The evolving civic space of e-government represents a bundle of contradictions. These contradictions mirror the competing visions of what e-government is or should be and its genesis as a byproduct of both the e-commerce revolution and the reinventing government movement of the 1990s. Competing visions of e-government also mirror the competing visions of traditional physical-space based government as well as the resulting contradictions and dilemmas that are bound to arise when incomplete or competing visions are manifested in either type of space. This chapter examines the competing visions and contradictions of e-government within the broad historical context of the competing visions and contradictions of traditional physical-space based government.

Some definitions of e-government are exceedingly broad. One defines e-government as “the use of electronic information to improve performance, create value, and enable new relationships between governments, business, and citizens. E-government builds links between government entities and their customers and suppliers; it connects jurisdictions, customers, units of government, and locations” (Abramson & Means, 2001). Another describes it as “the use of technology to enhance the access to and delivery of government service to benefit citizens, business partners and employees” (Deloitte Research, 2000). A literal interpretation of these definitions would mean that, in addition to computers and the Internet, other technology such as cell phones, e-mail, facsimile machines, land line phones, personal digital assistants (PDAs), pagers, public touch-screen kiosks, radio, television, voice-mail, etc., are therefore part and parcel of e-government.

Such definitions highlight the breathtaking scope and incredible complexity of an overly broad vision of e-government. The complexity and problems confronting any government jurisdiction attempting to manage and coordinate such a disparate e-government environment with its multiplicity of access and distribution channels and audiences would be daunting to say the least. The task is almost beyond comprehension if one also reflects upon the number and variety of units of government within the United States. Data collected in the U.S. Census Bureau’s 2002
census of governments indicated that there were no less than 87,900 government units in the United States as of June 30, 2002.¹

Visions

The success of Internet e-commerce in the 1990s and the corresponding explosion of citizen Internet use provided an overarching platform, tested model, and enduring philosophy for the launching of e-government. The platform was the Internet based website and the model and related language were that of e-commerce where, among other things, encounters became “transactions” and citizens became “customers.” This innocuous change in vocabulary signaled a re-infatuation with a recurring theme and argument within public administration and political science. The theme was the appropriate philosophy for governing in which the citizen-centric versus government-centric philosophies were in question. The citizen-centric philosophy can be characterized as one in which government treats and views the citizen as an individual and not as a case or client, and strives whenever possible to enable the citizen to participate in the affairs of government through the decentralization and democratization of the decision making process and dissemination of information. The government-centric philosophy can be characterized as one in which centralized decision making and the efficient and economical operation of governmental programs take precedence over citizen engagement and participation. The argument involved the putative results of applying a particular philosophy and how well government would or would not function as a result.

The philosophy underpinning the recurring siren song of appropriate governmental form and function is as old as the Republic itself and has over time spurred dramatic changes in governance practices. The most notable of these changes was the Progressive Era inspired 1936 corporate conceptualization and subsequent 1939 congressionally approved reorganization of the federal executive branch based largely on the recommendations contained in the famous Brownlow Committee Report (Brownlow, Merriam, & Gulick, 1937). Reorganization Plan No. 1 became law on April 25, 1939 and created a chief executive officer or “chairman of the board”

for the national government—an ostensibly unitary command within a hierarchical structure. A corporate business model was superimposed on a polycentric representative democratic republic—thereby creating contradictions in both the perceived form and functions of government (Wamsley et al., 1989). The contradictions were apparent in the message President Franklin D. Roosevelt sent forward with his recommendations for reform. No mention was made in that message of improved responsiveness to citizen concerns or the need for more democratic governance practices. However, these issues would be partially addressed seven years later with the adoption of the Administrative Procedures Act (APA) in 1946. The central foci of Roosevelt’s message were those of efficiency, effectiveness, economy and, of course, good management. These foci constituted the cornerstones of the Progressive Era government reform agenda and of the Administrative Management School within public administration.  

When President Roosevelt forwarded the Brownlow Committee report to Congress on January 12, 1937, his accompanying message providing the rationale for the necessity of the reorganization was prudently couched as a management issue:

. . .Our struggle now is against confusion, against ineffectiveness, against waste, against inefficiency [emphasis added]. This battle, too, must be won, unless it is to be said that in our generation national self-government broke down and was frittered away in bad management. (Brownlow et al., 1937, p. iii)

Reorganization No. 1 represented both an explicit public policy statement on the importance of the application of sound management practices in government and a blurring of the distinction between the administration of our constitutional representative republican governance structure

---

2 At the close of 1936, President Roosevelt found himself overwhelmed by the “100 independent agencies, administrations, authorities, boards, and commissions” with which he had to interact; and, by the growing number of assistants he had borrowed from other agencies. The President needed help in reorganizing the government to accomplish his purposes and those of the nation. For that help, he turned to three leaders in the emerging field of public administration: Louis Brownlow, Charles E. Merriam, and Luther H. Gulick. On March 22, 1936, President Roosevelt appointed them to his Committee on Administrative Management. Each of the three men Roosevelt selected had been involved in some way with previous governmental reform efforts, government operation, and the new science of administrative management.
and operating a business. Reorganization No. 1 created the fiction and related public perception that the president is the nation’s chief executive officer (Wamsley et al., 1989).

The resurrected philosophy invoked in the 1990s was that “government should be run like a business.” A related belief, held by a wide array of politicians, public administrators, and a largely unquestioning public was that by adopting the business model, government would succeed in eliminating inefficiency, inflexibility, waste, and lethargy—the universal targets of government reformers. As noted earlier, this idea is not new, but the context in which the 1990s reform effort arose was decidedly different than its earlier uses.

The 1990s saw the emergence of the governmental reform movement generally referred to as “reinvention” or “REGO.” David Osborne and Ted Gaebler introduced the concept of reinventing government in their popular 1993 book on the topic (Osborne & Gaebler, 1993). The business model, the concept of government employee entrepreneurship, and the identification of customers and satisfying their needs underpinned the reinvention approach to reform.

It was not mere happenstance that the role and process differentiations arising from the switch to the customer and transaction model mirrored both the reinvention government rhetoric and that of the Clinton administration’s National Performance Review (NPR) project led by Vice-President Gore. These two initiatives, the reinvention of government and the National Performance Review, were parent and child. This is not surprising inasmuch as Osborne and Gaebler’s nuanced government bashing had caught the attention of Clinton and Gore in their first term election drive (Moe, 1994).

