Policymaking in the Age of Internet: Is the Internet Tending to Make Policy Networks More or Less Inclusive?

R. Karl Rethemeyer
University at Albany, State University of New York

ABSTRACT

Although many policy and political scientists have studied the Internet’s role in electoral and organizational processes, there is little work that examines the Internet’s effect on policy processes. Has the Internet tended to make policy deliberations more inclusive? Has it affected patterns of influence reputation among network participants? Has the Internet helped to bring new organizations into policy debates? This study provides preliminary answers to these questions. Treating policy networks as a type of interorganizational network, a “socialized” resource dependence framework is developed. Deployment of the Internet is conceptualized as an exogenous shock, where the shock alters the material resource base of a policy network and allows actors inside and outside the network to challenge structural power holders. Structural power holders attempt to “mold” use of the Internet to protect their position and its perquisites.

To test this framework data were collected from two policy networks in “Newstata”—one focused on adult basic education policy and the other on mental health policy. Both policy networks appear to have become more exclusive since the deployment of the Internet. Electronic central discussion networks (or “cores”) were primarily populated by actors who were already entrenched in positions of structural power within the network and possessed very high influence ratings. Most Internet communication occurs between members of the electronic core. At least preliminarily, the Internet appears to reinforce existing patterns of authority and influence.

INTRODUCTION

Probably no innovation in recent memory has captured the public’s imagination like the Internet and related forms of information technology. In the field of politics and policy, the Internet makes possible unprecedented levels of political and policy communication between and among public officials and the organizations and citizens they represent, serve, and regulate. Although many scholars have studied the Internet’s role in elections, interest

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organizations, and “social movements,” there is little work that examines the Internet’s effect on policy processes: that is, the methods by which policies are discussed, debated, evaluated, and eventually made. In essence, the Internet’s impact on the political and interorganizational context of public management has gone largely unstudied, even as the field has grappled with the operational implication of computing, e-government, and e-democracy. This study attempts to fill the gap by addressing the following questions:

- Has the Internet led to the inclusion of new organizations in deliberative policy processes?
- Has the Internet generated patterns of communication among existing members of networks that are demonstrably more open and inclusive or closed and exclusive than coexisting patterns of nonelectronic communication?
- Is the use of the Internet for mobilization of external constituencies correlated with patterns of communication or influence reputation scores of “incumbent” network members?

The first section of this article introduces a policy network framework that provides a theoretical basis for understanding the Internet’s role in the policy process. The second reviews the case selection and data collection methods. The third presents findings from two network-analytic case studies—one focused on adult basic education policy and the other on mental health policy. The last section reviews some implications of this study.

CONCEPTUALIZING THE “INTERNET EFFECT” IN POLICY NETWORKS

The Internet as a Focus of Study

Since becoming part of the popular imagination, the Internet has been the subject of numerous studies across a broad range of disciplines. However, scholars who study the Internet’s impact on politics and policymaking have largely focused on its use in elections or for “grassroots” organizing by interest groups, “social movement organizations,” and “civil society”; they have had little to say about policy or policymaking (see Bonachek 1995; Conte 1995; Dutton, Elberse, and Hale 1999; Friedland 1996; Gates 1995; Grossman 1995; Lewis 1998; Simmons 1998; Thakur and Maley 1999; see also Kohut 2000). Although the initial optimism about the Internet’s “democratizing” effects has been tempered (see Anderson 2000; Davis 1999; and Margolis and Resnick 2000), many “Internet optimists” still expect the Internet to broaden participation in the policy process solely by changing how elections are fought and individuals are organized. What these analyses often lack is any specific model of the policy process.

Although there are at least three process models that have gained currency in recent years, an increasingly large and varied body of work has focused on policy networks. The more recent use of this concept has its roots in a variety of literatures, including those on “subgovernments” (McCool 1989, 1990), “policy subsystems” (Baumgartner and Jones 1993; Freeman 1965; Sabatier and Jenkins-Smith 1993), and “policy domains” (Burstein 1991; Laumann and Knoke 1987). Policy networks are sets of public agencies, legislative offices, and private sector organizations (including interests groups, corporations, nonprofits, and so forth) that have an interest in public decisions within a particular area of policy (for example, adult basic education, mental health, energy, or the environment) because they are interdependent and thus have a “shared fate” (Hanf and Scharf 1978;
Public decisions affect the ability of all member organizations to continue operations and meet the expectations of internal and external stakeholders (Cyert and March 1963). Such organizations constitute a “network” because they communicate intensively on issues about which they care and must exchange money, political support, and other “resources” to maintain operations and influence public decisions (Pfeffer 1987; Pfeffer and Salancik 1978).

The Internet as a Factor in Systems of Resource Dependence

Just as Internet scholars have failed to conceptualize policy processes adequately, policy network scholars have yet to consider fully the impact of the Internet. Unfortunately, most policy network frameworks tend to be static rather than dynamic (for a discussion of this issue, see Klijn 1996; for a recent counterexample, see Raab 2002) and thus are poorly suited to incorporate an “Internet effect.”

Sociologists have increasingly focused on the complexities of managing interorganizational networks, that is, economic and social enterprises where there are multiple centers of independent yet interdependent power involved. However, this literature is itself somewhat underdeveloped with respect to the Internet. Although many theorists have attempted to explain the effect of product or process technologies on interorganizational networks (see, for instance, Gulati 1998; Gulati and Singh 1998; Holland and Lockett 1997; and Powell, Koput, and Smith-Doerr 1996), few (if any) have tried to study how nonproduct, nonprocess technologies (what might be termed “operations technologies”) like the Internet affect interorganizational phenomena.

Resource dependence theory (RDT) has long provided the primary conceptual framework for studying both interorganizational and policy networks, yet RDT is also deficient. Most RDT-inspired conceptualizations of the policy process account for resource endowments, but few attend to a critical differentiation within the concept. In any policy network there are two broad types of resources that may be converted into influence. The first I label “material-institutional resources” (MIRs): the set of financial, political, human, informational, and institutional things and conditions that organizations may deploy in support of their preferred political positions and policy options. MIRs include money, employees, technical and experiential knowledge in substantive areas, state-sanctioned authority, political constituencies, and nonstate sources of funding. As this suggests, some MIRs are inherent in the larger institutional structure (that is, the governing constitutional and statutory framework). MIR endowments are critical to the exercise of power within a policy network; they create differentials in power that help to explain who gets what and why.

