

ICT, Policy, Politics, and Democracy: An Integrated Framework for G2G Implementation

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ABSTRACT

This research approaches the issue of G2G digitization using an integrated policy dynamics model. The essence of the contradictions in the G2G integration discourse is followed by a description of two policy paradigms that are then incorporated into an integrated or synthetic framework to evaluate the specifics of the G2G implementation in DHS and HUD. Speculations are made about the implications of this study for the democratic principles of government rule.

Keywords: G2G, policy, politics, democracy.

1. INTRODUCTION

The rapid advances of IT have penetrated all sectors of society, including government. Carr [1] speculates that if any sector of society “lags in harnessing the power of technology, it will be vulnerable to displacement”. The rationale of this assertion illustrates an arguable *impasse* that has been facing the public sector. Whether or not the advances in IT applications in governing engender potential threats to the central dimensions of our democratic system and institutional structure is a sensitive dilemma. In broad view, the rigid rationality of governing by technology seems to interfere with the uniquely crafted precautions of our intergovernmental framework against unified and hierarchical ruling patterns that pose threats to liberty and the expression of civil virtues. This controversy is creating increasingly complex technical and normative issues of intergovernmental collaboration that may impede the advances of the G2G digitization initiative.

In this paper, we seek to outline an integrated evaluation model to assess the contentious G2G policy dynamics. The paper is organized as follows. In the literature review, we first narrow the focus of attention from general e-government to the G2G digitization stage and review briefly two competing paradigms in public policy: the institutional and the social constructionist. The research problem is to formulate an integrated evaluation approach for the G2G integration framework. The methodology employs the

synthesis matrix of Lieberman [2] to incorporate the conceptual elements of both paradigms. In the results section, we use a comparative analysis of G2G policy dynamics in two public sectors – Homeland Security and HUD – using the conceptual framework of our methodology. A speculation about the implications of our research for the democratic principles of government rule draws inferences for future research.

2. LITERATURE REVIEW

The literature review is organized into two parts. The first focuses on the essence of G2G and the sources of the controversial discourse. The second part focuses on existing paradigms for evaluation of public policy dynamics and concludes with the need to develop an integrated framework.

Beyond (traditional) E-Government: G2G.

The less controversial G2C and G2B initiatives have been promoted under the common denominator of e-government in the 1990s with the idea of ‘reinventing government’ through improved efficiency and citizens’ involvement [3]. The successful adoption of this initiative has been attributed to the undisputed cost-effectiveness and convenience in information and service delivery. Because of the advantages of the e-government, many governments are increasingly relying on communication e-portals to provide information and services and to complete transactions online. Also, many observers view e-government as a democratic policy tool for fostering public participation in real-time communication with government agencies. A standard measure for advanced implementation and adoption of e-government at state and local level has been the ability to complete a full transaction on line [4]. The advances to the next generation digital G2G governing that goes beyond the e-portals are outlined in Layne and Lee [5] as the last two steps of an IT development model: cataloguing, transaction, vertical integration, and horizontal integration.

While the politically seductive inferences of G2C and G2B have contributed to the widespread and rapid

diffusion of e-government, more recent advances to a second-generation digital G2G platform are wavering. A conceptually founded explanation draws on the essence of a vertically and horizontally integrated intergovernmental platform that interferes with the principles, dynamics, and structure of our institutional system. However, such claim does not encompass the complexity and ambiguity of issues involved. The IT community, the practical discourse, public officials, and academic literature approach the dilemmas of the G2G intergovernmental scene differently and at, respectively, ascending levels of ambivalence.

Atkinson [6] discusses G2G as an opportunity for radical transformation for government and society. The initiation of G2G implementation and adoption stages is marked by the appointment of a CIO authority in the Office of Management and Budget in 2000 [7]. The initiative has been further expanded by mandating annual federal funding, creating of the federal enterprise architecture's (FEA) compliance standards, establishing models in each of five layers (performance, business, service, data, and technical) and institutionalizing the budget review process in compliance with FEA. Ultimately, G2G is about establishing new integration networks with shared service centers across agencies and departments and layered by functions and applications [8,9]. The new government architecture reportedly targets human resources, criminal investigation, public health, grants, financial management, and enterprise management, but the same sources reveal that advances in adoption and development of across-agency collaboration are so far observed only in healthcare and homeland security.