Osborne and Gaebler’s anecdotal success stories for improving government performance chronicled in their popular book, Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector, provided the Clinton candidacy with a convenient and less strident framework for government reform. However, the framework was flawed on many levels. A major flaw was its perpetuation of the fiction that there was no appreciable difference between operating a business and running government.
Osborne and Gaebler’s polemic seriously misrepresented the underlying complexity and fundamental legal dimensions of government operation while simultaneously undercutting the accountability/responsibility nexus between public officials and citizens (Goodsell, 1993). Moreover, the pithy proverbs they offered for entrepreneurial success could be characterized alternatively as prescriptions for litigation or the mere repackaging of government reform ideas that had been around for 50 plus years (Williams, 2000). The prescriptions for litigation comment refers to Osborne and Gaebler’s recommendations which, if implemented absent reflection on the potential consequences, could lead to litigation. Their recommendations to eliminate line-item budgeting and detailed job classifications are good examples. The line-item budgeting requirement is typically a statutory one imposed by the states while detailed job classifications are usually progeny of both civil service reforms and contract labor negotiations. Any move to eliminate these two requirements would likely lead to litigation.

The 1993 election of the Clinton-Gore ticket ushered in not just a Democratic party administration but a commitment to a vision of government reform wholly inconsistent with statutory guidelines, Constitutional requirements, and established governance practices. The NPR project initiated in 1993 and led by Vice-President Gore succeeded in conjoining business philosophy/practices with government operations to an unprecedented level. Whereas President Roosevelt had sought only to recast the presidency in a more business-like manner, the Clinton Administration’s embrace of reinvention constituted an explicit move to fundamentally redefine government as a business and consciously move to run it as such. Government and business had once again joined forces to both reform and bring the leviathan—government bureaucracy—under control.

The nexus of government and business relative to governmental reform efforts is an established one. Paul Light (1997) researched past reform efforts over a fifty year period from 1945 to 1995 and concluded that they mirrored the public policy concerns of the times as to how government should work. By and large, earlier reform efforts had focused upon the reorganization of existing institutions and interagency relationships, changes in reporting and accountability requirements or, very rarely—the elimination of an agency. However, the REGO and NPR reform partnership differed markedly from the more than 141 earlier such efforts Light
chronicles in that emergent information technology provided the means to expand the scope of the reform to encompass the entire federal government.

The role of information and communication technology (ICT) embodied in the Internet occupied center stage in both the reinvention of government and the NPR projects. In a major break with past reform efforts, NPR focused on work process and service provision improvements that could be achieved through ICT use. The Internet and the e-commerce model were viewed as the ultimate means to those most allusive of reform goals—achieving ever increasing levels of efficiency and effectiveness at reduced cost. Corporate America’s success with e-commerce placed the business community in a pivotal position. Corporate America alone possessed the means to launch e-government, an established and widespread ICT infrastructure and the requisite technical expertise required to operate it.

Business moved aggressively to secure contracts at all levels of government for the development and management of web based information dissemination and service provision in e-government. This situation could be characterized as a paradigm shift wherein “run like a business” became in part “run by business” in the evolving e-government environment. The factors leading to this shift, its potential benefits and burdens, as well as the related policy implications, are worth exploring against the backdrop of the contradictions which represent the competing visions of e-government.

Something Old and Something New

The use of information technology (IT) in government and public administration is not a new phenomenon. However, what is new is the ever increasing integration of IT applications across all levels and aspects of institutional activity and the growing deployment of those activities during the past ten years through Internet web sites into the public domain.

In the 1960s, 70s, and early 80s, large mainframe computers comprised the core IT functions of government. These mechanical/electronic behemoths occupied large climate controlled rooms and required extensive staffs of attendants to operate, program, and maintain them. Data
handling functions were centralized in operational units or departments generally referred to as “central data processing,” “electronic data processing,” and or “information systems.” These units were tasked with developing, programming, and maintaining in-house software for large scale applications costing millions of dollars and were tied to specific programs and or departments, e.g., social services, public health, registrar of voters, payroll, etc. The focus of most of these projects was to reduce the cost, paperwork, and time associated with specific routine tasks, and also to improve the efficiency of public encounters. Public encounters were simply those interactions of citizens and government officials “as they communicate to transact matters of mutual interest” (Goodsell, 1981). IT projects were sold, and sometimes oversold, as the means for controlling personnel costs through improved productivity, that is, fewer people and more efficiently provided services. Typical ratio measures used to benchmark productivity increases were the number of clients seen per hour, cases handled per worker, or the number of applications taken by worker per hour. The client’s encounter with government, in this pre-Internet period, usually required that the individual travel to a physical office to interact with a government employee for service provision. Although the telephone and U.S. mail were also used for encounters, the majority of actual program service provision was effected through the face-to-face encounter.

Central data processing units were usually internal operations, managed and staffed with government employees who exercised considerable control over a department’s or institution’s information gathering and processing activity. Computerizing any task was a major budgetary exercise because mainframe, systems analysis, and programming time were expensive. The economies of scale of desktop computers, packaged software applications, distributed networked information processing systems, and outsourced or contracted IT operations were still ideas in waiting. The potential for the wholesale automation of minor repetitive or routine institutional tasks and or encounters was present but not practical within the constraints of the central data processing model. Nonetheless, there were those within and outside of public administration who theorized about the form and effects of expanded computerization of the operations of public bureaucracies.
Almost a quarter of a century ago, Inbar (1979) theorized that it was almost inevitable that a wide variety of the routine and repetitive decisions of stable bureaucratic organizations would be made by computers in the future. Inbar’s thesis was underpinned by Weber’s theory of bureaucracy, as well as systems, information, and cybernetic theory; the heuristics of psychology; and Herbert Simon’s speculations on computerizing clerical tasks (Inbar, 1979).

Inbar developed a continuum of bureaucratic decision-making. Policy making was at one end and its routinized implementation at the other. The policy making position on the continuum roughly corresponded with upper level management within the organization and the routinized implementation with the lower echelons—line staff. Inbar argued that while value premises and goal setting were essential factors at the policy making end of the decision making continuum, they were more than likely to be irrelevant at the routinized implementation end of the continuum. He further suggested that the routinized activity more appropriately mimicked simulations that could be duplicated by an information processing system or machine such as the computer.

