Information micro-practices in Texas rural courts: methods and issues for E-Government

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Abstract

This paper reports on an empirical study of the information behavior of governmental actors in rural Texas courts. The study used multiple data collection and data analysis methods to produce a rich, thick description of the participants’ behavior which is contextualized and used to identify important challenges to e-government. The paper argues that moving beyond the silo-based approach to reporting and information technology implementation that characterizes the current policy environment can be done only with a strong and detailed understanding of governmental actors’ job responsibilities and their information and communication patterns. Doing so is important to achieving the vision of e-government. © 2002 Elsevier Science Inc. All rights reserved.

1. Introduction

It is plain that the value of computer and telecommunications technologies is growing and that the Internet and Web have proliferated from the technical and social elites that were their original users. As a result we see that citizens, policy makers, and others have raised their expectations about the delivery of government services digitally. Initially, these expectations centered on the increased efficiencies that information technologies (IT) promised public organizations; on the delivery of governmentally held information, for example, information about government benefits, real estate transactions, and the like; or on the institution of interactive fora for citizens in a democracy to deliberate with each other and with their elected representatives. In the past decade, however, delivery of a robust suite of government services to citizens, businesses, governmental actors, and others through the Web has
become a commonly articulated goal. Terms such as “e-government,” “digital government,” and others have become common place in the mainstream media as well as in governmental and academic studies and white papers. Further, numerous jurisdictions in the United States have initiated and successfully maintained thousands of projects to distribute government information and other government services digitally.¹

Many of the e-government reports, white papers, workshops, and initiatives, however, fall prey to common weaknesses: technological determinism, unfounded optimism about the benefits of increased reliance on integrated digital technologies, superficial consideration of major obstacles to integrated e-government, dismissal of critics as ignorant about or afraid of technologies, and lack of attention to how similar weaknesses have led to significant failures in reinventing organizations and services in the private sector. Perhaps the greatest problem with what some might call unfettered boosterism about e-governments and vertically and horizontally integrated systems is lack of consideration of founding principles of participatory democracy – open government, public access to information, public confidence in public institutions, and public recognition of the presumption that government, first and foremost, belongs to the people. This weakness is more than a bit ironic, given that the ideology and rhetoric of e-government consistently assert that increased public access to government services and deliberations is one of the major (presumed) outcomes of e-government. The reality of e-government, however, offers a more sobering picture.

E-government does not start with a tabula rasa or in a vacuum; rather, it builds upon several elements of the existing social landscape. Among these are the information skills and abilities of citizens, the global and local characteristics of the technology infrastructure, information and telecommunications policies at multiple levels of government, currently available government services and business models, and the information needs and uses of various stakeholders at the individual and organizational level. While investigations of the technology-specific aspects of e-government are common, there is little research into the integrated and holistic information work practices of governmental actors. This paper concentrates on this foundational element of e-government: the situated information practices, skills, and concerns in rural Texas courts. Even though research into federal and state information initiatives has grown immensely, what Fletcher and Foy said in 1994 is still true: “Research on state and local government information technologies is . . . sparse.”²

The current authors, under contract to the Texas Office of Court Administration, performed an empirical study of the local judiciary in eight rural Texas counties at the end of the 1990s.³ While the most important features of the study are more fully explored below, generally speaking the study revealed a stunning contrast between the fragmented picture of information technology (IT) implementation and use in rural Texas courts held by outsiders (including state reporting agencies), on the one hand, and the sophisticated, integrated information practices of local judicial actors, on the other. While that finding echoes those of empirical studies of information behavior in other environments, the Texas rural court study is useful for considering the promise and the inherent challenges of e-government.

The goal of this paper is not what might be termed traditional policy analysis, that is, the identification of important areas of public dissensus (issues), important policy instruments, conflicts among major stakeholders, and recommendations for policy actors. Instead the analysis results from ethnography of important information behaviors of local judicial actors.
This ethnography, in turn, has led to the identification of important policy issues relative to e-government that spring largely from the complex relationships among state regulatory and oversight agencies on the one hand and local judicial actors on the other. These relationships are the focus of the analysis and recommendations.