The slow advances in G2G integration appears to be related to determinants different from the high demands for technological sophistication. Atkinson points out, at the federal level, that Congress, the White House, and the lack of leadership in departments and agencies passively hold back the G2G initiative. McClure [7] argues that among the many reasons for this controversy is the decentralized agency-centered federal funding rather than allocations along lines of business and that CIOs lack broad oversight of what's happening across governments. Moreover, CIO Councils with state and local representation are not authorized or equipped with resources to redistribute the IT appropriations to cross-servicing functions [6]. Finally, existing rules, rigid disclosure and information sharing regulations, and practices hamper the efforts toward organizing political support to prioritize the G2G mission.

Because of the competitive nature of state and local governments, the implementation and adoption of G2G enterprise architecture at these levels also involve significant political and instrumental implications. Newcombe [9] points out that the agencies and jurisdictions at state and local level fail to see much distinction in building shared-service network systems because their jurisdictions have

different priorities. Both theorists and practitioners agree that the multidimensional relationships of intergovernmental enterprise architecture affect a variety of participants and that's why leadership and professional networking are essential. Reportedly, determinants for successful effort are more likely to be collaborative but customized strategies, information policies, and long-term relationships.

Academic discourse is scarce. There are three camps: proponents of IT diffusion paradigm [e.g., 10], opponents of IT diffusion [e.g., 11], and pragmatists [e.g., 12].

Thus, in summary, the practical and academic approaches to explaining G2G policy and political phenomena reveal at least three central elements of the institutional and ideological system that are arguably incompatible with the essence of an integrated digital platform for intergovernmental collaboration. First, the vertical and horizontal integration of government information and services across agencies, departments, and governments presupposes reciprocal sharing, access, and management of information thus ignoring the division in government structure. Second, digital intergovernmental integration and collaboration may unsettle the institutional fluidity and fragmentation that balances the trade-offs between the contradictory dimensions of democracy: liberty and equality. Third, the infrastructure and enterprise architecture of G2G transcends the boundaries of the bureaucratic organization. The lack of clear limits of space and control weakens the power of politicians over the bureaucracy and affects the determinants of overall government rule: legitimacy, accountability, and representativeness [13].

Models of Public Policy

Two broad approaches -- the institutionalist and the social constructivist -- offer potential determinants for analyzing the digital G2G integration advances in terms of accommodating the trade-offs of democracy.

The Institutional Approach: Selected Substantive Models. In broad outline, the institutional approach seeks systematic order, pattern, predictability, and regularity in political systems and phenomena. Variables that account for ideological and cultural changes are either absent or considered as exogenous elements of insignificant power. The institutional approach to the formulation, diffusion, implementation, and adoption of innovative policies is illustrated by a number of policy typology, diffusion conceptual models, public choice and new-institutionalist approaches.

The structural and political implications of the G2G reform find a close analogy with the framework of Lowi [14] in interaction with the political influences expressed by particular sets of marginal variables in his matrix. Lowi's typology divides the complex public policy system into distributive, redistributive,

constituent, and regulative policies. Based on the assumption that “policy determines politics” he develops a hypothesis that the alternative political commitments of government can be understood and guided in the context of one of the policy typology systems as choices of political venue. Later work by Hwang and Gray [15] offers a typology of two policy categories: redistributive and developmental. While redistributive policy adoption is determined by political factors, the developmental policy depends on the level of economic development. Furthermore, McNeal et al. [4]) separate a category of policies leading to administrative reforms and conclude that their diffusion depends more on technical than political factors. Hence, according to the policy categorization criteria, the G2G diffusion determinants are both political and technical.