*By concentrating on routinized decision-making, a well-specified system—the computer as a paradigm of a cybernetic information-processing system—can readily be applied. This, in turn, makes possible the quasi-isomorphic use of a theory-specific methodology—simulation [emphasis in original]. In particular, because, in ideal terms, a bureaucracy is a routinized (programmed) information processor, its theoretical yardstick is a programmed computer. (Inbar, 1979, p. 18)*

I would argue as a counterpoint to Inbar’s sweeping vision of the computer—enabled transaction, that the continued involvement of people in and with their institutions of governance is an *a priori* worthy goal. However, my argument is not that the computerized routine encounter is qualitatively any better or worse than the traditional public encounter in a large scale public bureaucracy. In the case of the latter, the literature is rife with horror stories of the

---

3 It is important to note that Inbar did not distinguish between public or private bureaucracy.
less than satisfactory nature of these encounters (Hummel, 1976; Merton & Nisbet, 1966; Singer, 1977; Thayer, 1973). The point is that human agency is an indispensable factor in our institutions. Herbert Simon, who also foresaw the future utility of computer technology in organizations, cautioned us not to forget the central role of human agency.

For generations to come, although organizations will have many mechanized components, their most numerous and crucial elements will continue to be people. Their effectiveness in handling problems will depend as heavily on the effectiveness of the thinking, problem-solving, and decision-making that people do as upon the operation of the computers and their programs. (Simon, 1997, p. 227).

Inbar’s thesis is both fascinating and troubling. Fascinating because of its prescience and troubling because the overriding metaphor was still that of the organization or institution as machine. The corollaries to the machine metaphor are the diminished importance of human agency within institutions and the corresponding increased impersonal nature of the public encounter in Inbar’s idealized schema.

What is considered a routine organizational activity today may not be so in the future. Who is to determine what is or is not routine? Continuing advances in computer artificial intelligence could conceivably place the non-routine decisions which require consideration of value premises and goal setting into the “routine bucket;” and thereby, further reduce the opportunity for human agency in that most human of endeavors: government. The foregoing scenario is admittedly a “worst case” but—absent an ongoing public dialogue on the limits of e-government—who is to say what reality will obtain at the end of the day?

The subtext of Inbar’s hypothetical idealized model for routine decision making in bureaucracies was that human agency, though important at higher levels within the institution, represents barriers to efficiency at the lower levels of routinized activity. Who and or what process will be used to determine the appropriate level of routinized activity vis-à-vis efficiency? The extensive elimination of human agency in government activities could eliminate or severely weaken the
nexus between responsibility and accountability for actions. Although information and communication technologies may mediate these relationships, it cannot replace them. Inbar’s theorization constitutes a slippery slope.

Responsibility and accountability for actions and results in our republican system of governance rest directly with elected and appointed officials acting on behalf of the governed. The governed are responsible and accountable indirectly through their political choice of elected representatives in whom they vest the authority to act on their behalf. The development of value premises and goals should never be considered a routine activity.

Public administrators working at all levels of government and in diverse organizational contexts are confronted daily by situations, problems, and policy choices that need to be addressed. Some of these situations are undoubtedly routine. The problems perhaps less so and the policy choices are seldom, if ever, routine. In deciding what action to take with respect to these matters, the public administrator usually must exercise his or her judgment through a synthesis of his or her education, personal experience, personal and organizational value premises, and organizational goals. The act of deciding is not value neutral nor should it be. The public administrator’s decision—the bureaucrat’s decision—is a governmental act enabled by the laws and related values of government.

The question of how much discretion a bureaucrat should have to act, the ethical and statutory basis for that action, and the related means for holding the bureaucrat responsible have been recurring themes in both government reform efforts and the literature (Cooper, 2000; Finer, 1941; Friedrich, 1940; Long, 1962; Rohr, 1989; Rosenbloom & Carroll, 1989; Waldo, 1948). The work of John Rohr in developing an ethical framework for grounding the bureaucrat’s decision making process is particularly relevant to the questions of the character and extent of bureaucratic discretion. Rohr’s work focuses on the bureaucrat’s ethical exercise of administrative discretion.
The consideration of value premises and goal setting that Inbar associated with policy making is another way of describing the exercise of administrative discretion and is consonant with Rohr’s (Rohr, 1989) conception of such discretion as:

The discretionary activity of bureaucrats in which they advise, report, respond, initiate, inform, question, caution, complain, applaud, encourage, rebuke, promote, retard, and mediate in a way that has an impact on what eventually emerges as ‘agency policy’ (Rohr, 1989, p. 36).

Thomas Dye (1998) noted that policy, whether that of an agency or institution, in its most elementary formulation—is nothing more than what governments choose to do or not do (Dye, 1998, p. 2). The exercise of choice assumes discretion to act or not act based on the consideration of facts, value premises, political considerations, and yes, even intuition. Administrative discretion is the quintessential expression of human agency within institutions and provides the framework for action when ritualized and or programmed responses will not suffice. Inbar failed to extend his theorization to its logical conclusion in which the ultimate heuristic supplants its author.

Inbar’s thesis represented a novel synthesis of the relevant literature of the time which examined societal and related policy issues with the ostensibly dispassionate, rational eye of the scientist-systems analyst-cyberneticist. In this perspective, organizations and institutions were perceived as organic machines or complex systems that could be tweaked for optimum performance and efficiency. The tweaking advocated generally involved some degree of task and or process automation that further circumscribed the exercise of human discretion which, in the ideal bureaucratic setting, was nonetheless perceived as illusory or illegitimate because of the inherent impersonal nature and rigidity of bureaucracy itself.