The Texas rural court study identified a number of important policy issues. Some of these will be familiar to those interested in information policy, especially policy related to rural areas. At the same time, however, some of these issues take on a new meaning when contextualized in the complex work environments of local governmental actors:

- Reliance of many federal and state policy makers on speculation about what local governmental representatives do rather than on empirical evidence
- Severe dislocation between oversight agencies’ view of IT and communication equipment and behavior in local government and the complex practice that local governmental actors, in fact, create
- Lack of telecommunications providers and robust infrastructure in rural areas
- The need for an explicitly multidisciplinary perspective in the policy discussion related to e-government
- Lack of IT training and support, especially in the context of real work tasks and social relationships
- A need to go beyond rationalistic assumptions and disjoint incrementalism in bringing the promise of e-government to fruition
- Specific demonstration of the critical shortage of IT workers in local government
- Overarching concern with the privacy of court records in digital environments
- Public dissatisfaction with electronic provision of government services.

Each of these issues poses serious, perhaps insurmountable, obstacles to the success of e-government. These issues, furthermore, are common in many other jurisdictions in the United States and, therefore, serve as important means to make our expectations about e-government as realistic as possible. Only in meeting such challenges can e-government achieve its goals. The aim of the subsequent discussion in this paper is to inform policy makers—and analysts and commentators, especially those interested in e-government—about the perspectives and behaviors of governmental actors whose work practices place them in the trenches that will be the battleground for e-government and the arena in which it is defined.

The remainder of this paper discusses the rural judiciary study in Texas, particularly its triangulated methodology and its findings useful for thinking about e-government, and then offers some specific strategies for integrating the planning and implementation of IT in local government. These strategies, in turn, provide an empirically-based, stable foundation for e-government.

2. Texas rural court study

The effective administration of justice in rural Texas courts has considerable obstacles such as complex geography, very large distances between population centers, a relative dearth of telecommunications infrastructure and providers, and the need for substantial
cooperation and coordination among multiple legal jurisdictions. Despite the fact that various levels and activities of government have been the object of research for quite some time, there is little knowledge, however, of the information technology needs and practices in rural courts or how the technologies in use there can contribute to the development of the concept and practice of e-government. The Texas rural court study was not focused on e-government per se but emphasized the responsibilities and behaviors of major judicial players in rural district, county, municipal, and justice courts in order to understand their communication patterns, information management initiatives, and information technology use.

The study team investigated the following research questions: (1) How do major judicial players in rural Texas communicate?; (2) What information technologies do these courts and actors currently use and/or have access to, including hardware, software, Internet connectivity, training, and technical support?; and (3) How can information technologies make these courts and actors more effective and efficient?

2.1. Research design and methodology

The study demanded a research approach that would capture a holistic picture of communication behavior, information management, and information technology use in the target environment. This requirement was best satisfied with a multiple case study design enhanced by triangulation of several data collection methods. Based on the recommendation of the study sponsors, the case study respondents were two rural judicial districts in Texas. All together there were 10 individual case studies, two conducted with the district level courts and eight with county level courts. In the two district courts, the study involved district judges, court coordinators, district attorneys, and court reporters, while county judges, district and county clerks, county attorneys, county reporters, justices of the peace, and municipal judges participated from the eight counties.

The data collection for each of the case study locations involved the following procedures:
- Individual interviews (in person or by telephone)
- Focus group interviews
- Site visits
- An on-site information technology census, and
- Review of relevant court documents and similar resources.

These procedures combined detailed insight into the work environment from the perspective of individual study respondents with the broader view of the research team as external observers of communication processes and information technology use at the case study locations. The triangulation of several data collection activities also ensured multilevel validation of data.

The process of interviewing in general terms involved completion of a written survey, followed by in-person or telephone interviews based on a prepared, open-ended interview protocol. The survey instrument consisted of close-ended, multiple choice questions about respondents’ types of work-related activities involving information technology and communication with others and respondents’ demographic characteristics. Forty-eight respondents completed the survey instrument. During follow-up interviews, the researchers encouraged the respondents to describe the main functions of their jobs, their on-the-job communication
with other individuals, and their experiences with information technology. The study team audio recorded the interviews to ensure the reliability and accuracy of the study team’s interpretations and to facilitate the researchers’ recall during data analysis.

During two summer months of data collection activities, the study team visited all 10 courthouses of the rural courts participating in the study. These visits facilitated first-hand observations of respondents’ work environments including space arrangements, location of files, placement of computers, and distribution of other information tools. At each study site, the team also conducted an information technology census using standardized forms continuously updated during the course of each visit based on comments made by the study respondents.