Most popular treatments of the Internet and politics focus on the Internet’s ability to alter an organization’s “effective” MIR endowment through what I term “resource creating, enhancing, and diminishing processes.”¹ The Internet may change the value of some or all MIRs. For instance, an organization’s political advocacy budget may go much further if it can use e-mail instead of telephone banks to organize a political rally. The deployment of the Internet constitutes an exogenous “shock” to a system of policymaking through its

¹ Compare Tushman and Anderson’s (1986) discussion of “competence enhancing” and “competence destroying” technical change and Giddens’s (1986, 174) discussion of technology’s transformation of structure.
effect on MIR endowments. If the shock affects all organizations equally, then nothing would change. If the Internet tends to advantage some members and/or nonmembers over others, then new patterns of exchange and influence may emerge. This is the standard technology-induced change story that stretches back to at least contingency theory in organizational sociology (Lawrence and Lorsch 1969).

However, to view the Internet as inexorably changing policy networks is to fall into a crude form of technical determinism that has been thoroughly discredited. If we accept that policy is made by networks of public and private organizations, then to understand the Internet’s impact we must consider both the ways in which the Internet may affect such networks and how the networks themselves may change how the Internet is used. Technology may “bend” existing social and governmental processes, but technology is itself bent to fit the preexisting power structure and “way things are done.”

What force could blunt the Internet’s effect? There is a second type of resource—what I term “social structural resources” (SSRs)—that may play a part in policymaking. SSRs may upset the linear causal structure implied in the standard “tech change” story. Yet to understand the role of SSRs we must first examine what part social structure plays in policymaking.

“Socializing” Resource Dependence

“Social structure” refers to a persistent pattern of communication and resource exchange between three or more “actors”—in this case, organizations. This perspective assumes that patterns of communication and resource exchange are not random and not easily changed. Such patterns are created and persist because they generate a sufficient return to those who create and maintain them.

Social structure implies several concepts that need greater elaboration. First, “ties” constitute regular communication and resource exchange relationships between two organizations. Ties raise the probability that a communication or exchange attempt will generate the desired results because ties help to foster knowledge, trust, and flows of mutual obligations—a “gift” economy (Bell 1991; Carrier 1991; Mauss 1990). Resource exchange cannot occur without communication. Ties are an investment good (Coleman 1988), where the inputs are other resources, including facilitating ties (i.e., relations with others who can create a connection), money, personnel, and time (Burt 1992). The set of ties between a group of organizations constitutes the social structure.

Second, once established, ties become resources that owners may exploit and others may seek to control. One way to exploit ties is to use them to gain a coveted role in the network. For instance, industry or peak association leaders may gain their role because they have a preexisting relationship with public officials.

Third, within any pattern of interorganizational relations a pattern of relations usually emerges that may be described as a “role structure.” A social role (also called a network

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2 This perspective is similar to Sabatier and Jenkins-Smith’s (1993) notion of “dynamic system events” that originate outside the system. Their “shocks” affect consensus on policy ideas, not resource endowments.

3 This insight draws on technology “enactment” theory (see Fountain 1996, 2001) but has a deeper antecedent in the work of Kenneth Kramer and John King on public sector computing (see Kraemer, Dutton, and Northrop 1981; Kraemer and King 1986; and Kraemer et al. 1989). Both streams of thought put more emphasis on understanding the causal arrow that leads from structure back to technology.
“position”) consists of patterned ties to members of a network and the expectations, customs, and norms that help to guide behavior between role holders.

Role “assignments” may emerge via two processes. First, a role may be assigned to certain actors through coalition processes. If some set of actors has relatively similar dependence relationships in a network, members may use simple elective or rotational rules to assign a role. The role may be constituted formally or informally, depending on whether the coalition assumes a formal structure.

Alternately, roles may be assigned to constrain the actions of relatively powerful actors (Emerson 1962). Status-granting occurs when members of a network decide to confer a title and set of privileges on one actor, with the proviso that the network may decide to revoke the title and privileges if the grantee fails to meet the membership’s expectations. Status-granting is usually strategic. Salancik and Pfeffer’s organizational work assumes power and roles are assigned to individuals controlling “strategic” or “critical” contingencies (Pfeffer and Salancik 1978; Salancik and Pfeffer 1977). Similar status-granting processes may operate interorganizationally. For instance, a coalition of mental health advocacy groups may choose to name the largest and best-funded group to speak for all. By so doing, the members may hope to create a “hostage”: the well-funded group will lose the ability to speak for all if its actions fail to account for the interests of other advocates.

Role holding is usually correlated with formal or informal grants of authority. Authority is often expressed in terms of communication relationships. As Barley (relying on Nadel) pointed out, roles are composites of resources and relationships (Barley 1990; Nadel 1957). Since knowledge is such a vital resource in policy discussions, certain types of role holders are often given differential rights to communicate on behalf of others, creating “brokerage” roles.

Brokerage exists when one actor provides the shortest (or only) communication channel between two or more actors. Because material flows must have corresponding communication flows, controlling communication between parties can greatly affect the nature, quality, and distribution of MIR flows (see Knoke et al. 1996, especially the diagram at p. 106). Brokerage may also result from status-granting within an industry. An example would be making one company the “lead” negotiator for labor contracts for the entire industry. In any event, brokerage positions are valuable structural resources that are affected by advances in communication technologies.

Thus, communication ties are created for three purposes: to maintain and coordinate resource flows, to reduce uncertainty (through information gathering and evaluation), and to fulfill roles. To elaborate on the final purpose, an industry or peak association leader (for instance) is usually expected to have strong ties to both private and public decision makers. Role holders are often given resources to facilitate creation of a tie structure commensurate with their role. For example, the American Petroleum Institute (API) collects dues from its member companies with the expectation that API will maintain relationships with key public decision makers, its members, and other organizations (such as environmentalists, car makers, transportations companies, and so forth) that have an interest in this area of policy in order to help oil companies cope with their dependence on national energy policies. Ties are not formed solely to move material resources but also to cope with the

4 See also Knoke et al. 1996 for a similar argument.
5 Compare Oliver’s (1990) discussion of determinants of interorganizational relationship formation.
effects of interdependence. Tie structures are an outcome rather than a mirror-image re-
fection of MIR dependencies.

Social structure emerges as an efficiency device, allowing actors to create an intra-
network division of labor. Social structure also creates survival advantages for member
organizations and the network as a whole. Finally, structure helps absorb uncertainty,
creating a “negotiated environment” for organizations (Pfeffer and Salancik 1978).

However, in the face of technical change, social structure may also serve to entrench
those who have advantageous roles. In the organizational literature, Pfeffer and Salancik
(1978) show that role holders use their SSRs to maintain their positions, even when de-
mand for their MIRs has declined. For instance, brokerage roles often endow incumbents
with control over normative processes (like writing internal rulebooks), information (often
through access to those with knowledge), and/or financial flows (such as final approval of
personnel decisions or membership on a grant review board). Using SSRs, organizations
can attempt to influence how the Internet is used within their network.6

For this last reason, role holders have a vested interest in the reproduction and
maintenance of the network and its structure. Ordinarily, SSRs accrue to those who possess
valued MIRs.7 In equilibrium, the two sources of power and influence reinforce one
another. New forms of information technology, like the Internet, may upset a network’s
equilibrium.