---

4 Inbar drew upon the work of March and Simon (1958) and Wieck (1969) on routine decision making in organizations, Beer’s (1959) work on Cybernetics and Management, and Simon’s (1960, 1972, 1976) work exploring the effects of technology on modern organizations. In 1975, the Altair 8800 computer kit appeared on the cover of Popular Electronics and in 1977 Stephen Jobs and Stephen Wozniak invented the Apple II personal computer. This is just a partial list of the literature Inbar drew upon and the key events of his day. This is only offered to provide the reader a feel for the literature underpinning his efforts and the context.
Inbar’s continuum can be viewed as a proxy for the competing visions of human agency both within and external to institutions of governance. At one end are the proponents of increased task and process automation whose preferred tools of reform for improving bureaucratic efficiency and performance are the unidirectional application of the appropriate computer software programs. At the other end of the continuum are those who believe that technological solutions are affected at a fundamental level by the social and institutional context in which they are employed (Grossman, 1995; Mackenzie & Wajcman, 1999; Poster, 1990; Postman, 1993; Saco, 2002; Sunstein, 2001). In other words, any such solution is shaped by its effects upon and resulting feedback from the institution.

Jane Fountain (1999), in writing about what she sees as the “virtual state” emerging from the increasing use of information and communication technology in government, succinctly noted that ”Indeed, organizations often appear to change technology, rather than their practices, by using or enacting technology [emphasis in original] in suboptimal ways that allow the status quo to continue" (Fountain, 1999). What Fountain describes in part as “suboptimal enacting of technology” was referred to as “reinforcement politics” almost twenty years earlier (Danziger, Dutton, Kling, & Kraemer, 1982). Reinforcement politics relative to computing within government was the theory that “computing will reinforce [emphasis in original] the power and influence of those actors and groups who already have the most resources and power in the organization” (Danziger et al., 1982, p. 18). Benjamin Singer highlighted a variant of this behavior in a 1977 article critiquing the unidirectional procedural and technological means used by both private and public organizations to either avoid or minimize contact with their customers and clients (Singer, 1977).

The scenario Singer highlighted is played out on a daily basis all around the globe for citizens, customers, clients, etc. whose primary or sole means of encounter with an organization—public or private—is the ubiquitous automated voice decision tree with its numbered menu of limited choices. All of the key attributes of bureaucracy, hierarchy, rules, specialization, and impersonality, have been incorporated into the automated voice response encounter. As a result, the encounter in this highly scripted interaction has been honed to a level of efficiency and
control which may possibly only be surpassed by having no means of communication whatsoever.

Admittedly, the preceding characterization of automated voice response systems is worst case. These systems do possess a proven utility in expediting certain types of transactions, disseminating information, and in reducing labor costs. Moreover, these systems generally do provide an opportunity to speak with a human being—providing one has been successful in navigating the menu maze and also has sufficient patience for being placed on hold for extended periods of time. The point is that these systems cannot be used and or viewed as the sole means for effecting the encounter. Not all situations or problems will fit neatly into an automated menu nor are all potential users going to be able to use the means provided for a variety of reasons, e.g., disability, language, human error, and so forth. Why on earth would we consciously choose to impose a restrictive, unidirectional, technology enhanced bureaucratic system upon ourselves, if, as we loudly protest, we want a government that serves its citizens, empowers employees, and want to use citizen satisfaction as a measure of success?

Bureaucracy, and in particular public bureaucracy, has been the target of legions of critics who in the extreme view it almost as evil incarnate, the institutional Frankenstein, and the root of all organizational and governmental problems. For some, no distinction is made between government and bureaucracy and both are popularly reviled in incessant anti-government rhetoric by business, politicians, and the media. Ironically, one of the more familiar refrains emanating from this chorus of condemnation is that of the impersonal nature of bureaucratic service provision and the related desire of citizens to be treated as individuals rather than as cases, clients, or customers.

Reified constructs such as bureaucracy are easy targets, when the construct has been reduced to a pejorative epithet. Bureaucracy in the abstract is generally perceived as a monolithic structure—the proverbial unwanted “elephant in the living room.” In actuality, bureaucracy, is not a mega-institution but as Goodsell noted it is “thousands of separate organizations” each with its own culture and potential for pathology or health (Goodsell, 1994, p. 4).
Ongoing research on bureaucracy and honest public debate of its documented and alleged deficiencies as well as its benefits has not been standard practice. For far too many, the conventional wisdom is that bureaucracy has little or no value other than to dehumanize and oppress employees (Hummel, 1976; Merton, 1989; Osborne & Plastrik, 1998; Thayer, 1973). Goodsell and Frederickson’s analyses of bureaucracy, by and large, are two of the more notable exceptions to the foregoing (Goodsell, 1994; Frederickson, 2000). If not bureaucracy, then what alternative organizational form is preferred by its critics? The question is a simple one but the answer to it, if there is one, will undoubtedly not be as simple. For, if we discount the usual utopian fare, the choices are few to none. It may also be instructive to reflect on the bureaucracy observations of two intellectual giants of the Twentieth and Nineteenth Centuries respectively. Schumpeter, in spite of his critique of the “depressing influence on most active minds” of bureaucracy, held that “bureaucracy is not an obstacle to democracy but an inevitable complement to it” (Schumpeter, 1975, p. 206) and Weber argued that:

The whole pattern of everyday life is cut to fit this framework. For bureaucratic administration is, other things being equal, always, from a formal, technical point of view, the most rational type. For the needs of mass administration to-day, it is completely indispensable. The choice is only that between bureaucracy and dilletantism in the field of administration (Weber, 1997, p. 337).

Regardless of where we stand on the subject of bureaucracy, it is important to note that bureaucracies are predominantly comprised of honest, hardworking people who vote, pay taxes, have children, pay mortgages, and may be our neighbors. Grouping people into abstract constructs which are then imbued with overly negative attributes only serves to create a consciousness that perceives this socially constructed group as the “other,” as less deserving, and even perhaps—less than human. It is this type of dynamic and related consciousness that may have underpinned the twisted logic of Timothy McVeigh, the young man who conspired with similarly disturbed individuals to perpetrate the horror of the 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City. It is my belief that abstract constructs such as bureaucracy or the metaphor of the organization as “machine,” while useful for examining
theoretical issues, are wholly inappropriate when used to either circumscribe, denigrate, or otherwise diminish the contribution of human agency to human enterprise.