Walker [16] offers a comprehensive across-policy type diffusion models. His leader-laggard model reveals that states more prone to innovative policies are likely to be wealthier, more urbanized, and larger. He also observes that innovative initiatives spread in regional patterns and through national professional networks of officials from different government entities. In contrast, the 2004 Digital States Survey [8] findings on the recent advances toward G2G shows that the top ten states rank from small, poor, and rural (South Dakota, Utah, Tennessee) to large industrialized states (Michigan, Virginia). Neither is regional pattern observed in the ranking. According to the Center for Digital Government [8], a significant impetus for the success of the leading digital states is the leadership of their governors. Aside from political leadership, other political influences for innovation diffusion are reported to be party politics, public opinion, and voter participation [4].

The public choice approach is focused on the government as an imperfect self-perpetuating institution and an organization that is designed to fail [17,18,19]. The concept of failure leads to assumptions of symbolic rather than substantive government approach to efficiency and result oriented performance initiative. The implications of these theories reveal weaknesses inherent to our system that has political and technical implications for an integrated digitization analysis.

Another aspect of the avenue of government failure that may explain local and state opposition to integrated digitization reform is the bureaucratic pressure to preserve and grow their agencies and budgets. In government this pressure is difficult to overcome because of the multiplicity of missions and difficulty in evaluating performance, the lack of competition among bureaus, and the rigidity of civil service systems [17, p. 181]. Most importantly, the latter hampers the ability to hire and retain highly qualified employees. The implications of organizational failure to the G2G digitization issue is the huge reliance on highly qualified human capital in

the civil service. A number of theorists [4,17] emphasize professionalism and expertise in the public sector as highly significant determinants of the G2G digitization initiative.

Relevant to this research is the Weimer and Vining [17] argument that vertical and horizontal decentralization of government limit its effectiveness (p. 187). Implementation of policy issued by a high level of government depends upon cooperation by subordinate and separately governed entities with contrary views on or interests in the policy. This rationale implies that digital streamlining of government functions and applications has net benefit for the public.

Finally, the new institutionalists extend the prior focus on interactions among to multilayered formal and informal institutional arrangements to the cultural behaviors that form intercepting flows of interests, agents, agendas, and alternatives to expand the scale and scope of analysis [20]. Sabatier and Jenkins-Smith's [21] advocacy coalition frameworks (ACF) offer an alternative pattern mediated by policy brokers that involve sets of actors from different public and private venues but with common core beliefs and policy goals. Ostrom's Institutional Analysis and Development (IAD) framework [22] exceeds the ACF capacity for comprehensive and systematic analysis. It bridges assumptions about interests, formal and informal institutions, ideas, and actors into a complex set of elements and relationships at three action levels: operational, collective, and constitutional. Ostrom's framework is relevant for an integrated analysis of the government digitization policy dynamics is enhanced by its analogous hierarchical yet reciprocal direction of complex interactions between levels and among elements.

Social Constructionists. The social constructionists' perspective is based on the classical liberalist view that the central dimensions of democracy should reflect, accept, challenge, or accommodate the diversity of preferences in society. The constructed interactions between these dimensions evoke continuous political struggles and are a source of policy change toward inclusive distribution of values throughout society. This model of social well-being is linked to our unique ideology and culture and explains the use of rhetorical tools to balance the diversity of preferences in society. Stone [23] argues that its central claim is that policy politics creates common patterns of metaphoric reasoning that relieve the tension between individuals, society, and public authority. Public policy uses the paradoxes of politics to accommodate diversity not only by employing ambiguities in the interpretation of central concepts and categories. It also employs the opposite process of framing meanings in unimodal categories and images. Fundamental categories, such as equality, liberty, efficiency, security, legitimacy, loyalty, order, and justice have interchangeable functions and are

continuously constructed and destroyed to “provide an enormous range of choices in interpretation” and drive policy politics toward inclusiveness and discourse” [22, p. 38].

Social constructionists offer an alternative to the institutionalists’ argument that rhetorical patterns are constructs of the political ideology of public policy used by self-interested individuals and groups. Their alternative reveals policy politics as a communication media that creates, reproduces, and manages the paradoxes of diversity. Such media accommodates the diversity of preferences in society in two ways. First, it mobilizes bias through strategic construction of ideas, categories, and metaphoric patterns that create “loyalties and comparison of images” between policy elites and the general public [23, p.10]. Second, it provides potential for multiple interpretations and deconstructions of established categories as goals to be traded off in problem definition of agendas. Such ambiguities allow continuous shift of accepted boundaries for distributing the values in society. In this way opposing attitudes are brought together into a relatively stable dynamics of the policy process that integrates at different times the preferences of all.