**Pulling the Thread Together**

Using the framework developed above, it is now possible to disentangle the effects of the
Internet from other factors that also influence resource endowments. The Internet’s de-
ployment was a shock to existing systems of policymaking. There are at least three possible
hypotheses suggested by the preceding analysis.

\[ H_1 \quad \text{Greater inclusiveness.} \]

Through MIR creating, enhancing, and diminishing effects, the “Internet shock” may
alter the correlation between MIRs and SSRs, creating conflict between organizations
newly endowed with MIRs and those who hold preexisting SSRs. The Internet may help
resource-constrained organizations leverage financial and human resources such that par-
ticipation becomes feasible when it was not before. Of particular interest are the ways in
which e-mail, Listservs, and Web sites reduce the costs of mobilizing individuals and
organizations outside for political action. This is an example of the Internet altering the
external dynamics of the network, creating the potential for change in the internal structure
thereof. By spanning distance and time, providing points where previously unaffiliated but
“interest-aligned” individuals and organizations can meet (sometimes called “Schelling
(1978) points”), and reducing the cost of bulk communication, the Internet may advantage
the grassroots and community organizations that many social movement scholars suggest
will benefit from the Internet (see Bonchek 1996; Minkoff 1997).

\[ H_2 \quad \text{Stalemate.} \]

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6 For a related discussion, see DiMaggio’s (1988) work on agency, interests, and institutions.
7 Compare Benson (1975) on social superstructures in “interorganizational political economies.”
A second possibility is a standoff between the recently empowered and the “old guard.” Organizations whose MIRs become devalued by the Internet do not sit idly by. For those who possess SSRs, their first recourse is to use their position to protect themselves (for example, using a seat on a grant review panel to interrupt the flow of money to an “upstart”). At minimum, incumbents will seek to “channel” use of the Internet to their advantage, even if they cannot completely blunt its impact.

H₃ Greater exclusivity.

It is not self-evident that the Internet will help “outsiders.” A final possibility is that the Internet may tend to entrench the powerful. Incumbents—but especially brokers—may be substantially advantaged by the Internet. The new technology may tend to enhance financial advantages by further reducing the costs of mobilization and political action, freeing money for intensification of these efforts or for new initiatives. Incumbents are more likely to have large constituencies outside the network that could be mobilized via the Internet; they also have connections inside the network that are cheaper and easier to maintain using e-mail. The Internet may make leveraging these forms of social capital less expensive. Moreover, organizations with large MIR endowments are likely to have the material and technical wherewithal to field better Web sites and mobilization tools than outsiders. If the Internet advantages incumbents, participation by nonmembers may appear futile in the absence of momentous social, political, or policy upheavals.

The net impact of the Internet, then, will depend on the interplay of technology, MIRs, and SSRs.

DEVELOPING A RESEARCH DATABASE

To test this framework, I developed two case studies—one on adult basic education policy and a second on mental health policy. For the purposes of this study, I define adult basic education policy as those decisions that affect the funding or regulation of organizations that provide educational services to individuals sixteen years of age or older who are seeking (1) to raise their reading, writing, or computations skills to a secondary school level; (2) to attain their General Educational Development (GED) credential; (3) to gain life, job, or computer skills; or (4) to raise the overall level of literacy in their families (U.S. Congress, Office of Technology Assessment 1993). I define mental health policy as policies that affect the quality and quantity of services available from public and private sector sources to children and adults who have severe mental disorders that interfere with some area of social functioning (U.S. Department of Health and Human Services 1999).

Network Selection

These networks were selected because they were differentiated along several important comparative dimensions. First, the level of financial resources at stake in the mental health (MH) network is much greater than in the adult basic education (ABE) network. Second, the degree of private sector dependence on state outlays is much greater in the ABE network than in the MH network. Finally, the MH network is highly organized politically, with representatives from user communities, families of service users, providers, and subunits from the state legislature (table 1). The ABE network is far less complex. There
are only five types of actors in the network (table 2), though even these categories could be collapsed to two: those that control state funding and those that are seeking it.

**State Selection**

Both policy networks were located in a state I have given the pseudonym “Newstatia.” Newstatia has offered services to adult basic learners and the mentally ill for over a century. Newstatia ranks in the second-highest quintile in terms of total mentally ill patients served and the top quintile in terms of total and per capita state spending on the mentally ill. Although it ranks in the middle quintile with respect to student dropouts, Newstatia ranks in the top quintile in immigrant population per capita, per learner expenditures, and total expenditures for adult basic education. Newstatia has more than ten cities with a population of fifty thousand, many of which are more than fifty miles from the capital. State-operated mental health facilities are also distributed around the state.

**Data Collection**

Five types of data were collected: (1) network data on the nature, type, and direction of communication and resource exchange between members of a policy network, including estimates of communication frequency (using Likert scales); (2) compositional data on the network members (organizational budget, workforce size, and so forth); (3) observational data on technology use (in order to determine what capabilities are available in situ); (4) survey data from informants in each organization on their attitudes toward technology use for political and policy purposes; and (5) interview data from free-form discussions with one or more informants in member organizations in order to probe their attitudes toward

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Table 1

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<thead>
<tr>
<th>Description</th>
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<tr>
<td>Client or family advocacy organizations</td>
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<tr>
<td>State agencies</td>
<td>6</td>
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<tr>
<td>Industry associations</td>
<td>3</td>
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<tr>
<td>Insurers</td>
<td>3</td>
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<td>Legal advocates</td>
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<td>Legislative committees</td>
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<td>Legislators</td>
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<td>Newspapers</td>
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<td>Professional associations/unioms</td>
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<td>Providers</td>
<td>1</td>
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<td>Researchers/research teams</td>
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*Note: These numbers do not total 40, as two legal advocates are also government agencies.*
and use of the Internet for political and policy purposes. The goal was to test the observable implications of the theoretical framework and to induce refinements of the framework that may be tested in subsequent studies.