Fortunately or unfortunately the systems theory metaphor of organizations or institutions as organic machines has persisted. Today it represents both a tacit objective and end goal for the computerization of government. Scavo commented on the results of a question asked in 1998 of very active Internet users or “netizens”—so called permanent cyberspace dwellers (Scavo, 2003). The question was quite simple and the answer was illustrative of the emerging mindset of a generation of Internet users. The question was: Technology, Yea or Nay? One respondent proclaimed:

Technology is wonderfully liberating. I don’t need my stockbroker or travel agent anymore. I may choose to use them for a variety of reasons, but I don’t NEED them anymore. Multiply that by millions of people and you have an entire industry that could be irrelevant in the Information Age. . . .Take this even further—maybe technology at some point will make government irrelevant [italics added]. (Scavo, 2003, p. 229)

One individual’s comment expressing a vision of government as truly a machine, as being in the machine or indistinguishable from the personal desktop computer and or Internet, does not portend the future but. . . could it? I will address this question later in the chapter. As it turned out, Inbar did not have long to wait for others to test his thesis.

IBM’s introduction of its personal computer in 1981 and Apple’s introduction of its MacIntosh computer in 1984, coupled with aggressive marketing efforts, resulted in exponential growth of personal computer sales and use in the 1980s. In 1989, federal information policy critics called for a more robust use of modern computer and telecommunications technology by agencies for the dissemination of and access to public records (McClure, Hernon, & Relyea, 1989). By 1991, the personal computer had secured a firm toehold in the American home and business
community and as a result of an improved graphical user interface software program developed by Tim Berners-Lee the Internet was becoming more user friendly.\(^5\)

The Business of Government

During the mid-1990s, traditional physically-based retail commerce and other enterprises moved onto the Internet and e-commerce was born. Just a few personal computer mouse points and clicks away and within the safe confines of one’s own home, e-commerce shopping placed a dizzying array of products and services in front of the computer user. E-commerce was the ultimate in convenience and timesaving because the shopper did not have to leave home or interact with another human being to complete the shopping transaction. One merely made a selection, typed in the requisite personal and billing information, and then, waited for its delivery to the front door.

The e-commerce point-and-click shopping model had arrived and the traditional business community, as well as other less savory entrepreneurs, became the newest denizens of the Internet. Physical space based entrepreneurs, who were able to do so—including the unsavory—, either moved onto or were emulated by others on the Internet. Gambling and pornographic sites proliferated on the Internet more rapidly than those of the traditional retailers (Alexander & Pal, 1998; Landow, 1997). By 2000, the comparative success of e-commerce, the increasing penetration of the personal computer at home and at the office, coupled with escalating Internet use by the general public, resulted in a growing demand at all levels for access to point-and-click government services and information.

In May 2000, David L. McClure, a senior official of the United States General Accounting Office, testified before a Congressional committee that e-government could build upon the experiences and approaches of e-commerce. Specifically, he noted that:

---

\(^5\) Tim Berners-Lee was a computer engineer working with CERN, the European Particle Physics Laboratory located in Geneva, Switzerland. Berners-Lee had been trying to come up with an easier way to communicate with his colleagues. The method of communicating on the Internet prior to his software program was by text and required the physical or Internet protocol (IP) address of the machine you wanted to reach. The IP address was a (4-byte) binary number uniquely identifying a host (computer) connected to the Internet to other Internet hosts, e.g., 128.93.0.23.
The recent advances in web-based commerce mean that comparable advances in e-government are just as possible. . . . It has the potential to help build better relationships between government and the public by making interaction with citizens smoother, easier, and more efficient (GAO, 2000, p. 3).

Although the overall tone of McClure’s testimony was that of optimism, he nonetheless highlighted some specific areas of concern that the federal government would have to address. While his stated concerns focused on the federal government, they were equally applicable, if not more so, to state and local jurisdictions—jurisdictions with generally far fewer resources to draw upon.

Nevertheless, despite its promise, technology advancement is not a panacea for government performance problems. I want to emphasize that we still face formidable challenges. While considerable technological progress has been made, successful e-government must still deal with some of the same basic challenges that have plagued information systems for decades—inadequate attention to technical and business architecture, adherence to standards, and security [italics added] (GAO, 2000, p. 19).

A little more than a month after McClure’s testimony, Jeffrey Birnbaum, writing in an article that appeared in Fortune magazine, speculated on the effects of e-government on bureaucracy and bureaucrats (Birnbaum, 2000). He envisioned a dramatic reduction in the federal workforce as a result of e-government implementation, other salutary effects on government and democracy, and the “end of bureaucracy.” He also unabashedly critiqued the federal government’s initial e-government efforts, describing the content of agency home pages as consisting of a photo of the department head and recent press releases. More importantly though, Birnbaum highlighted a major reason why business was interested in e-government as evidenced by the following statement:
Still, money is money, and there’s a lot to be made from e-government. Federal, state, and local government transactions reach upward of $1 trillion a year. Less than 1% occur online. Entrepreneurs think that gap represents a gargantuan opportunity and are fighting for the chance to build government Websites for free. That’s right, free. In exchange for a piece of the action—typically a fee charged for each electronic transaction—legions of firms are scrambling to erect virtual statehouses and city halls (Birnbaum, 2000, p. 242).

Birnbaum’s assessment of why business was interested in e-government was balanced by Milford Sprecher’s assessment of why government was interested in e-government. Sprecher, writing in the October 2000 issue of Government Finance Review, detailed the economic impact e-government could have on saving taxpayer dollars (Sprecher, 2000). He provided estimates that placed government savings, at the combined local, state, and federal levels, at approximately $110 billion per year, that placed e-government annual growth at 33 percent, and that predicted that governments would spend $101 billion on information technology by 2005. Sprecher also noted that other factors pushing governments towards e-government were pressure from constituents looking for easier ways to interact with government, pressure from elected officials looking to improve service, and competition from other governments (Sprecher, 2000, p. 21).

E-government has come a long way since 2000 when federal agency home page content consisted primarily of the department head’s photograph and recent press releases, if that were ever the case. In the past three years, federal, state, and local governments have made tremendous strides in moving both information and services online (Sostek, 2002; Van Wert, 2002; West, 2001; West, 2002). The involvement of the business community in e-government initiatives at all levels of government has been instrumental in the progress and success enjoyed to date. Key to the explosive growth and success of e-government were corporations’ e-commerce expertise and related lessons learned, as well as the professional and material resources firms such as Accenture, IBM, Oracle, SAP and many others made available to government. It is fair to say that the continuing involvement of corporate America in working with government to maintain, secure, and update e-government infrastructure is crucial. However, there is another very important aspect of this partnership between government and
business that should not be ignored—that aspect is the blurring of roles and functions, and in some important instances conflicting values.