Another purpose of social construction is to induce compliance in the distribution of benefits and burdens throughout society. Categorizing target populations and using policy politics tools to motivate the target to comply or benefit from the distribution helps to achieve this goal [24,25]. The definitions of worthy recipients and their level of need are also subjectively constructed worldviews and may intervene with the liberties of some while benefiting others.

Drawing on the social constructionists’ approach to policy politics, the contentious issue of intergovernmental digitization is viewed just as an ambivalent concept in a particular context of place and time. A multitude of interpretations of the G2G implications for the policy system illustrates a wide range of preferences that are bounded only by the primacy of political liberty. A dynamic balance of the trade-offs between the central democratic values expresses the latter. The fluidity of this balance is defined by the political cultures and subcultures of the governed entities [26]. For example, while some political cultures emphasize on security, legitimacy, and accountability, others put higher priority on justice, loyalty, and discretion.

3. RESEARCH PROBLEM / METHODOLOGY

The research problem is to formulate an integrated evaluation approach for the G2G policy dynamics based on the conceptual patterns offered by the discussed policy paradigms.

Our method incorporates the multitude of policy elements from these patterns into the synthesis framework of Lieberman [2]. Lieberman has critically

captured a variety of conceptual developments from the ideational and institutional schools that fail to account for changes leading to new policies or to ideological bases for political change. The author’s claim is that only a synthesis of the elements of both patterns, treated as variables of equal power, may reflect friction within and among them and explain changes in politics and policy. Friction occurs when the gap between ideas and institutions increases or when the two perspectives move into opposite directions. In contrast, when the pressures on the actors involved are complimentary, then the democratic process’s dynamics is stable.

A synthesis framework of the G2G policy dynamics includes the interaction of both institutionalist and social constructionist lenses. This interaction between the two paradigms determines the direction and magnitude of the democratic trade-offs of government rule. The institutionalist perspective focuses on a number of trade-off attributes including: legitimacy, incrementalism, security, order, economic prosperity, efficiency, representativeness, cooperation, and, accountability. The social constructionist lens seeks to legitimize the direction of G2G initiative by balancing these attributes as follows: legitimacy/loyalty; security/autonomy; representativeness/responsiveness; order/justice; economic prosperity/welfare-ism; incrementalism/reform; professionalism and knowledge/empowerment of ordinary citizens, and accountability/discretion

4. ANALYSIS / RESULTS

A comparative analysis of the G2G initiatives in the Departments of Homeland Security (DHS) and the Department of Housing and Urban Development (HUD) serves to illustrate the potential of the proposed integrated analytical framework.

A general substantive approach to the G2G initiative reveals similarities based on the shared merit of the rationale that every citizen’s chance to benefit optimally from the missions of both DHS and HUD departments depends on a balanced local, regional, and national unity. This merit underlies the capacity of the G2G to not only make governments more efficient and less costly to society, but also to promote the compromise of cooperation and collaboration. The latter two lead to the common perceptions of present and future problems that ensure the necessary framework to deal with challenges. In both policy domains the substantive approach to G2G seeks efficacy through a precise, sophisticated, and reciprocal framework for managing social wellbeing. Also, they both share a mission to preserve civil rights and liberties that can be secured and enhanced by the G2G streamline coordination of their capacity to sustain economic uncertainties or safety threats. With regard to representativeness and accountability issues, the enterprise architecture offers overlapping layers of social representation to achieve public purposes and

provides for access to information that is traditionally and often deliberately kept secret.

DHS.

