the former.

It was logical therefore to focus on the Finance Department, as it was the repository of the information needed to make good decisions. This focus on financial management was in keeping with ideas put forth by international organizations such as the Asian Development Bank that identified public expenditure management as instrumental to achieving sound development and being the core business of governments. The solution presented itself from the way in which the problem was framed. If the ULB needed access to timely and accurate financial data for decision making, then two things needed to happen. First, the introduction of modern financial management practices so that the ULB would be in a position to assess its revenues, expenditures, assets, and liabilities and make policy decisions based on them rather than the current guesswork. Second, a process had to be put in place so that the information could be accessed and analyzed on demand; in other words, commission an F-MIS.

Institutional entrepreneurs used different vocabularies to ensure that the manner in which the issue was framed resonated with different people. Thus, for example, when talking with middle management, emphasis was laid on being able to supervise the work of the lower level staff; for senior management, the benefit involved better planning and management; and for the lower level staff, it was about reducing the workload. By constructing cultural frames, 'which are representations of collective problems and solutions that help other actors to link their own interests and identities to a collective purpose' (Stone-Sweet, Fligstein, & Sandholtz, 2001, p. 1), they shaped the terms and conditions within which the project takes place.

Institutional entrepreneurs are not 'disinterested altruistic agents of greater systemic effectiveness or efficiency. To the contrary, their advocacy is impossible to separate from their own particular material and ideal interests . . . Though they rely on myths and institutional formulas to articulate and legitimate their proposals for structural change, they do so in innovative ways while simultaneously challenging and critiquing existing arrangements, rules of thought and standardized practices' (Colomy, 1998, p. 271). They use their professional knowledge to redefine what practices and structures are appropriate (Hwang & Powell, 2006). This is very well illustrated by the present case. In the case of the F-MIS project, the institutional entrepreneurs had a similar background. They were bankers, chartered accountants, and individuals familiar with financial management standards followed by commercial enterprises. By 'transposing institutional logics from one domain where they are common and accepted into a new, unfamiliar domain' (Hwang & Powell, 2006, p. 199), they

facilitate the adoption of new practices. F-MIS and its financial reporting standards are nothing new in the world of commercial enterprises. Since there was a high level of uncertainty regarding how one should proceed with reforming the financial management systems in local government, the institutional entrepreneurs were able to use their professional knowledge and expertise to provide a methodology that could be followed. The argument, as the project team leader put was, 'when companies that operate in 106 countries with 99 currencies and multiple businesses could present their performance statement to the world, why couldn't the ULB, which has an operating radius of about 8 km and which deals in a single currency?,' (Prayag, 2004). By using their professional knowledge and expertise the institutional entrepreneurs, in this case, acted as filtering agents, interpreting laws and regulations (the constitutional amendment, and the technical guide to accounting and budget reforms for local government) and formulating appropriate strategies to ensure compliance.

Institutional entrepreneurs openly called for changes in the existing financial management system. Several channels were used to get their message out—the mainstream print media (articles written by the TF, particularly the project team leader and the consultant); journals and newsletters published by the four non-government organizations involved in PROOF; and seminars and public forums, organized by local and international organizations. White papers written by the TF and the core project team were shared with leading policymakers at the state and national levels. The common theme running through all these publications was the need to reform financial management practices to ensure good governance and the propagation of F-MIS as a means to achieve this goal. The induction of these institutional entrepreneurs as members of national level committees on local government reform, such as the National Urban Renewal Mission, only served to give the project greater legitimacy.

Projects like F-MIS require a range of skill sets to enable their successful deployment. Hwang and Powell (2006) point out that institutional entrepreneurs act as connectors bringing together groups that would otherwise not interact. In the F-MIS project this is best exemplified by the project team leader. He was able to bring in the consultant and his team to work on the implementation of the project; a local chartered accountant was roped in to provide article clerks who did the entire mapping of the business process; and local software company, where the project team leader was an investor, offered to build the necessary software free of cost. Equally significant is the fact that the project was able to secure funding for the entire project from a trust run by the chair of the TF. The project team leader was also able to use his social circle and collaboration with other civil society organizations to launch PROOF. The launching of PROOF was an important component to ensure the institutionalization of F-MIS. It provided the demand side of the equation. By creating a platform where citizens could access, analyze, and debate financial statements disseminated by the ULB, PROOF ensured that there would always be steady demands for the reports generated by F-MIS. It was also the TF's way of realizing its primary motivation behind engaging with the ULB—enabling participatory governance.