Earlier I discussed the role and process differentiations that have emerged from government’s adoption of the language of reinvention and the e-commerce model. Citizens have become customers and encounters have been replaced with transactions. This change of vocabulary also constitutes a change in philosophy and by extension a change in values. The constitutional principles and overall objectives of U.S. government are to sustain a republican form of government and promote the general welfare of the citizenry while adhering to values such as equity, participation, publicness or openness, and privacy. Within this scheme the citizen has enumerated legally defined rights and implicit responsibilities for participating in government to sustain the principles and overall government objectives. More often than not, the act of voting on an issue or for a candidate serves as a loose proxy for this participation. By contrast, the principles and overall objectives of corporate enterprises are to generate profits for shareholders and to grow and sustain their competitive businesses. The essential key to achieving the former is the customer. Without someone to buy the “product” there is no enterprise. Customers, as opposed to citizens, by and large, seek to purchase quality goods and services at the lowest price possible to satisfy their individual needs and desires absent other responsibility considerations. Which particular company provides a given product and or service is less of an issue than its availability to the customer. Efficiency and economy of operation are the dominant values in the business enterprise. These values are important in government as well but they do not or should not trump either regime values or our republican tradition.

The concept of “regime values” refers to those values embodied in the U.S. Constitution such as freedom, equality, and property, as well as to those values that have emerged through the evolving interpretation of the Constitution by the Supreme Court. In the latter case, fairness, justice, privacy, and participation are four such examples. The regime values noted above are not exhaustive and, while they focus on individual rights in the Lockean sense, our republican tradition provides balance. That tradition speaks to the importance of community and civic virtue—and to the responsibilities of citizens (Rohr, 1989, p. 285). In the past, while it may have
been customary for public administration to focus on efficiency, economy, and effectiveness, the
values of equity, fairness, and justice have always been part of public administration.⁶

In the preceding pages I sketched a general vision of the business community’s vision of e-
government. Admittedly, that sketch highlighted the pecuniary nature of that community’s
interest and related vision. On balance, however, absent an opportunity to profit from e-
government on some level, business would not have come to “the party,” or, at least not as
quickly. The next section is intended to provide a general overview of the current visions of e-
government within the larger public administration community and that of government at the
federal level. I will also highlight selected values articulated in those visions.

Competing Visions, Complex Realities

Two very important institutions within public administration require scrutiny. The institutions
are the American Society for Public Administration (ASPA) and the National Academy of Public
Administration (NAPA). It can be argued that these two institutions and their related
memberships, comprised of both academics and practitioners, collectively constitute the social
consciousness of public administration. This consciousness is manifested through the
organizations’ mission statements, codes of conduct, publications, studies, and partnerships with
other institutions. It is possible to glean what general vision or visions of e-government exist
within public administration by examining the initiatives, partnerships, and other institutional
activity of ASPA and NAPA relative to e-government. ASPA is the older of the two institutions
having been established in 1939. NAPA was established as an ASPA affiliate in 1967. Both
organizations have well established web sites that are accessible to the general public as well as
their memberships.⁷ Let’s first turn our attention to NAPA in the examination process.

Approximately three years ago in the summer of 2000, the National Academy of Public
Administration (NAPA) launched an initiative called Governance in the Technology Century.

---

⁷ The web site home pages for ASPA and NAPA are as follows, ASPA at http://www.aspanet.org and NAPA at http://www.napawash.org.
The initiative was housed in the newly established NAPA Center for eGovernance\(^8\) and had a related web site. The initiative represented a partnership between NAPA, *Government Technology* magazine and the Center for Digital Government.\(^9\) eGovernance was defined in the initiative as models of working relationships between the citizen and government that also included partners, both public and private, involved in the evolution of electronic or e-government. The key distinction between the concepts of eGovernance and e-government is that the former implies some form of direct participation by constituents in government activities while the latter relates more to information dissemination and routine service delivery. In point of fact, there appears to be a trend toward convergence as web site features become more sophisticated and in some instances even allow for bidirectional communication between constituents and service providers and or policy makers.

The purpose of the NAPA initiative was exploring “citizen-centric,” intergovernmental service applications focused on “key life events” around which solutions can be built and developing the learning that give solutions relevance. . . . It begins with a primary focus on the relationship of government to the citizen (NAPA, 2000, p. 1). A key life event was defined in the initiative as “an episode in a citizen’s life that creates a series of needs that they may not be able to address solely by themselves and could trigger some form of government action” (NAPA, 2000, p. 1).

The NAPA initiative is useful to examine for several reasons. First, NAPA, since its founding in 1967, has been the premier professional nonpartisan national institution within public administration. It is congressionally chartered resulting from legislation signed into law in 1984. Second, the Academy’s mission outlined in its congressional charter places it at the nexus of

---

\(^8\) Use of the lower case e in the term eGovernance is consistent with NAPA usage on the initiative web site.

\(^9\) *Government Technology* magazine may be accessed online at [http://www.govtech.net/](http://www.govtech.net/). The magazine is a subsidiary of e.Republic Incorporated. e. Republic, Inc. is the nation's leading media, event and research company focused on the state/local government and education information technology markets. Serving both government and industry for over 18 years, e. Republic publishes the dominant state and local government magazine (Government Technology), runs the four largest intergovernmental conferences in the nation (GTCs), produces over 100 public and custom events annually and has the top research and advisory group in the state, local and education markets (Center for Digital Government and Center for Digital Education). Source: [http://www.erepublic.com/](http://www.erepublic.com/) accessed June 4, 2003.
most, if not all, local, state, and federal governance issues—including e-government. Third, the eGovernance initiative articulated a citizen-centric focus as opposed to that of the customer and identified a set of basic building block issues that should underpin all eGovernance models. The twelve building block issues identified, in original list order, were as follows: (1) Shared strategic vision; (2) Related service groupings that can be integrated into “one-stop-shopping” bundles to address key life events; (3) Intergovernmental coordination including dispute resolution; (4) Legislative barriers; (5) Institutional structures; (6) Privacy; (7) Security; (8) Privatization; (9) Citizen participation; (10) Interest group coordination; (11) Architecture; and, (12) Infrastructure requirements.