In the case of DHS the successful institutionalization of G2G was legitimized by the September 11 events that increased the awareness that the fragmentation and complex spectrum of services in the absence of integrated system lead to vulnerability to externalities. Sloan [27] shows how G2G systems address not only the diversity and sophistication of police work but also the enterprises of crime and disaster that transcend political boundaries. Furthermore, G2G utilizes the best talent and equipment available through centralization of effort at an optimal cost for society and addresses the increased demand toward crime prevention. While the benefits of G2G seem undisputable, a formal structural centralization alternative would have created legitimacy issues. Instead, under circumstances of increased sensitivities toward threat and technological sophistication the perception of G2G contributes to the balance of the contradictory attributes of government rule. It simultaneously supports the image of professionalism and legitimacy of law enforcement and enhances citizens' loyalty and perhaps a perception that security provides empowering autonomy towards broader shared goals. Furthermore, G2G maintains stable balance between the order and justice trade-off because by facilitating the law enforcement mission it distributes justice more equitably on a nationwide scale - the target population is the American nation. Finally, the technological advancements create new capacities for interface with communities that reduce potential friction and social unrest and preclude the necessity of incrementalism in the reform.

HUD.

The mission of HUD to ameliorate social inequalities and oversee the protection of civil rights in housing has equally attractive political connotations. However, G2G implementation has been lagging behind Homeland security. The introduction of government e-portals in HUD has enhanced its mission through empowering low-income communities. Also, the early stages of e-government have provided local jurisdictions and community level organizations with the discretion to use the ICT professional tools in response to local needs, and influence federal policy decisions. Participatory systems, provided by GIS and other platforms, have enhanced the control of local advocacy groups over information and knowledge to influence federal mandates according to local conditions [28]. E-government has been a significant tool in allocating low-income families and creating optimal environment and supportive services towards their economic independence [29]. Finally, information technologies have allowed customized approach to the common mission of HUD according to the specifics of local culture, problems, and preferences [30]. The e-government capacities have also enhanced the allocation of procedural and fiscal

resources for protection of the civil rights of low-income families and minorities, tracing violations, and seeking remedies for the affected citizens.

The HUD e-government reform has not reached beyond the e-portals. At the federal level, the incremental and wavering advances of the G2G reform in HUD are grounded in the shifting political strategies between competing jurisdictions and categories of targeted populations. At local level, the competitive nature of state and local governments also involves significant political and instrumental implications. Because of the specific environment in each jurisdiction, the decision-makers fail to see the benefit in building shared-service network systems because their priorities are limited to the interest of the communities they serve. The great variety of participating jurisdictional, business, and public interests in HUD policies raises the classical paradox of fair distribution that creates and destroys value to accommodate diversity. Therefore, the trade-offs that determine the direction and magnitude of the reform in HUD are shifting within a very large range of more or less fragmented interests and pressures. Thus, the balance of accommodating legitimacy and loyalty of more or less influential parties through the G2G initiative is a continuous and incremental process. The incrementalism minimizes friction between and within political and economic interests and simultaneously symbolizes a democratic transformation toward advanced form of managing social interactions, where government is not the exclusive power actor.

5. CONCLUSIONS AND SPECULATIONS

An integrated evaluation approach for the G2G policy dynamics based on the conceptual patterns of the institutionalist and social constructionist policy paradigms is formulated. We employed the synthesis framework of Lieberman to evaluate the G2G initiative. The interactions between the two paradigms indicated the direction and magnitude of the democratic trade-offs. The comparative analysis of the in DHS and HUD served to illustrate the potential of the proposed framework. The analysis illustrated that the stable advances of G2G in DHS had been warranted by the perception of equalitarian distribution of optimal benefits for the parties in the reform. In contrast, the *laggard* model of incrementalism in the case of HUD minimized friction between the variety of economic and political interests and pressures involved.

The rationale of the analysis leads to the speculation that informal approaches to *bottom up* integration through inter-local instrumental and political arrangements have the potential to facilitate the G2G implementation in the public sector. Future empirical research should focus on innovative venues of building up informal and formal collaborative relationships within and between the dimensions of the integrated framework. The suggested more

egalitarian distribution of values at a lower cost to society through G2G integration should be balanced by retaining strong local communities.