INSTITUTIONALIZATION AND PATH CREATION

Following Frumkin and Kaplan (2000), the process of institutionalization can be seen as one that begins with a trigger that breaks 'previously recurrent actions and reflexive behaviour of individuals' (p. 8). These triggers can be economic or political, or, as in the F-MIS case, 'a radical transformation in the intellectual lenses through which people look at and understand their world' (p. 9). The new notions of good governance challenged the existing arrangements of governmental decision making by putting forth a model that emphasized transparency, accountability, and citizens' participation in decision making. Institutional entrepreneurs responded to these changes by 'by bringing it to the attention of others and by proposing a response that carries weight' (p. 12). These entrepreneurs, through framing, advocacy, and persuasion attempt to change the beliefs and practices of other actors (Benford, & Snow, 2000). If they succeed, then new beliefs and practices become embedded in the day-to-day routines of the organization and diffuse to other organizations as well.

An important dimension of the work institutional entrepreneurs engage in can be described as path creation. The term suggests that institutional entrepreneurs behave in a proactive manner to 'make sense, enact and shape events and opportunities, often in ways other than those prescribed the existing rules and norms' (Grand & MacLean, 2003, p. 7). Thus, rather than passive observers reacting to events, institutional entrepreneurs 'attempt to shape paths, in specific contexts and in real time, by setting processes in motion that actively shape emerging practices, artefacts and procedures' (p. 7). The act of framing itself can be seen as an attempt at path creation. By setting the agenda early on, institutional entrepreneurs 'set where the groups are going and what their collective identity is likely to be' (Fligstein, 1997, p. 399). Linking the poor quality of decision making to poor quality information, the institutional entrepreneurs were able to focus their efforts on enabling the existing decision-making processes rather than move for a radical change to the institutional environment which dictates how decisions are made. However, while framing initiates the creation of a path, by itself it is insufficient to sustain and institutionalize the path.

According to Colomy (1998), 'few challenge every recognizable feature of an existing social order. Implicitly or explicitly a project usually constitutes some macro-environments that it treats as unchangeable' (p. 273). The institutional entrepreneurs in this case focused on restructuring the flow of information within the organization rather than bringing about radical changes in work processes. This would have been more

difficult to affect as they would require the approval of the ULB's Council (comprising elected representatives) and the state government because the regulations constituting the ULB would have to be modified. Institutional entrepreneurs, therefore, focused on changing the perception that accounting is a terminal function. They promoted an enterprise approach where the Finance Department becomes a service department, acting as a conduit for the informational needs of all other departments in the ULB. They turned their attention to creating new financial management regulations because none existed and adopted an incremental approach to institutional change. Rather can walk in with a plug and play system, undertake organization-wide training on an intensive scale, and insist that the system be used from day one, the institutional entrepreneurs tried a different approach. Changes were introduced in an incremental manner moving from getting the staff to understand their organizational roles and responsibilities to creating a classification system that would streamline data structuring. This was followed by ensuring that staff was first familiarized with this system in a manual form. Next came training them to use the new system while allowing the old system to run alongside. Once staff expressed a degree of comfort with the new system, the old one was terminated. Finally, via directives from the senior management, efforts were made to ensure that the system was used on a regular basis. This incremental approach to reform served to appease any fears that the project would bring about radical changes. In doing so it made F-MIS and PROOF a feasible reform strategy.