Data were collected in two phases. The first was a three-step “network specification” using what Laumann, Marsden, and Prensky (1989) term a “realist” perspective: the use of network informants to identify the members rather than a researcher-defined criterion (the “nominalist” approach). I began by compiling a “naive” universe of potential network members based on searches of the Internet and review of recent newspaper reports on policy issues in both substantive domains. Using knowledge gained during this scan, I then recruited three informants from “presumptive” members of the networks to make additions to the naive list. Next, I recruited seven presumptive members of the ABE network and nine presumptive members of the MH network to rate the members of the master lists in terms of their influence over policy. Finally, during each interview the informant was asked if any organizations were omitted from the list. This process yielded consensus network specifications in both cases, with twenty-eight actors in the ABE network and forty actors in the MH network.9

The second phase involved semistructured interviews with the network members. For this phase, I developed and field-tested a data collection instrument using the questions and methods found in Laumann and Knoke (1987) as a template. The instrument was presented to seven ABE and six MH organizations in a neighboring state for field-testing. The testers were drawn from organizations of the type I expected to be in the populations. The “base” instrument’s language and structure were then revised to make it more sensitive to each case’s context.10 The instrument was used to collect the network, compositional, and survey data.

To elaborate on the network data collection, I gathered data on two types of communication—routine and confidential—in two modes—non-Internet and Internet. The distinction between routine and confidential communication has been used in several policy

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<td>Legislators</td>
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<td>State-funded service providers</td>
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<td>Community-based organizations</td>
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<td>Community colleges</td>
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<td>Municipal agencies</td>
<td>3</td>
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<td>School districts</td>
<td>2</td>
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<tr>
<td>Union</td>
<td>1</td>
</tr>
<tr>
<td>State-funded technical assistance units</td>
<td>3</td>
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9 Because no potential “excluded” organization received nominations from more than 15 percent of the “included” organizations, the phase one network specification was retained throughout.
network studies (most recently, Raab 2002). Routine communication is used primarily to scan the environment to collect what Laumann and Knoke (1987) term “neutral intelligence.” Confidential communication is used both to discuss distribution and allocation of resources and to establish meaning. Confidential communication usually contains sensitive, high-value political and policy material. Non-Internet communication occurs on the telephone, during meetings, via fax, or by paper mail. Internet communication occurs by e-mail, audioconferencing or videoconferencing, instant messaging, Listservs, or bulletin boards.

Communication data were collected using roster methods. Informants were presented four “grids” that contained the name and contact person for the organizations identified during phase one. The four grids corresponded to the two-by-two matrix of communication types and modes. For each grid, informants were asked (1) whether they or others in their organization communicated with the listed organizations using the type and mode of communication listed at the top of the grid; (2) whether the communication was generally initiated by their organization, the listed organization, or both; and (3) what the monthly frequency of communication was on average, using a zero to seven scale that was anchored to cues for the number of contact per month—for instance, “0,” “1,” “1–2,” “2–3,” and so on.

To measure influence reputation, each informant was asked to rate the “policy influence” of each member of the roster on a scale of zero to seven.

Eighty-three interviews with 149 informants were conducted across the cases. Most informants were chief executive or chief operating officers for their organizations; some were community or government relations specialists. For large organizations I sought to interview more than one informant in order to get a more complete description of the organization’s communication with other members of their respective networks. In those cases, data were aggregated or averaged, depending on the measure in question. The ABE data were collected February–May 1998; the MH data were collected June–December 2001. Twenty-three of twenty-six “active” nodes in the ABE network participated; thirty-nine of forty MH nodes participated. In both cases, data for 99 percent of the possible dyads were collected from at least one member thereof. For most network measures, I have retained the directed, valued network data. If symmetric data were required, I coded a tie as existing if one member of the dyad reported a relationship. I have not dichotomized the data (that is, converted frequencies into a “1” if any communication existed and a “0” otherwise) unless the technique required it.

The network members are reciprocally recognized as important “players” in policymaking in their respective domains. They tend to deploy their own political, structural, and material resources to promote their legislative and administrative agendas. Most are in weekly to daily communication with one another regarding policy in their substantive networks. Some share political, material, and structural resources to further their causes. In the ABE network, the members are split between those who seek state funding and those who control it, with the bulk of the network members being educational providers. The MH network is more heterogeneous, with only a few provider voices but more extensive representation from client populations.

11 The interviews established conclusively that two members of the original ABE specification were “social isolates” and thus not relevant to the analysis. However, because all twenty-eight organizations were included in the instrument, data for all is presented.
FINDINGS AND ANALYSIS

With respect to both the adult basic education and mental health networks, the balance of factors seems to mitigate toward less inclusiveness since the Internet became widely available, per hypothesis 3. The evidence is as follows.

Finding 1 The Internet has not broadened participation.

Archival research and interview data indicated that both networks experienced no entry that could be traced to the Internet. Informants identified three members of the ABE network and six members of the MH network that became “active” over the thirty-six months preceding the interview. With the exception of two legislators who had joined the MH network when their committee assignments changed, none of the entrants were new to their networks. Two ABE organizations increased their participation for bureaucratic and political reasons; the third in order to assure that its organization got a larger slice of an expanding financial pie. The six MH organizations became more active because of improved management, shifting editorial priorities at a newspaper, or changing legislative assignments. Four of the six MH entrants have been players in the network for at least five years; the other two are newly minted chairs of legislative committees.12 Most informants described their respective networks as (in the words of one informant) “nearly fossilized” over the last ten to fifteen years.

Finding 2 The Internet is not being used to create new relationships within the network.

If the Internet has not changed the number of organizations that are involved in the networks, it may have changed the number of communication relationships among existing members. For instance, members located outside the capital or major metropolitan areas could have used the Internet to discuss policy issues with members who are too distant to interact face-to-face. To address this question, I turned to the data on communication.

It turns out that virtually no “Internet-only” communication relationships exist in these networks. Less than 1 percent of all relationships (routine and confidential) in the ABE network and about 1.2 percent of all relationships in the MH network rely solely on the Internet. The Internet is used to “multiplex” relationships (that is, to provide more than one means of communication between two actors), but it does not create new relationships. With virtually no exceptions, organizations reported that their Internet communication partners were drawn strictly from the circle of interlocutors that existed before they began using the Internet. Interview data suggest that those Internet-only relationships that do exist were almost certainly built upon preexisting face-to-face relationships. Even the replication of communication relationships on the Internet is far from complete. About 70 percent of all MH relationships and nearly 80 percent of all ABE relationships are carried on without using the Internet, despite the fact that all network members had computers and Internet access. Findings 1 and 2 militate against hypothesis 1 and the assumption of inclusion, but they do not rule out hypothesis 2 or necessarily support hypothesis 3.

12 There appears to be a relatively fixed number of legislative “seats” in the MH network that are occupied by key committee chairs. The chairs appear to be powers unto themselves, separate from their committees. The committees are involved through the actions of staff members, who often remain through several chairs.
Finding 3 The primary users of the Internet are those network members who are highly influential and well positioned structurally.