Prior to the site visits the study team examined numerous court documents such as court rules, policies, bench books, statistical summaries of court activities (e.g., cases filed and resolved), and statutory and regulatory material. During the site visits the team looked at examples of case dockets, transcripts of case proceedings, record books, and indexes, and collected various forms, many of which were custom-designed by the respondents, that are used in communication with the public and for internal communications. Inspection of various written documents, accompanied with respondents’ comments about their use, provided important microscopic views of real work practices and processes.

The outcome of the data collection procedures described above was a large collection of raw data. The research team analyzed the surveys and IT census data using simple descriptive statistics and performed content analysis of the qualitative data from the research notes and interview transcripts for internal consistency and identification of major themes. The respondents then reviewed these interpretations to ensure the faithfulness of the researchers’ analysis and explanations (member checking). The researchers developed two conceptual layers of the analysis: case-by-case analysis and analysis of individual functional roles of court actors. The case description approach provided a systematic overview of individual district and county courts in the study, including demographic highlights, status of information technology infrastructure (hardware, software, connectivity, training, and support), and unique local characteristics pertaining to use of IT. Within the functional approach, the team outlined the major judicial responsibilities of the function, described its work processes and communication patterns, and identified the unique themes of each function’s information technology use.

The following sections of the paper describe some of the key study findings about: (1) the work practices and professional communication of the various local judiciary actors and (2) the use of information and communications technologies in the research sites. These findings serve as an empirical foundation for understanding what e-government might mean in these jurisdictions.

2.2. Work practices and communication behavior of rural judicial actors

The study team created the complex picture of the professional responsibilities and real work tasks of the study participants based on empirical field observations and examination of the Texas Constitution, statutes, regulations, case law, and other documents. The main theme that emerged was that all the judicial actors involved in the study had various and
substantial nonjudicial responsibilities complementary to and sometimes in conflict with their prescribed judicial responsibilities. Table 1 summarizes the key legal responsibilities for each category of judicial actors who participated in the study and also provides illustrative examples of their nonjudicial responsibilities. These nonjudicial responsibilities are many and quite heterogeneous.

The two general types of responsibilities depicted in Table 1 were not clearly separated but rather seamlessly integrated in the daily work practice of the judicial actors. Furthermore, while some of the nonjudicial responsibilities such as the election–related duties of county clerks, were formally prescribed, many others were informally adopted. Some unexpected responsibilities, for example, court coordinators’ intense involvement with IT implementation and troubleshooting and court reporters’ duties as de facto courtroom sound engineers,
evolved in response to day-to-day work requirements in an environment that often lacked important resources.

The study team was also able to identify two key communication “rings” or professional communication networks which are essential to the success of the Texas judicial system: (1) the connections among the district judge, district court coordinator, district attorney, and district clerk, and (2) the connections among the county judge, county judge’s assistant, county attorney, and county clerk. At both district and county levels, the judges’ assistants were integral players in setting the docket; therefore, they are integral players in judicial communication. In addition, seeing the County Judge and the County Judge’s assistant as a unit is important because county judges often rely on their assistants to assume all responsibility for dealing with information management including computing.

2.3. Use of information and communications technologies in rural Texas courts

Each of the ten jurisdictions in the study has developed a unique approach regarding the scope and type of IT implementation. While the detailed account of IT use in individual case study sites goes beyond the scope of this paper, the illustrative examples of IT use by some of the judicial actors provides an important perspective on the internal user base for e-government applications.

The court coordinators and district judges possessed the highest level of IT use and skills among all the study participants. They had become the IT leaders for their districts and counties. The two court coordinators were especially advanced and intensive users of IT. Their major tools included word processing, calendars, spreadsheets, databases, case management software, and other applications. Both court coordinators had access to the Internet; their use of it, however, was still very limited.

In contrast to the two district judges, the county judges and district/county attorneys who participated in the study largely relied on their secretarial staffs for IT functions. In response to chronically low IT funding in their counties, district and county attorneys relied on many forms of computing, telecommunications, and other office resources from their private law practices to support their public offices. They used the Internet only sporadically; there was a desire, however, to use it more extensively for professional communication with their colleagues in other Texas counties.

The repetitive aspect of clerks’ work was especially suitable to the application of information technologies, including word processing, spreadsheets, and database applications. If the clerks processed documents manually, they had to enter the same information multiple times in different types of record books and indexes. Clerks in the study used a number of different special purpose software applications, for example, for case management, accounting, child support, and jury selection. Various commercial vendors and state agencies such as the Texas Office of Court Administration and the Attorney General’s office developed these applications. There was a shared feeling among the clerks who had long experience with information technology that integrated applications were preferable to stand-alone applications.