6. REFERENCES

- [1] M. Carr, "IT doesn't matter: Information technology changing role in business," **Harvard Business Review**, 81(5), 41-50, 2003.
- [2] R. Lieberman, "Ideas, institutions and political order: Explaining political change," **American Political Science Review**, 96:40, 697-712, 2002.
- [3] D. Osborne and T. Gaebler, **Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector**, Reading, MA: Addison-Wesley, 1992.
- [4] R. McNeal et al., "Innovating in digital government in the American states," **Social Science Quarterly**, 84(1), 52-71, 2003.
- [5] K. Layne and J. Lee, "Developing fully functional e-government: A four stage model," **Government Information Quarterly**, 18(2), 122-136, 2001.
- [6] R. Atkinson, "What's next?" **Technology Leadership in the Public Sector: Government CIO**, Available at <http://www.public-cio.com/story.php?id=2005.01.31-92922>, 2005.
- [7] D. McClure, D. "IT management is improving," **Government Computer News**, 21(33), 25, 2002.
- [8] Center for Digital Government, **2004 Digital State Survey**, www.centerdigitalgov.com, 2005.
- [9] T. Newcombe, "Establishing frameworks: What's the best model for good IT governance in government?" **Technology Leadership in the Public Sector: Government CIO**. <http://www.public-cio.com/story.php?id=2005.01.31-92923>, 2005.
- [10] J. Naisbitt, **The Global Paradox: The bigger the world economy, the more powerful its smallest players**. New York, NY: Avon Books, 1994
- [11] C. Stoll, **Silicon Snake Oil: Second thoughts on the information highway**. NY: Doubleday, 1995.
- [12] S. Graham and S. Marvin, **Telecommunications and the City: Electronic spaces, urban places**. London, UK: Routledge, 1996.
- [13] D. Wood, and R. Waterman, **Bureaucratic Dynamics**, Boulder, CO: Westview Press, 1994.
- [14] T. Lowi, "Four systems of policy, politics, and choice," **Public Administration Review**, 32(4), 298-310, 1972.
- [15] S. Hwang and V. Gray, "External limits and Internal determinants of state public policy," **Western Political Quarterly**, 44, 277-299, 1991.
- [16] J. Walker, "The diffusion of innovations among the American states," **The American Political Science Review**, 63 (3), 880-899, 1969.
- [17] D. Weimer and A. Vining. **Policy Analysis: Concepts and Practice** (4th ed.), Upper Saddle River, NJ: Pearson Prentice Hall, 2005.
- [18] T. Moe, "Politics and the theory of organization," **The Journal of Law, Economics, and Organization**, 7(sp), 106-128, 1991.
- [19] J. Buchanan and G. Tulloch, **The Calculus of Consent: Logical foundations of a constitutional democracy**, Ann Arbor, MI: University of Michigan Press, 1962.
- [20] J. Kingdon, **Agendas, Alternatives, and Public Policies** (2nd ed), New York: Harper Collins, College Publishers, 1995.
- [21] Sabatier, A. & Jenkins-Smith, H. **Policy change and learning: An advocacy coalition approach**, Boulder, CO: Westview Press, 1993.
- [22] E. Ostrom, **Governing the Commons: The evolution of institutions for collective action**, New York: Cambridge University Press, 1990.
- [23] D. Stone, **Policy Paradox: The art of political decision-making**, NY: Norton & Co, 2002.
- [24] A. Schneider and H. Ingram, "The social construction of target populations: Implications for politics and policy," **American Political Science Review**, 87, 334-347, 1993.
- [25] M. Donovan, "Social construction of people with AIDS: Target populations and United States policy 1981-1990," **Policy Studies Review**, 12(3/4), 3-29, 1993.
- [26] J. Lieske, "Regional subcultures in the United States," **The Journal of Politics**, 55, 888-913, 1993.
- [27] S. Sloan, "Responding to the Threat," **Low Intensity Conflict and Law Enforcement**, 11(2/3), 164-170, 2002.
- [28] L. Ramasubramanian, "Knowledge production and use in community building organizations," **Citiscap**, 7(1), 165, 2004.
- [29] S. Clampet-Lundquist, "Moving over or moving up?" **Citiscap**, 7(1), 57, 2004.
- [30] M. Sidney, "The struggle for housing equality: Impact of fair housing and community reinvestment laws on local advocacy," **Citiscap**, 7(1), 133, 2004.