If members of both policy networks communicate primarily offline, then who is using the Internet? To explore this question and the social structure of these networks, an analysis was conducted to see if a core-periphery structure existed, as is often the case in local and national policy networks (see Knoke et al. 1996; Laumann and Knoke 1987; and Laumann and Pappi 1976; and compare Heinz et al. 1990 for their concept of the “hollow core”). A core-periphery structure is said to exist when there is a subset of network members who are highly interconnected but have few ties to the remainder of the network. In statistical terms, the network-analytic concept of “K-cores” can be used to find core-periphery structures. A K-core is defined by specifying the minimum internal “degree” (number of connections) for subgroup membership. All members of a K-core must have at least K connections to other members of the subgroup (Wasserman and Faust 1994). Using the UCINET software package, it was possible to identify core-periphery structures in both non-Internet and Internet communication. The “Internet cores” in both the networks had several common features (table 3):

- All members of the Internet cores were drawn from the coexisting, non-Internet cores.
- The average influence rating for the cores was greater than for the network or for the periphery ($p < .05$ for all measures; one-tailed $t$-test).
- The confidential Internet core in the ABE case had the highest influence rating across all cores (all differences $p < .05$; one-tailed $t$-test).
- The confidential Internet core of the MH case also had the highest influence rating across all cores, but the $p$-value is higher (all differences $p < .14$; one-tailed $t$-test).
- More than 80 percent of all Internet-based communication originated within or was targeted at the cores.

Do the members of these cores—but especially the Internet cores—have particularly important structural positions? To answer this question I conducted a structural

| Table 3 |
|---|---|---|---|
| | **Mental Health** | | **Adult Basic Education** |
| | **Average Influence** | **Influence in Summed Deviations** | **Average Influence** | **Influence in Summed Deviations** |
| Network | 3.09 | 0.00 | 2.88 | 0.00 |
| Routine, nonelectronic core | 3.48 | 6.56 | 2.83 | -0.92 |
| Routine, electronic core | 3.64 | 9.49 | 3.49 | 6.20 |
| Confidential, nonelectronic core | 3.51 | 6.98 | 3.14 | 2.49 |
| Confidential, electronic core | 4.06 | 16.97 | 4.29 | 14.68 |

Note: Deviations were used to “purge” each respondent’s tendency to “anchor” as a high or low influence rater. Deviations were calculated by subtracting each informant’s average influence score from each of his or her responses and dividing by the standard deviation of his or her responses, converting each response to a measure analogous to a Z-score. For member of the network, the respondent deviations were then summed. This measure is centered on 0.00 for the entire network and may take a negative value if the respondent is generally rated to have below average influence. The negative value for the adult basic education routine, nonelectronic core indicates that members of this core have below average influence ratings. Their participation in the routine nonelectronic core may reflect their lack of access to other forms of information about policy matters in the networks.
equivalence analysis using the CONCOR routine in order to map the members of the cores onto the brokerage structure in the network. Structurally equivalent actors have similar patterns of ties within the network; for this reason, the actors may be aggregated into “positions,” which are similarly connected groups of actors. It is often easier to analyze the pattern of communications between positions than between individual actors. Tables 4 and 5 describe these positions; figures 1 and 2 present the positional analysis for the ABE and MH networks, respectively.

Turning first to the ABE analysis, there are eleven members of the confidential, non-Internet core. All but one of the core members is contained in one of the “brokerage” positions in non-Internet, confidential communication—positions B, C, E, and H. Position H is particularly critical because positions J and K contain the key legislators in ABE policy. The Internet core has five members, all drawn from the confidential, non-Internet core. Of the “Internet five,” three are members of position H (the Division of Adult Basic Education [DABE], the industry association, and a rural provider); one each is in position B (a technical support organization) and position E (a large English as a second language [ESL] provider).

Legislators play a prominent role in the ABE network through relations of financial dependence. All private actors rely on state coffers for at least 60 percent of their budget.

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Members</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, C, D, F</td>
<td>11</td>
<td>Urban programs and support organizations (including a union)</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>Rural interest, community college interests, contractor</td>
</tr>
<tr>
<td>G</td>
<td>3</td>
<td>Welfare-oriented agencies and urban program focused on welfare support</td>
</tr>
<tr>
<td>H</td>
<td>5</td>
<td>Brokers—industry association, state division of adult education, largest municipal program, largest school-based program, largest urban community-based organization</td>
</tr>
<tr>
<td>I</td>
<td>3</td>
<td>Isolates—state board of education, state library agency, municipal provider</td>
</tr>
<tr>
<td>J</td>
<td>1</td>
<td>Legislative activist</td>
</tr>
<tr>
<td>K</td>
<td>2</td>
<td>Key legislative committee chairs</td>
</tr>
</tbody>
</table>

Table 4
Positions in Non-Internet Communication in the Adult Basic Education Network

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Members</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>Mixed—University-based research group, health advocacy group, social professional organization</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Insurers (isolates)</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Newspapers, child and family advocates, provider group</td>
</tr>
<tr>
<td>4, 6</td>
<td>5</td>
<td>Legal advocates</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>Key government agencies and university-based research group</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>Family advocate, community provider advocate, association of psychological professionals</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>Legislators</td>
</tr>
</tbody>
</table>

Table 5
Positions in Non-Internet Communication in the Mental Health Network
Since adult basic education is not an entitlement, both public and private actors work vigorously each year to make sure the financial pie that DABE gets to divide grows or at least gets no smaller. As a result, the network has structured itself around carefully advocating for funding. To paraphrase the industry association head, it was imperative that the providers present a “united front” when they spoke with key legislators. That effort to act as a unified coalition manifests itself as limitations on who may communicate with the legislators. However, the industry association is not the only organization that tries to influence the legislators. The DABE itself brokers between its providers and the legislature. Both the DABE and the industry association provide “channels” for other members of the network to pass along information to the legislators. Neither broker is dominant. Instead, they compete both for the attention of the legislators and for control of providers’ communication with political and policy authorities.

The Internet core members are the central nonlegislative figures in this network; all are endowed with both MIRs and SSRs. The DABE is both a broker and the central financial agent in this network. The industry association is a broker and the central source for information on public and private funding and volunteers for adult literacy programs. (Volunteers are often the most important nonfinancial “input” in ABE programs.) The provider in position E is the largest ABE provider in Newstatia; it has the second-largest private sector budget and substantial links to a community that can be mobilized to support ESL funding. A technical assistance unit (here meaning both technological and pedagogical) from position B participates in the core in part because it controls expertise that providers require. The provider in position H serves as the coordinator for policy-related activities for the industry association and represents—according to data collected both from inside and outside the network—the interests of rural providers. In this case, the central structural positions are held by those with key MIRs. The Internet is used to
automate communication between those endowed with MIRs and SSRs, to the exclusion of lower-ranking non-Internet core members and the entire periphery.