While the state assumes some district expenditures, for example, the salaries of district judges, the counties in the district pay the salaries of other district personnel such as the
district court coordinators and court reporters. Similarly, the counties fund IT expenditures on the district level, as well as the counties’ own IT expenditures. The Commissioners Courts hold the county purse strings, and Commissioners throughout Texas, with some notable exceptions, have not been very pro-active in investing in information technologies.

Overall, the study team identified four key areas of IT implementation and support in the courts that participated in the study: computerized management of information pertaining to cases (case management), electronic access to case court documents, networking (including connection to the Internet), and training and support. We discuss each of these areas briefly below.

2.3.1. Case management

Six of the eight counties (the exceptions were two very small counties) reported using case management software. There was remarkable heterogeneity among the various jurisdictions studied. There were four different commercial case management products used, while some other jurisdictions had self-designed, in-house databases or spread sheets to manage cases. The case management modules of the commercial products were parts of more comprehensive and integrated office management suites for local government.

Many respondents identified significant problems in the case management software developed by OCA: (1) there were multiple versions of the software in use, (2) OCA provided basic customer support but did little to initiate individual, customized contact with its software users, and (3), users did not feel that they could influence the development of the OCA software.

2.3.2. Electronic access to court documents

There was a general understanding among many study participants of the potential of electronic access to court documents for fulfilling their responsibilities, and the promise of functions such as electronic filing. The possibility of remote electronic access to documents seemed particularly important to the actors in the rural court study at the district level. At the same time, however, Table 2 illustrates that electronic access meant different things to...
different types of respondents.

Some participants already used alternative means for accomplishing some of the tasks that a more complex information system for electronic access would facilitate, for example, use of the Internet for exchanging OCA software-based files and use of floppy disks to exchange case information in county courts.

2.3.3. Networking (including the internet)

All but one of the study jurisdictions in the Texas rural court study had telephone networks in place in their county courthouses. The counties owned most of these networks, while some telephone networks (including the telephones) were leased from local telephone service providers including GTE (now Verizon) and Southwestern Bell (now SBC Communications).

Five of the county courthouses had Internet connectivity. District Judges had Internet access, and one used the Internet remotely. Most of the study respondents were only beginning to use net-based applications such as email, discussion groups, and Web-accessible state documents. Even non-Internet users, however, had high awareness of its importance for their functions and were preparing for Internet connectivity in 1999–2000. Several respondents, especially judges and clerks, expressed deep concern about the need for absolute security in networked case materials, although none had yet had any serious negative experience in that regard. Table 3 illustrates some of the study participants’ difficulties with networks, including the Internet. These findings echo those from other studies of rural communities.4

E-government initiatives in the study jurisdictions, including the efforts of judicial reporting and oversight agencies, must take advantage of existing wired infrastructure, for example, the Panhandle Information Network, the Regional Education Centers, the Texas A&M University Extension Network, and the community supervision network. This infrastructure can also be used for other high-end applications such as teleconferencing.

2.3.4. Training and support

There was no systematic training related to IT available to the respondents in the ten jurisdictions in the study. The respondents needed and asked for on-site training, customized to their job responsibilities and tasks. They limped along relying on family members, friends, technical documentation, and haphazard support from local and remote hardware and

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Table 3
Respondents’ problems with networks including the Internet

- Most respondents had to pay long-distance toll charges for many in-district phone calls.
- Study participants with Internet access connected through ordinary telephone lines.
- Some of the respondents with Internet access had quite unreliable connections. Whether they were unreliable because of the local ISP (Internet Service Provider), the local phone company, or their own telephone network was unclear.
- Some Internet users in the study were plagued by slow modem speeds and difficulties with modems with different speeds using the same network.
- There were often 40-50 miles between an Internet user and the “local” ISP making it difficult to obtain support and network maintenance.
software vendors. An important source of support and troubleshooting was other judicial actors who, in turn, found this task very demanding and often in conflict with their professional responsibilities.

Many of the respondents in the study consistently emphasized that information technology, without sufficiently localized and personalized training and support, was less than worthless. Contrary to much of the prevailing ideology and rhetoric common to IT and e-government communities, local governments often see digital technologies primarily as drains on time, money, and other organizational resources. Similarly, local governments frequently regard these technologies as imposed by outsiders who have no understanding of local actors’ multiple and complex responsibilities. At the same time, the Texas rural judicial study respondents had made remarkable progress in integrating IT into their existing tasks and modifying their work practices to take advantage of IT functionalities. In addition to local technology champions, of special importance in this regard were professional associations, Continuing Legal Education (CLE), and peer networks of all kinds.