The twelve building blocks articulated more than issues. They also spoke to both the underlying values within the initiative and an acknowledgment of the complexities attendant to eGovernance form and function. Citizen participation, privacy, and security are values expressed as issues. Architecture or the concern with how an eGovernance model and related web sites are built to provide accessible content for citizens may be construed as both issue and value. The value equity requires that disabled or non-English speaking individuals are able to both access and utilize the web site. The primary focus of the NAPA eGovernance initiative was the citizen’s relationship to and interaction with government. The related values of citizen participation, equity, privacy, and security underpinned it. Although the eGovernance Center is no longer operational, the values and vision of eGovernance it articulated are nonetheless still relevant today.

ASPA has formed partnerships in recent years with a variety of organizations and institutions for the purpose of studying, reporting, and staying abreast of e-government initiatives and their related implications for governments at the local, state, federal, and global levels. ASPA is a North American partner of the United Nations Online Network in Public Administration and Finance or UNPAN. One of UNPAN’s major initiatives is assessing the e-government progress of the 190 United Nations member states.

10 The Academy’s mission as outlined in its Congressional Charter may be accessed at http://www.napawash.org/about_academy/about_vision_mission_values.html.

11 The eGovernance Center ceased operation in the fall of 2002. However, the Center may be started up again at a later date. Source: June 4, 2003 phone conversation with Benita Carr, Staff-Associate.
In the spring of 2002, ASPA and the United Nations Division of Public Economics and Public Administration (UNDPEPA) published an online report titled *Benchmarking E-Government: A Global Perspective* (Ronaghan, 2002). The report was the culmination of a research study undertaken in 2001 to analyze the approaches, progress, and commitments of the UN member states to e-government. The principal goal of the study was “to objectively present facts and conclusions that define a country’s e-government environment and that demonstrate its capacity to sustain online development” (Ronaghan, 2002, p. v). Not too surprisingly, the United States was documented as the global leader in e-government. Other key selected observations and recommendations in the report were: (1) that services and by extension public encounters are the public face of government, (2) that a citizen-centric participatory orientation to e-government is preferable to a consumer orientation, and (3) that a nation’s e-government commitment should ideally “respect the citizen-centric approach rather than being influenced by short-lived trends or what outcomes may be politically expedient” (Ronaghan, 2002, p. 9).

In the case of the latter, concerns about an undue focus on online transactions as opposed to citizen participation seems to be growing. The report noted, based on information contained in a 2002 government web site survey conducted by the Pew Internet and American Life Project (Larsen & Rainie, 2002), that in the case of the United States there is growing concern “among academics, activists, and elected officials that government websites might focus more on providing services, and less on facilitating civic involvement” and that such service orientation “treats citizens as consumers rather than partners in government” thereby acting to inhibit public involvement with politics (Ronaghan, 2002, p. 9).

The unstated dilemma posed by a transaction focus vis-à-vis a more robust citizen participation orientation is—who is to pay? The dominant e-government model in the United States is that of the government web site contracted to a business entity that provides the hardware, software, and technical expertise required to maintain the web site—which is then funded by a percentage fee assessed against every completed online transaction. Of course, it must also be noted that, the government jurisdiction also significantly reduces its transaction cost through the economy of scale that online transactions permit. Economies are achieved through the one-to-many service
provision aspects of the web based transaction and a corresponding reduction or elimination of labor costs. However, these cost savings, along with greater citizen convenience, more often than not were used by an elected and or appointed official to justify migration of the transaction(s) to e-government. The dynamics and form of the foregoing model, absent both a commitment to and funding for expanded citizen participation, will trump broader considerations of participation. Nonetheless, the citizen-centric focus as well as the values of participation, privacy, and security articulated in the joint UNDEPA and ASPA report were encouraging because they spoke to a vision of e-government that engaged citizens in their governments and that was less instrumental in form and function.. A few months later in October 2002 another report was issued in which both ASPA and NAPA were partners in collaboration with additional entities.\textsuperscript{12} That report also advocated a citizen-centric approach to e-government, but defined citizen-centric in a narrower context within an overarching concern for documentation of both the effectiveness and efficiency of e-government initiatives at the federal level.

The report \textit{Creating a Performance-Based Electronic Government: Fiscal Year 2002 Progress} focused on addressing several important issues in the federal e-government environment (DeMaio, 2002). Two of the principal issues examined were: (1) whether and or what performance measures were used “to justify, manage, and evaluate the success of e-government initiatives”\textsuperscript{13} and (2) how to clearly define “what constitutes a ‘citizen-centered’ e-government initiative” (DeMaio, 2002, pp. 9 &14). The conclusion reached on the first issue, the strategic use of performance measures in e-government initiatives, could only be characterized as disappointing. In general, most agencies failed to use “mission-aligned IT performance measures to justify, manage and evaluate the success of e-government” (DeMaio, 2002, p. 24). The finding reported relative to the second issue was mixed. The stated objective of providing a clear definition of what constitutes a citizen-centered e-government initiative was not fully

\textsuperscript{12} The report was sponsored by The Performance Institute in collaboration with The Council for Excellence in Government, ASPA, NAPA, Progressive Policy Institute, Fujitsu Consulting, and the Reason Foundation.

\textsuperscript{13} The Clinger-Cohen Act formally known as the Information Technology Management Reform Act of 1996 (Division E of Public Law 104-106) and section 4 of the President’s Management Agenda for 2002 stipulate that performance measures must be used to justify, manage, and evaluate e-government initiatives. The President’s Management Agenda for 2002 may be accessed online at http://www.fgipc.org/02_Federal_CIO_Council/Resource/48_Presidents_Management_Agenda.htm
achieved because the definition used the language of the customer and efficiency to blur the important distinction between a citizen-centered initiative and an agency or department focus. Citizen-centered e-government initiatives were defined as those which:

...strategically employ information technology to provide government products or services to intended users resulting in enhanced value. Enhanced value is characterized by improved cost efficiencies, enhanced quality and availability of product and/or service, improved timeliness, better accessibility, and improved mission statement (DeMaio, 2002, p. 14).