The point to note is that the process of financial management was first embedded in practice before the use of the technology. The institutional entrepreneurs felt that technology was merely a tool and it would be easy to get the staff to use it once they understood the logic behind the technology. This approach is different from other such initiatives in India such as the Bhoomi project where the emphasis was on designing the software and the focus was on training the staff in the land records department of the state government to use the software from the day it was installed. The ULB staff gained a high degree of familiarity with how the F-MIS would operate by using the paper-based templates designed by the institutional entrepreneurs. Together with cleaning up the accounting practice and repositioning the finance department, the use of the paper-based templates helped institutionalize the technologically enabled F-MIS because the practices were already in place. Even if F-MIS was to fall by the wayside (due to data entry issues), the institutional entrepreneurs' intent would be served. Another strategy that worked well for the institutional entrepreneurs was juxtaposing the old and the new templates. By running the old accounting system in parallel with F-MIS, the institutional entrepreneurs were able to 'simultaneously make the new structure understandable and accessible, while pointing to potential problems or shortcomings of past practices' (Lawrence & Suddaby, 2005, p. 217).

The temporal sequencing of events—dividing the project in two phases, with the first phase focusing on internal reforms and the second being concerned with creating citizen demand for information—also highlights the attempt by institutional entrepreneurs to create a path that would ensure the institutionalization of their project. Hence, for them, it was logical that the first phase of any project that sought to establish financial accountability must be a project like F-MIS where information flow within the organization is restructured so that it can be accessed by various stakeholders. Once in place, citizen participation could be garnered through campaigns like PROOF. Disclosure forums like PROOF, and training the public to understand and analyze the financial information being generated by F-MIS, established a feedback mechanism. Even if the system faltered due to entropy, the institutional entrepreneurs hoped that the demand from the public for standardized financial documents would make the organization snap out of that state. Also by making F-MIS and its outputs available to the public via PROOF and media reports, the institutional entrepreneurs made it much harder for the ULB to drop the system. If they dropped it, they would have to answer to the public.

By interpreting concerns citizens expressed with regard to corruption as a need for greater transparency and accountability, institutional entrepreneurs conceived of citizens playing the role of auditors. The public might or might not have cared for this role. Similarly, institutional entrepreneurs fixed the role that elected representatives would play. By confining their role to that of an observer, institutional entrepreneurs tried to bypass the existing accountability structures. Not only were the elected representatives left out of the F-MIS project, they were not seen as integral to the PROOF campaign either. It has been pointed out that PROOF was more 'attuned' to working with bureaucrats (Vijayalakshmi, 2004). The PROOF team went to great lengths to establish a working relationship with the bureaucracy, although they knew that this would curtail achieving accountability through the elected representatives (Vijayalakshmi, 2004). This view of accountability stemmed from a feeling that it was easier to work with bureaucrats rather than elected representatives, and some within the campaign were of the view that 'because the officials can be influenced through their contacts with state level politicians (particularly the Chief Minister), it is more sensible for the campaign to have a partnership with the officials' (Vijayalakshmi, 2004, p. 20).

The exclusion of elected representatives from PROOF had its fallouts. The elected representatives felt that the campaign was misguiding the public on the financial management practices within the ULB. The result was that the ULB Council passed a unanimous resolution asking the Commissioner to review of the activities of the PROOF. As a way to win over the elected representatives, PROOF invited the Mayor of the city and other representatives from the ULB Council's Standing Committee on Taxation to attend the PROOF meetings. Attempts were made to meet with selected

representatives who were known to be popular and have them advocate for F-MIS and PROOF. This reflects Garud and Karnoe's (2001) finding that, 'to the extent that they are unable to gain momentum with their own approaches, path creation requires an ability on the part of entrepreneurs to shift their emphasis to alternate approaches that may have greater promise' (p. 7).