3. What the Texas rural court study revealed about challenges to e-government

The very close and deep contact the study team had with the study respondents provided a rich and complex picture of their communication and information behaviors, especially that related to stand-alone and networked digital technologies. This picture also provides insight into some of the micropractices of local judicial officials that have important implications for e-government. The next sections of the paper address some of the most important of these implications, considering several of the policy issues related to e-government uncovered by the rural court study but not yet discussed.

3.1. (External) Information Silos Imposed on (Internal) Holistic Behavior

The Texas rural court study showed that, despite continuing efforts to the contrary, there is a long-standing tension between IT aims and implementations. The information practices of local judicial actors are, as with other persons, quite complex, integrated, situated, and holistic. At the same time, however, federal and state authorities impose fragmented reporting requirements and IT applications on local judicial actors. For example, information technology programs, incomplete understandings of the specific complexities of local judicial actors’ responsibilities and communication patterns, lack of situated and contextualized IT training, formal and informal state and local policies, and infrastructure and interoperability problems undermine the success of local information practices.

One of the most important findings of the Texas rural court study was that all judicial actors, including judges, have major professional duties beyond their judicial responsibilities. Further, when performing their work as reflective practitioners and when using information technologies, they do not distinguish clearly among their judicial, administrative, and other duties. The stand-alone reporting and funding silos (see Table 4) that characterize local justice, and other governmental functions, however, erodes the integrated information practice of judicial actors.
This silo-based approach is reinforced by the ways that IT is implemented in local courts, driven by three of the most important demands that reporting and oversight agencies impose when introducing information technologies into local court jurisdictions: (1) reporting requirements that demand the use of IT tools; (2) general funding and equipment; and (3) grant money for IT projects. What is missing, of course, is sensitivity and adjustment of these demands to an integrated, practice-driven understanding of local rural courts. Large information technology vendors and consulting firms often adopt this same canonical approach to local governments’ information needs.

While it is important to use the latest technologies, organizational structures, and approaches to doing business in local governments, policy makers also need to have an integrated view of local information micropractices. Table 5 suggests such an approach: it is intended to be empirical, holistic, and useful to oversight and reporting agencies, technology vendors, and IT consulting firms that work with local governmental agencies. This approach is essential to e-government because it facilitates integration of the fragmented, silo-based model by recognizing real work practices of judicial actors and accommodating the complex social environment in which they function.

The proposed, holistic approach may appear unrealistic. For example, oversight and reporting agencies can reasonably claim that they do not have the personnel, expertise, time, money, administrative structures, or other resources to achieve such an integrated vision. They might further claim that an emphasis on existing information micropractices effectively precludes the achievement of e-government. Society as a whole and public and private sector enterprises have already incurred immense costs and experienced repeated failures in far too many IT projects. We have suffered “discrete, disjoint information management and IT initiatives; . . . [the] political and financial costs of alienated and frustrated information system users; and . . . the recurring expenses of putting out information management fires instead of preventing them.”

Table 4
Current IT model in rural Texas courts

| Top-down | State and federal agencies in the judicial, executive, and legislative branches largely determine the nature, direction and extent of information flows to and from local judicial actors. They also impose real financial and other penalties if such courts do not meet their reporting and IT mandates. |
| Silo or stovepipe | Each state or federal reporting agency focuses on only part of local courts’ myriad responsibilities, for example, county judges’ formal judicial role, not their (more demanding) county administrative responsibilities. |
| Canonical7 | Responsibilities and relationships are defined through statutory, regulatory, and case law; prescribed work products and activities are also codified, whether explicitly or implicitly through IT implementation and reporting requirements. |
| Closed system | “Upstream” federal and state reporting and oversight agencies are generally not sensitive to the local, situated constraints and opportunities that characterize the administrators of local justice, especially their constitutive professional contacts and relationships with the public and other governmental entities. |
3.2. The need to go beyond “muddling through”

As is well known, the American method of policy formation and evolution is identified as disjointed incrementalism, or, as Lindblom famously put it, “muddling through.” Despite some deep and fundamental disagreement about disjointed incrementalism, it is quite clear that, while technical rationality is inadequate to address the realities of professional work and the conundra in which administrators and policy makers find themselves, simply muddling through and “crawling” along incrementally will not suffice either.