The mental health case is more complex. Unlike the ABE case, where there is a central tension between the private sector providers and legislators who control overall funding levels, the MH network includes a multitude of constituencies with conflicting agendas and interests. Many of these constituencies are user populations rather than providers, and most have more than one organizational representative (see table 1). Thus, there is no single organization that can effectively speak for a large majority of the nonstate participants in the network. In the mental health network brokerage happens as much within organizations (through negotiation processes that lead to a unified position for the organization) as between organizations. As we shall see, it also clears the way for one organization—the Department of Mental Health—to establish a dominant position.

There are eight positions in this network. Position 1 is a group of low-influence organizations that rely on members of position 3 to broker for them. Position 2 is a group of private insurers who are thought to be influential by other members of the network but who are largely disconnected from the ongoing discussion and thus irrelevant to this analysis. Positions 3 through 8 are highly inter- and intra-connected. That is, there are

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13 As a group, the insurers all said they “monitored” developments in state mental health policy but only participated in a “defensive” mode—to stave off changes detrimental to their interests. For them, the status quo was acceptable.
one- or two-step paths between positions, and most members of a position are connected to one another. Each position may be identified with a particular perspective on or role in mental health policymaking (see table 5). Four of these positions—3, 4, 6, and 7—represent different ways of viewing mental health issues. Members of positions 4 and 6 view mental health issues as a matter of patient rights and view litigation as a form of advocacy that is often preferable to political action.\textsuperscript{14} Members of position 7 view mental health problems as affecting patients and families jointly and advocate for communal and vocational treatment that is more likely to use nonpharmacological interventions. Position 3 is a composite that includes two newspapers. For this reason, the position attracts more incoming communication than it might otherwise. Network members sometimes try to use the newspapers to reach a mass audience or to reach the entire network in one communication event. The other members have family-centric positions on mental health issues and advocate for greater access to institutional care and maintenance of institutional facilities. Position 8 contains almost all the legislators who are involved in this network.

However, the “center of gravity” in the MH network resides in position 5 and its dominant member, the Department of Mental Health (DMH). Position 5 contains all the major executive agencies and legislative committees (including the House and Senate Ways and Means Committees) that control discretionary funding for mental health services in Newstatia, plus a university-based research unit that seems to play a “consigliere” role for public decision makers. As figure 2 demonstrates, most positions try to “send” information and communication to position 5. By contrast, position 5 sends only to position 3. This “sending” arrow exists exclusively because the director of mental health sometimes seeks newspaper coverage for departmental initiatives. Executive decision makers in position 5 take in information from many constituencies but reciprocally confer only with other public managers and the university researchers.

Yet position 5—and indeed, the entire network—revolves around the DMH. The DMH has either direct or “at one-remove” relationships (path lengths of one or two) with almost every other member of the network. However, the DMH receives many more messages than it sends. The network acts primarily to “funnel” information to the DMH with little return flow—as one might expect if this were a classic hierarchy. Unlike the ABE network, there are no competing brokers. DMH has paired its substantial material-institutional endowments with social structural resources of equivalent depth.

How does the Internet core differ from the structural patterns discussed here? The Internet core constitutes what might be termed a “kitchen cabinet” (a group of trusted advisors) for the DMH. Rather than including all the agencies, the Internet core contains only the most influential ones—the House and Senate Ways and Means Committees, the Medicaid agency, and the Coordinating Office for Health and Human Services. Instead of including all legal and family advocates, it includes only the most influential ones. Instead of including all provider advocates, it includes one (but not the most influential in this case). The core also includes the only child advocacy organization (which also happens to be relatively influential). Notable also was the exclusion of all legislators and the

\textsuperscript{14} Professionals, family members, and the mentally ill themselves use a variety of terms to refer to people with severe mental illnesses, including “client,” “patient,” “survivor,” and “service-user.” For simplicity, I will use the term “patient,” though I acknowledge that some may find the term imprecise or insensitive.
nonfinancial legislative committees. Information flows in from the network, but interaction and discussion seems to largely occur among the Internet core’s membership. The Internet is helping to automate an already closed circle of decision makers and their advisors.

Once again, the data seem to support hypothesis 3. In these networks the Internet is used primarily by those who are highly influential, highly endowed with material-institutional resources, and well positioned structurally. The Internet has created a new and exclusive “back channel,” in which information flows at literally the speed of light.

Finding 4 The members of the cores, consciously and unconsciously, construct barriers to entry.

One implication of the theoretical framework was that network members with social structural resource endowments may use their position to alter how the Internet is used for policy purposes. There is evidence for this type of activity. Members of both networks reported behaviors and practices that tend to reinforce the exclusivity of the network generally and the cores specifically.

In the ABE network, the industry association’s practices tend to limit network entry. In order for a private provider to participate in the ABE network, it must have an association membership. To be an effective, trusted, and included association member, an organization must send a representative to the monthly meeting in or near the state capital. For rural service providers—the group that expressed the most dissatisfaction with state policies—participation in the association was virtually impossible due to temporal and financial constraints. Instead, they relied on a single network member to represent their interests.

In the MH case, it appears that entry is limited, in part, because the social space is already so thoroughly organized (see table 1). Each major constituency has at least one well-funded organization to represent its interests. As mentioned before, these organizations subsume conflict within their structures. For instance, rather than have tensions between urban and rural outpatient mental health clinics be expressed through separate organizational representatives in the network, a single representative speaks for outpatient clinics. The disagreements among rural and urban clinics are resolved through political processes within the industry association rather than within the network.15

In both the MH and ABE cases, use of the Internet to gain entry to the network is limited by existing members’ skepticism about and outright obstruction of Internet use for communication. In response to survey questions about the nature of Internet communication, informants in both networks tended to focus on the risks of using the Internet and their preference for using other means to communicate. The MH survey data were most explicit on these points: supermajorities (in excess of two-thirds of informants) reported concerns about unwanted forwarding of Internet messages and believed that members of the network have a positive preference for face-to-face communication—especially when decisions on policy or political matters must be made.

In the ABE case, brokers in the network took actions to restrict use of the Internet for communication. The head of the industry association often staged what he termed “e-mail

15 This pattern is similar to the “representational patterns” Fernandez and Gould (1994) found when reanalyzing the Laumann and Knoke (1987) data on the federal health “policy domain.”
strikes,” where he refused to accept electronic messages for any form of policy-related communication. Discussions with informants in both networks indicated that the underlying issues were trust and influence. No matter how reluctant a network member might be to use the Internet, if a powerful interlocutor used e-mail for communication, they would, too. Conversely, no matter how ardently an Internet enthusiast preferred e-mail for policy communication, if they lacked a relationship of trust with those they needed to contact, e-mail was set aside in favor of meetings or telephone calls.