To ensure that the paths they have created remain stable, institutional entrepreneurs engage in what Lawrence and Suddaby (2005) call 'enabling work'. This refers to the creation of rules that facilitate, supplement, and support institutions. This may include the creation of new roles needed to carry on institutional routines, such as creating the post of the Additional Commissioner of Finance within the ULB, or diverting resources required to ensure institutional survival, and ensuring compliance through enforcement, auditing, and monitoring (Lawrence & Suddaby, 2005). Institutional entrepreneurs use rule making as a means to ensure that the practices they are propagating become institutionalized. Rule making serves a dual purpose: it grants legitimacy to an activity as well as ensures its diffusion. By becoming widely diffused, over time, practices become habitual and are taken for granted (Hwang & Powell, 2006). In the case of the F-MIS project, the passing of the Accounts Regulation reflects this attempt by institutional entrepreneurs. The non-existence of any accounting regulation gave the institutional entrepreneurs an opportunity to carve out a document that reflected all that they considered important and paramount to good financial management. The creation of the F-MIS manual is another attempt to 'actively infuse the normative foundations into the participants' day to day routines and organizational practices' (Lawrence & Suddaby, 2005, p. 233).

CONCLUSION

In summary, we cannot afford to ignore the work of institutional entrepreneurs. They create 'social entanglements' (Selznick, 1996) by embedding ICTs such as F-MIS 'in networks of interdependence, thereby limiting options' (p. 271). By tying F-MIS to internal decision-making processes, finance functions, organizational hierarchy, the existing decentralized administrative setup, disclosure platforms, and financial aid conditionality, institutional entrepreneurs set in motion an inertial momentum which in its own right would contribute to the institutionalization of the new regime. The insights that this case has been able to provide regarding institutionalization also serves to elaborate on the adoption of technological innovations. Many, such as Fountain's (2001a & b) Technology Enactment Model, assume that the process of institutionalization is automatic. However, the F-MIS case highlights the deliberate strategies and tactics used by institutional entrepreneurs to embed practices such that their reproduction is self-activating, occurring through routinized action (Jepperson, 1991).

ACKNOWLEDGMENTS

This chapter builds on an article I co-published in Journal of Information Technology and Politics (see Mundkur, Anuradha, & Venkaesh, Murali, 2009) in which we highlighted how diverse stakeholders, by tapping into existing notions of good governance, articulated a project that emphasized reforming financial management systems as fundamental to transforming the working of urban local governments.

NOTES

- 1. In order to maintain anonymity I will not be identifying the organization but will simply refer to the organization in question as the ULB. Its assigned obligatory functions include the maintenance of roads, street lights, sanitation, water supply, registration of births and deaths, public immunizations, and regulation of buildings, and the discretionary functions comprise formation and maintenance of parks, schools, libraries, and hospitals.
- 2. This section has been drawn from an earlier article: Mundkur, A., & Venkatesh, M. (2009). The role of institutional logics in the design of e-governance systems. Journal of Information Technology and Politics, 6(1), 12–30.
- 3. A division of a city for administrative and representative purposes.

REFERENCES

- Asian Development Bank. (1995). Good governance: Sound development management. Manila, Philippines: Author. Retrieved January 1, 2007, from www.adb. org/documents/policies/governance/govpolicy.pdf
- Benbasat, I., & Zmud, R. W. (2003). The identity crisis within the IS discipline: Defining and communicating the discipline's core principles. MISQ, 27(2), 183-194.
- Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. Annual Review of Sociology, 26, 11–39.
- Benjamin, S., & Bhuvaneswari, R. (2001). Democracy, inclusive governance, and poverty in Bangalore (Working Paper No. 26). Birmingham, UK: University of Birmingham, School of Public Policy, International Development Department.
- Boston, J., Martin, J., Pallot, J., & Walsh, P. (1996). Public management: The New Zealand model. Auckland, New Zealand: Oxford University Press.
- Colomy, P. (1998). Neofunctionalism and neoinstitutionalism: Human agency and interest in institutional change. Sociological Forum, 13(2), 265–300.
- Fligstein, N. (1997). Social skill and institutional theory. American Behavioral Scientist, 40(4), 397-405.
- Fountain, J. (2001a). Building the virtual state: Information technology and institutional change. Washington, DC: Brookings Institution Press.
- Fountain, J. (2001b). The virtual state: Transforming American government. National Civic Review, 90(3), 241–251.
- Frumkin, P., & Kaplan, G. (2000). Neo-institutional theory and the micro-macro link (Working Paper). Cambridge, MA: Harvard University, Kennedy School of Government.