Moving beyond the disjoint silos that characterize enterprises of all kinds, especially public sector organizations, is key to the initiation and success of e-government programs. This assertion is an article of faith of e-government advocates and enthusiasts. What the Texas rural court study shows, however, is that moving beyond pre-existing reporting and oversight silos is an essential ingredient; in fact, it may be a prerequisite, for e-government to be successful. That movement, at the same time, must not ignore the constitutive nature of local governmental actors’ multiple and complex interactions with their multiple constituents. E-government systems, services, and structures must reflect the multiple perspectives in which local governmental actors are seen by their local constituents. Otherwise, the grand

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<th>A holistic approach to local courts’ information practices</th>
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<td><strong>Bottom-up</strong></td>
<td>Reporting requirements must reflect a multi-faceted, integrated view of court functions. This approach requires knowledge of local judicial actors’ self-definitions and professional identities, e.g., county clerks as the “custodians of court records” and county judges as the “people’s administrators.”</td>
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<td><strong>Cross-functional, integrated</strong></td>
<td>State and federal agencies must provide the money, expertise, and encouragement for local courts to implement information systems and services across their multiple areas of responsibility, including reporting to those agencies. Reporting agencies must also be aware of each other’s requirements and IT initiatives for local courts. Further local judicial IT resources should not be single-purpose, e.g., county clerks should not have a computer dedicated only to child support.</td>
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<td><strong>Non-canonical</strong></td>
<td>As the rural court study plainly showed, local judicial actors’ responsibilities include major undocumented activities. County clerks, for example, rely on in-house software, self-developed paper forms, apprentice/expert relationships, and close peer networks to do their jobs. These resources, however, are virtually invisible to reporting agencies, legislatures, and others.</td>
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<td><strong>Open system</strong></td>
<td>The situated, local environments of rural judicial actors are multi-faceted, e.g., county judges’ relationships with local school districts, library boards, boards of corrections, hospitals, and laobr unions. Without some direct contact with these local constituencies, reporting and oversight agencies cannot achieve realistic understandings of the roles courts play in their communities. Without such an understanding, e-government initiatives cannot be expected to be designed, implemented, and evaluated successfully.</td>
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ideals of “one-stop shopping” or the “universal” portal to interaction with government by citizens, businesses, and other governments will be impossible to achieve. The importance of this view of governmental actors’ information micropractices for e-government is clear. Will the current fragmented reporting and oversight structure persist? If so, external users of government information and services, for example, citizens, businesses, and other governmental actors, cannot come close to realizing the benefits of e-government.

3.3. Avoiding unrealistic expectations about e-government

One of the most common weaknesses of many e-government discussions is technodeterminism—the assumption that all problems are technical problems and, therefore, have technical solutions; that adoption of particular technologies is inevitable; that adoption of such technologies ensures solution to what are, in fact, political problems; and that failure to adopt such technologies (or even to question their efficacy) is short-sighted. The Texas rural court study underscored that facile belief in the inevitable and ubiquitous use of digital technologies fails to recognize the complexity of information behaviors in local government. Further, naïve enthusiasm for the supposed “revolutionary effects” of digital technologies and e-government can often stifle creativity and the situated knowledge, work-arounds, and practices that make local government work.

A related problem, which we cannot explore in any depth, is the ideology of the market and private sector enterprises. Much of the literature about e-government is dominated by private sector spokespersons who parrot sometimes vacuous truisms about reinventing organizations and revolutionizing business models. While such observations have some basis in reality, they tend to ignore the self-serving nature of such pronouncements as private sector firms try to create as well as satisfy a market for e-government products, services, and personnel, especially through outsourcing. They also ignore the demonstrated ill effects of such assumptions in the many failures of technology efforts in the private sector and long-standing problems with IT in the public sector.

A particular point that puts this concern with unrealistic expectations in sharp contrast involves one of the rural county’s relationships with a private sector vendor of case management software. Some of the study respondents could not praise the on-site support and customized service that the vendor provided strongly enough. But one respondent put this enthusiasm in a much wider context by noting that nonlocal, large IT vendors: involve high costs (often an order of magnitude or higher when compared to local firms), demand contracts that exceed individuals elected officials’ terms of office, and assert property rights in the public records that their systems process and house. Clearly each of these concerns, especially the last, has important implications for e-government.