In the mental health case, virtually all members of key positions and a majority of core members were governmental, which created a second barrier to the use of the Internet for policy communication: fear of state-level Freedom of Information Act (FOIA) requests. As one executive agency head termed it, FOIA is often used for “politics by alternate means.” If an organization is unable to get a preferred policy implemented, it may try to use FOIA to “dig up dirt” related to the decision. For this reason, many governmental leaders refuse to use the Internet for policy-related communication: Internet communications leave traces that are subject to FOIA. Interview data from three major agency heads also indicated that FOIA is used as a convenient excuse for nonresponse to a variety of online information requests.

There is a contextual factor that facilitated the operation of exclusionary processes: the relatively compact geography of both networks. Though Newstatia has several urban centers outside the state capital with substantial ABE and MH service populations, more than seventy-five percent of all network members have offices within four miles of the statehouse; more than 90 percent are within ten miles of the capital. Thus, it is relatively cheap for organizations to demand face-to-face meetings as opposed to using the telephone, much less the Internet. It may be that the findings from Newstatia are less general because of this contextual limitation. Nevertheless, the data again support hypothesis 3.

Finding 5 Use of the Internet to mobilize mass constituencies seems to be unrelated to structural position and only affects influence rankings in certain circumstances.

As the theoretical framework suggests, the Internet may create new internal dynamics by creating resources that are external to the network. If so, some of the centralizing effects noted before may be offset by use of the Internet to mobilize groups for political action. As the previous analysis suggests, the Internet has had very little impact on network structure. However, the Internet effect from external mobilization could manifest itself through its effect on influence. Use of the Internet to mobilize external communities may boost an organization’s influence reputation. Over time, influence reputation may translate (through resource effects) into advantageous structural position. Since the Internet is still quite new, the “Internet effect” may manifest in influence ratings first. To pursue this line of reasoning, a statistical analysis of the correlates of influence was performed (see the appendix). The results differed by case. In the ABE case, use of the Internet to mobilize mass constituencies (through e-mail lists, Listservs, bulletin boards, and Web sites) was positively (though weakly) related to influence rating. In the MH data, Internet mobilization was negatively (and somewhat strongly) related to influence.16 Disaggregation of the data,

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16 The data in these cases are (nearly) complete population censuses. For this reason, the least squares output could be interpreted as the actual population coefficient, rather than an estimate. For completeness, the standard errors have been reported.
nested regressions, and information gathered from the interviews offer an explanation for this disparity. In the ABE case, those using the Internet for mobilization were trying to organize constituencies who had never participated. For instance, one ABE “Internet entrepreneur” created a Listserv to mobilize an ethnic community that is generally wary of overt political involvement. The weakness of the relationship may be reflective of the newness of the Internet efforts at the time—note, for instance, that technical capabilities were positively and more strongly related to influence. In the MH case, the Internet was being used to mobilize those constituencies who are already represented and active in the network. Virtually every major organization was using some Internet technology to automate their external communication; none were actively trying to reach excluded constituencies or communities.

However, the data in tables A1 and A2 in the appendix do suggest that there might be a latent “Internet effect” that has yet to work itself out fully. Although actual use of the Internet for mobilization is equivocally related to influence reputation, reputation as a savvy user of the Internet is positively related to influence reputation in both networks, even after controlling for the organization’s technical sophistication, budget, mobilizable base (the total number of employees, members, volunteers, and clients that may be reached for political purposes), and sources of institutional power (like being a government agency or industry association). Unfortunately, without longitudinal data it is impossible to resolve what this correlation means. Is it that influence reputation begets technology reputation or vice versa?

Summing Up

On balance, then, the data from these networks seem preliminarily to support hypothesis 3: greater exclusivity. Why might this be? Certainly incumbents’ use of social structural resources is one contributing factor. Exercise of structural power can take two forms. One form is exemplified by the “e-mail strikes” reported in the ABE case and by agency use of FOIA as an excuse to reduce Internet communication in the MH case. The other is a more comprehensive use of structural power based on coalition processes and procedures. A large minority (nearly 40 percent) of both networks’ memberships is content with the size and operation of the network. Adherence to set meeting patterns and norms regarding communication (for instance, reliance on face-to-face communication when there are political issues at stake) is partly attributable to inertia and partly to a desire to safeguard valuable relationships. Adding new members could complicate matters because incumbent and entrant interests differ. Rural ABE programs, for example, have different needs and tend to receive less money than urban programs. Maintaining the old patterns of interaction—purposely or not—acts to restrict participation by those who may wish to change the status quo. Adding members to the network via the Internet could cause the major urban players to lose their preferential funding status.

In the MH case, nonelectronic communication processes are not institutionally enforced, so there may be more opportunities to use the Internet for policy communication. However, the barriers to entry may be higher than in the ABE case, making use of social control mechanisms less necessary. The financial resources available to MH network members are orders of magnitude larger than those available to the members of the ABE network. To be visible among giants, you need to be a “giant among giants.” However, the survey and interview data confirmed that there are established and widely
accepted norms in the network that also reduce use of the Internet for policy purposes, including preference for face-to-face communication when making weighty decisions and distrust of Internet communication for transmission of sensitive data.

There are at least four contextual factors that may also affect the generalizability of these findings. First, the ABE data may have been collected too early to find an “Internet effect.” In 1998 only one household in nine had home access. Thus, it was difficult for actors to create an electronically mobilizable “mass.” Insurgents usually need new resources to alter their position in network communications and influence patterns. In 1998 electronic communications could not provide such a resource, especially since the client base in the ABE network was (and is) so impoverished. However, the degree to which the findings in the MH and ABE cases agree with one another suggests—but in no way proves—the effects were not substantially attenuated in 1998.

Second, Newstatia’s relatively compact geography may have conditioned all measures of Internet effects. The issue is not simply how far apart the current members are but how far apart they might be in another setting—say, California or Texas. When network members are geographically dispersed, some exercises of structural power become more expensive, such as the requirement that ABE industry association members attend monthly meetings. This issue is critical because other studies of the Internet address phenomena where geographic dispersion is far greater—for instance, the body of work on the international landmines convention (see Lewis 1998; Simmons 1998; and Thakur and Maley 1999; for a skeptical view, see Anderson 2000). Only additional data from larger states will resolve this question.

Third, these cases reflect the political and policy realities of service networks, where the providers are clearly dependent on the state for financial support (though mental health providers are less dependent than their counterparts in the ABE network). When this financial nexus is missing, the “Internet effect” might be quite different—for instance, in networks that surround environmental regulators.