- Garud, R., & Karnoe, P. (2001). Path creation as a process of mindful deviation. In R. Garud & P. Karnøe (Eds.), *Path dependence and creation* (1–36). London: Erlbaum.
- Ghosh, A. (2005, November 19). Public-private or a private public? Promised partnership of the Bangalore Agenda Task Force. *Economic and Political Weekly*.
- Grand, S., & MacLean, D. (2003). Creative destruction and creative action: Path dependence and path creation in innovation and change. Paper presented at the 19th EGOS Colloquium, Copenhagen, Denmark.
- Hafeez, S. (2004). The UN Global E-Government Survey 2004: Towards access for opportunity. New York: United Nations.
- Heeks, R. (2001). *Understanding e-governance for development* (i-Government Working Paper No. 11). Manchester, UK: Institute for Development Policy and Management.
- Hood, C. (1995). Contemporary public management: A new global paradigm? *Public Policy and Administration*, 10(2), 104–117.
- Hwang, H., & Powell, W. W. (2006). Institutions and entrepreneurship. In S. A. Alvarez, R. Agarwal, & O. Sorenson (Eds.), *Handbook of entrepreneurship research: Disciplinary perspectives* (pp. 179–210). New York: Springer.
- Ingraham, P. (1997). Play It Again, Sam; It's Still Not Right: Searching for the Right Notes in Administrative Reform. *Public Administration Review*, 57(4), 325–342.
- Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalism. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 143–163). Chicago: University of Chicago Press.
- Lawrence, T., & Suddaby, R. (2005). Institutions and institutional work. In S. R. Clegg, C. Hardy, T. Lawrence, & W. R. Nord (Eds.), *Handbook of organization studies* (2nd ed., pp. 215–254). Thousand Oaks, CA: Sage.
- Mundkur, A., & Venkatesh, M. (2009). The role of institutional logics in the design of e-governance systems. *Journal of Information Technology and Politics*, 6(1), 12–30.
- Narayan, G., Nerurkar, A. N., & Mehta, S. J. (2006). Value-proposition of e-governance services: Bridging rural-urban digital divide in developing countries. *International Journal of Education and Development using Information and Communication Technology*, 2(3), 33–44.
- NIUA. (2004). Best practices by urban local bodies in India. *Urban Finance*, 7(2), 6–11.
- Nye, J. (2001). Information technology and democratic governance. In E. Kamarck & J. S. Nye (Eds.), *Democracy.com? Governance in a networked world* (pp. 1–18). Hollis, NH: Hollis Publishing.
- Prayag, A. (2004, July 2). Accountability mantra. The Hindu Business Line. Retrieved November 9, 2011, from http://www.thehindubusinessline.in/life/2004/07/02/stories/2004070200170400.htm
- Sachdeva, S. (2002, December). E-governance strategy in India (White Paper). Retrieved January 1, 2006, from www.indiaegov.org/knowledgeexchg/egov_strategy.pdf
- Selznick, P. (1996). Institutionalism 'old' and 'new'. Administrative Science Quarterly, 41(2), 270-277.
- Stone-Sweet, A., Fligstein, N., & Sandholtz, W. (2001). The institutionalization of European Space. In A. Stone-Sweet, N. Fligstein, & W. Sandholtz (Eds.), *The institutionalization of Europe* (pp. 1–29). Oxford, UK: Oxford University Press.
- Vijayalakshmi, V. (2004). Fiscal performance audit: Public Record of Operations and Finance (PROOF) and citizens' participation (IDS Working Paper). Brighton, UK: University of Sussex.

Vithayathil, T. (2004). Reforming municipal financial management systems. *Public Eye*, 6–7.

Winner, L. (1986). The whale and the reactor: A search for limits in an age of high technology. Chicago: University of Chicago Press.