3.4. Concern with court records and privacy

As is well known, the provision of government information and services online (to citizens, businesses, and other governmental entities and actors) is perhaps the most commonly iterated goal of e-government. A widely recognized concern with online access is
privacy and confidentiality. In the ten study jurisdictions as elsewhere, “the immobility and relative security of documents stored in locked cabinets in physically inaccessible locations is a primary advantage of print information,” as were the sheer number of cases, the number of documents, and the lack of powerful searching tools for print documents. Looking at some of the actual document handling processes in the clerks’ office will provide the reader further insight into how these practices define access and privacy in the context of real practice in local courts.

Clerks’ offices are the foci of local judicial documents, and the clerks are the local actors whose multiple constituents demand access to all kinds of documents, judicial or otherwise, for example, birth and death records, whether confidential or not. All documents that pertain to a specific case within the jurisdiction of a district court are filed with a district clerk’s office, and the district clerk is official custodian of district court records. The clerk’s office may take depositions of witnesses, records all acts and proceedings of the district court, records judgments of the court, records the service of court documents and returns on such service, and keeps an index of the parties to suits filed.

Integrated digital systems in the rural courts, particularly those allowing remote access to heterogeneous groups of users, give rise to several interrelated concerns about case documents: (1) confidentiality of litigants and victims, especially children and victims of sexual crimes, (2) sealing files, in toto (especially in juvenile cases) or in relation to certain forms of evidence, for example, medical records, including determinations of mental capacity, and (3) cases where the defendant is found innocent. How will the high level of privacy and confidentiality ensured in the print world, and guaranteed and demanded by law, be provided in distributed, interoperable, apparently seamless integrated digital systems? If we have learned nothing else from privacy and freedom of information initiatives at the national level in the U.S. and elsewhere, it is that superb principles and intentions mean little in the asymmetric relationships between citizens and large enterprises without enforcement guarantees and real, targeted penalties, criminal as well as civil.

3.5. Mistaken assumptions about IT use in local jurisdictions

As noted throughout this paper, oversight agencies and higher levels of government sometimes have rather limited understandings of the complexity of the information behavior of local governmental officials and other elements of local government. For example, the Texas rural court study team found that the rural courts were not the passive, unsophisticated nonusers of IT that state agencies or urban dwellers might assume. Even the identity of the specific equipment used in the local courts, what we might call the “lowest,” least complex level of information behavior, underscores this lack of coincidence between the micropactices of information behavior and outsiders’ assumptions about it. Table 6 illustrates only some of the major dislocations between such mistaken assumptions about IT use and the complex information behavior that characterizes the Texas rural courts. Well-integrated, effective e-government is impossible without clear understandings of IT in place in local governmental offices.
There is a real danger that the fragmented model of information technology planning and implementation common in government will serve as the *de facto* base for e-government development. Such a fragmented approach to e-government will not meet the information needs of the public, business, or governmental actors. Further, the all too common presumption that oversight, reporting, and policy implementation agencies at the state level know best about the business of local government is a persistent problem in information initiatives. Ignoring the complex matrix in which local governmental institutions exist and to which they respond is a clear formula for failure for e-government, no matter how sophisticated the technology, nor how good the intentions.

It is reasonable to ask how it is that local judicial actors, state and federal agencies, and other stakeholders can help the existing silo-based model evolve to the more integrated, holistic, practice-based model. Our empirical research recommends the following strategies:

1. A robust, longitudinal program of user-based empirical research that emphasizes rural judicial actors’ real work practices, constraints, values, constituencies, and peer networks.
2. A generalized understanding of the complex and multiple (non-canonical) relationships that exist within local courts and between local courts and their environments.
3. A primary focus on internal and external users of governmental systems that recognizes and supports their needs and goals.
4. A strategic, rather than tactical, approach to information initiatives in courts that goes beyond short term projects and relies on a combination of an integrated understanding of local conditions and information practices with a sophisticated understanding of digital tools and organizational structures and services.

Layne and Lee (2001) and Caldow (1999) are good examples of some of the more thoughtful advocates of the revolutionizing potential of e-government. The essence of their arguments

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<tr>
<td>Jurisdictions are most interested in hardware and software.</td>
<td>The most common concerns were the lack of reliable support and adequate training.</td>
</tr>
<tr>
<td>Rural districts are running low-end, DOS-based applications</td>
<td>Rural districts were all running Windows-based applications.</td>
</tr>
<tr>
<td>Rural districts are dependent on hand-me-down computers.</td>
<td>Rural districts buy machines off the shelf and often have them customized.</td>
</tr>
<tr>
<td>Judicial players in rural districts are not aware of current trends in IT.</td>
<td>Judicial players in rural districts are knowledgeable about and anxious to participate in major IT trends, especially those involving the Internet.</td>
</tr>
<tr>
<td>Rural districts are waiting to make significant investments in IT.</td>
<td>Rural districts have changed their facilities, work processes, and budgets for IT and integrated IT into many if not all of their activities.</td>
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is that full horizontal and vertical integration (seamlessness) among governmental levels and agencies will result from full, interoperable (seamless) integration of information systems in e-government schemes. The Texas rural court study gives us a more sanguine view of this assertion.