Finally, Newstatia is a relatively high spending state in both areas of policy. Members of these networks may have more “slack” in their budgets to participate in political activity than their peers in less munificent fiscal settings. Similarly, fiscal munificence may undercut the incentive to use the Internet creatively in Newstatia. Networks in more impoverished states may rely on the Internet more extensively precisely to better capture its cost savings.

To address the contingencies reported here, future research needs to move in three directions: geographic diversity in the states studied, substantive diversity in the networks studied, and longitudinal study of the states and networks selected. Network analytic research has often been criticized for the paucity of longitudinal work (see, for instance, Stokman and Doreian 1997). Recent statistical innovations by Snijders and his associates (for a summary, see Snijders 2005) have helped to bridge the methodological gap that inhibited longitudinal work in the past. Yet the more difficult challenge may actually be creating datasets across multiple, geographically dispersed, substantively diversified networks. The starting point must be to make the current dataset longitudinal, a process that is already underway.

CONCLUSION

As researchers we usually begin with some hunch—and often with some rooting interest—in what our inquiry will find. I began this work with the hope that the Internet would
promote broader participation in the processes that lead to public decisions, whether mundane or momentous. As researchers we are also taught to respect the integrity of what the data say. Here, the data say that the Internet has not become a force for democratizing policy decisions—at least in this state in these two networks at an early stage of the Internet’s evolution. In fact, there is preliminary evidence that the Internet is increasingly a tool of the powerful and entrenched rather than the new and reform-minded. There are many caveats to this conclusion, not the least of which is the brief time that the Internet has been widely available. Nonetheless, the results are not encouraging and may point to a broader burden on government and public managers: to deploy technology that furthers public access to policy deliberations; to forgo Internet services that may promote agency agendas at the expense of public access to decision processes; and to use public monies to address inequities of access to decision processes that are being exacerbated by the Internet. It appears that the Internet’s democratic potential cannot be realized without a guiding hand from government.

APPENDIX

Internet and Influence

In the tables the variables are defined as follows:

Use Internet for mobilization: Count of technologies used to mobilize groups outside the network; roster includes World Wide Web, private e-mail lists, private mail reflectors; Listservs, USENET groups, and FTP sites.

Technology reputation: Number of nominations by members of a network as an “effective” user of technology.

Technology use index: One “point” awarded for availability of fifteen types of computer hardware, software, and Internet services.

Industry association: Equals 1 if organization is an industry association.

Advocacy association: Equals 1 if organization is an advocacy organization.

Division of Adult Basic Education: Equals 1 if organization is the Division of Adult Basic Education.

Department of Mental Health: Equals 1 if organization is the Department of Mental Health.

Legislator: Equals 1 if organization is a legislative office.

Legislative committee: Equals 1 if organization is a legislative committee.

Advocacy budget: Estimated budget available for advocacy activities.

Mobilizable base: Sum of volunteers, employees, clients, members, organizational members, and constituents that are known and reachable by mail, telephone, e-mail, or Listserv.
<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Internet for mobilization</td>
<td>0.05 (0.37)</td>
<td>0.13 (0.98)</td>
<td>0.08 (0.54)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology reputation</td>
<td>0.44 (8.95)</td>
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<td></td>
<td>0.41 (6.28)</td>
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<tr>
<td>Technology use index</td>
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<td>Industry association</td>
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<tr>
<td>Division of Adult Basic Education</td>
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<td>Legislators</td>
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<td>Adjusted $R^2$</td>
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<td>0.6680</td>
<td>0.7824</td>
<td>0.7640</td>
<td>0.7738</td>
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<td>$N$</td>
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<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
</tbody>
</table>

**Note:** Dependent variable: average influence rating (0–7 Likert scale); standardized coefficients—constant included ($t$-value in parentheses).
<table>
<thead>
<tr>
<th>Variable</th>
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<td>Use Internet for mobilization</td>
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<td>-0.35 (2.45)</td>
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<td>Technology reputation</td>
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<td>0.37 (2.78)</td>
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<tr>
<td>Technology use index</td>
<td></td>
<td></td>
<td>-0.26 (1.75)</td>
<td>-0.19 (1.10)</td>
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<tr>
<td>Industry association</td>
<td>0.16 (1.04)</td>
<td>-0.01 (0.07)</td>
<td>0.01 (0.04)</td>
<td>-0.01 (0.06)</td>
<td>0.16 (1.26)</td>
<td>0.19 (1.55)</td>
</tr>
<tr>
<td>Advocacy association</td>
<td>0.30 (2.32)</td>
<td>-0.03 (0.16)</td>
<td>0.18 (1.30)</td>
<td>0.08 (0.51)</td>
<td>0.24 (1.71)</td>
<td>0.22 (1.63)</td>
</tr>
<tr>
<td>Department of Mental Health</td>
<td>0.30 (4.35)</td>
<td>0.19 (3.41)</td>
<td>0.32 (4.09)</td>
<td>0.26 (3.66)</td>
<td>0.26 (3.92)</td>
<td>0.22 (2.79)</td>
</tr>
<tr>
<td>Legislators</td>
<td>0.05 (0.42)</td>
<td>0.07 (0.53)</td>
<td>-0.02 (0.15)</td>
<td>0.01 (0.10)</td>
<td>0.11 (0.90)</td>
<td>0.13 (1.06)</td>
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<tr>
<td>Legislative committees</td>
<td>0.14 (0.52)</td>
<td>0.23 (1.04)</td>
<td>0.08 (0.30)</td>
<td>0.18 (0.76)</td>
<td>0.3 (1.34)</td>
<td>0.35 (1.69)</td>
</tr>
<tr>
<td>Advocacy budget</td>
<td>0.39 (3.21)</td>
<td>0.29 (2.89)</td>
<td>0.35 (2.51)</td>
<td>0.33 (2.74)</td>
<td>0.42 (3.71)</td>
<td>0.42 (3.79)</td>
</tr>
<tr>
<td>Mobilizable base</td>
<td>0.50 (1.86)</td>
<td>0.41 (2.00)</td>
<td>0.53 (2.01)</td>
<td>0.46 (2.17)</td>
<td>0.40 (1.96)</td>
<td>0.34 (1.80)</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.5576</td>
<td>0.4938</td>
<td>0.4941</td>
<td>0.5060</td>
<td>0.6421</td>
<td>0.6346</td>
</tr>
<tr>
<td>$N$</td>
<td>37</td>
<td>37</td>
<td>37</td>
<td>37</td>
<td>37</td>
<td>37</td>
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Note: Dependent variable: average influence rating (0–7 Likert scale); standardized coefficients shown—constant included (t-value in parentheses).
REFERENCES