One of the elements of e-government that has received little attention is explicit consideration of the disciplines that might contribute to its conceptualization, implementation, and evaluation. Besides the obvious candidates such as computer science, telecommunications, public management, and management information systems, important contributors are also sociology, information studies, and anthropology. This last discipline is especially important to understanding the information practices, skills, and habits of both internal and external users of government information and other services, that is, to generating the necessary thick description that must underlie system design.

An additional element of understanding internal governmental actors’ information practices in local situations is the concept of intentional rationality. We know that people are intentionally rational, that is, they identify, pursue, and evaluate their goals as they feel the situated and temporally evolving circumstances demand. People do so even if that behavior appears illogical to outsiders. Designing and evaluating digital systems for e-government must try to achieve this insider view of local governmental actors as well as external views.

Further consideration of the complexities of information technology implementation in public sector organizations provides some insights useful to e-government. For example, Sonal Seneviratne notes that: “The highly rationalistic assumptions that underlie many of the recommendations for management of information technology are appealing,” especially those that emanate from the work of Max Weber on bureaucracy and Frederick Taylor and others on scientific management. Seneviratne continues by suggesting seven ways in which managers in public organizations can maximize the potential of information technologies in those organizations. Among them are redefining job categories and requirements, insisting on vendors’ provision of adequate training and strong technical overviews of systems, and ensuring that staff members are trained to be self-initiated trouble shooters as IT is further decentralized, that is, they must be as self-sufficient as possible. Each of these suggestions echoes the respondents in the Texas rural court study, and each is an essential ingredient for e-government.

Among the chief reasons that increased use of IT will complicate public sector organizations is the well-known shortage of IT workers. Even in the economic downturn of 2001–2002, many organizations, especially public sector enterprises, cannot attract sufficient numbers of IT staff, and find it even more difficult to keep, train, and develop those they do attract. This shortage, which is likely to persist for some time, is a serious threat to e-government, and the rural court study made this point very clear in local government.

The Texas rural court study also underscored the importance of the public’s right to know, the public interest in information, and the public’s confidence in public institutions. Harold Relyea puts it well: “[R]ealizing greater efficiency and economy in government operations is unlikely to be the ultimate test” of e-government. Instead, “[f]or a self-governing democracy, the significant criterion would seem to be one of better serving the citizenry and, thereby, maintaining the continued faith of the American people in the form of government mandated by the Constitution.”
This dyad of service and faith is essential to e-government. Some 65% of 1,003 citizens in a 2000 Hart-Teeter e-government study clearly preferred that governmental information initiatives slow down a bit in “converting” communications between citizens and government into digital form, especially if that is the exclusive means for such communication. In clear contrast to that strong public sentiment, “Government managers . . . believed the effort should proceed quickly.”

Similar concerns with the quality of governmental services as they evolve into increasingly digital and “automated” forms were found in rural and urban Texas and elsewhere.

Moving more government transactions online might make public service worse as government workers are overwhelmed with Internet transactions as well as by the current flood of phone, paper, and face-to-face transactions. Frustrations with voice mail systems serve as a good warning for breathlessly optimistic predictions about the benefits of e-government. Among the most common complaints about voice mail are the lack of human contact, endless loops, the apparent need to understand the system in order to use it the first time, and the lack of navigational cues. Will e-government be voice mail systems writ large? That outcome seems unlikely, but self-conscious consideration of the question is likely to help us produce better experiences for online users than we would otherwise.

While e-government is a multifaceted and somewhat misunderstood concept, it is a focal point of significant speculation, writing, study, enthusiasm, and planning. What the Texas rural court study has shown is that ethnographic methods, focus on internal governmental users of IT as a complement to external users, and analysis of the information micropractices of local government are powerful tools for grounding discussion of e-government. Many of the policy issues revealed in the study are significant threats to achieving the vision of e-government. Whether we meet such challenges successfully will be key to its development.

Notes


19. For example, see Chen and Gant, 2001; Fletcher and Foy, 1994, p. 264; and Relyea, 2002.