Other related comments in the report also confused the issue. On the one hand, a citizen-centered focus is advocated but the language used to explicate that vision is dominantly that of business. The inclusion of a promise contained in President Bush’s 2002 Management agenda highlights the competing visions wherein the President “promises a government that is results-oriented, market-based, and citizen-centered” [emphasis in original] (DeMaio, 2002, p. 13). In all fairness, the President was merely picking up on the rhetoric of his predecessor’s reform efforts which, as noted earlier, to a large extent merely parroted both the philosophy and language of the reinvention of government movement. The fact that citizen-centered is listed last in the President’s vision of government may or may not be significant. However, there can be no doubt that the principal values articulated in the report were those of efficiency and economy.

To summarize, the preceding examination of NAPA’s eGovernance initiative and selected reports on the status of e-government have highlighted the competing visions at both the federal and state level. The NAPA eGovernance initiative focused on a citizen-centric approach constructed around key citizen service and information needs. The values resonating in that report were those of citizen participation, equity, privacy, and security.

The U.N. sponsored report argued for a citizen-centric approach to e-government/e-governance that would take into account the culture of the nation/country, administrative culture of its institutions, as well as the social, political, and economic implications of e-government
initiatives. The principal values articulated in that report were participation, privacy, and security.

The values articulated in *Creating a Performance-Based Electronic Government: Fiscal Year 2002 Progress* were those of efficiency, effectiveness, and economy (DeMaio, 2002). Moreover, the report, which was both a national policy and vision statement of what e-government is and should be brought us full circle—back to the competing visions and contradictions as to the appropriate form and functions of government. I have previously argued that the Clinton Administration broke new ground in deciding to run government not “like a business” but “as a business” and that business suppliers of e-government resources have facilitated this transition by grafting the e-commerce model onto e-government initiatives. President Bush’s vision of a government that is results-oriented, market-based, and nominally citizen-centered only serves to perpetuate the contradictions inherent in the competing ends of—running government as a business.

**Government or Business?**

The conundrums that may arise from attempts to fashion a reality to achieve the balanced citizen-centric objective are more than byproducts of an ends-means conflict. They are, more importantly, byproducts of language and values. Public administration has historically grappled with and attempted to balance both the language and practices of business with our regime values and republican tradition. The dichotomous language of some of the current e-government policy issues is illustrative of the ongoing struggle and the need for appropriate balance between efficiency, bureaucracy, and democracy.

Waldo discussed the dilemmas of efficiency, bureaucracy, democracy and the appropriate balance among the three. He also referred to the joint work of Dahl and Lindblom who identified this problem as one of “appropriate conclusion,” or the arriving at an appropriate mix at a given level of organization (organization wide, a unit in the organization, a city, state, etc.). As policy makers consider both the form and functions of evolving e-government, the problem
of “appropriate conclusion” or balance among competing visions should be central to their e-government strategies (Waldo, 1980, p. 91).

How these competing visions are resolved will shape the civic space of e-government in significant ways. Then, as with physical architecture, it will shape us. And, therein lies the challenge. For, if we are not more conscious of the effects of technology on the citizen’s encounter with government—through web site and information design and language use in shaping the public’s perception of and interaction with the institutions of government—then despite all our best efforts and intentions—we will not succeed in sustaining the critical nexus between technology and human agency. The expressive, behavioral, and societal implications of e-government should be part and parcel of both the strategic plans for its evolution and the reshaping of the administrative and institutional means necessary to support it.

Neil Postman warned about the consequences of not being mindful of the effects of what he termed “invisible technologies” (Postman, 1993). Invisible technologies are the systems and tools we take for granted in human interaction. Our use or misuse of language qualifies as an invisible technology. When we converse with someone we seldom stop to think about the etymological import of each word we use or, if we use gestures, why we came to use one gesture as opposed to another. The content language in the new civic space, the written text and graphic symbols that constitute the “built environment” or architecture of the web site, can be considered an invisible technology that may substantively shape our perceptions and conceptions of government. Postman argues that language provides the overarching context for our interaction in the world. If this is so, then the language of government web sites, as well as their architecture, is much more than mere instructions for securing information or services. Their content also serves to shape the citizen’s perception of government and his/her place within it. The same argument may also be made for the language used to define the citizen’s role, functions, and responsibilities in an e-government public encounter. Postman refined this point when he stated that:

If we define ideology as a set of assumptions of which we are barely conscious but which nonetheless directs our efforts to give shape and coherence to the
world, then our most powerful ideological instrument is the technology of language itself. Language is pure ideology. It instructs us not only in the names of things but, more important, in what things can be named. It divides the world into subjects and objects. It denotes what events shall be regarded as processes, and what events, things. It instructs us about time, space, and number, and forms our ideas of how we stand in relation to nature and to each other. . . . Unlike television or the computer, language appears to be not an extension of our powers but simply a natural expression of who and what we are. This is the great secret of language: Because it comes from inside us, we believe it to be a direct, unedited, unbiased, apolitical expression of how the world really is. (Postman, 1993, pp. 123-125)

The new language of the public encounter flows not from the mouth of the bureaucrat and citizen but from—the computer monitor. Hence “ideology” is for the most part unilaterally controlled by the contract web site designer and or webmaster. This dynamic is changing but how or if it will ultimately supplant the current unilateral aspect of the largely transaction based e-government presence of today—is yet to be determined.

The new civic space can inspire—but only if we have the inspiration. It may be able to re-invigorate civic mindedness, or it could convey the message to future generations that government IS in the computer. Our challenge is how we mold, modify, and improve upon the current visions of e-government so that the latter reality does not obtain.

The siren call for the reconceptualization of governmental form and function in response to technological advances is not the first call for such sweeping change, nor is it likely to be the last. However, there is a marked distinction between the current clamors for fundamental changes in government institutions and processes and past calls for reform which focused upon improving existing institutions and institutional relationships. In the latter case, the legitimacy and functions of government, though carefully examined, challenged, and oftentimes reorganized, were nonetheless at the end of the day still valued.
The current calls for reconceiving government go beyond traditional calls for reform. The more strident proponents of e-government actually argue that traditional government institutions and processes are obsolete and that the “commons” would be better served by the marketplace than by “big government.” While technology is the identified impetus in this instance, other calls for change have fallen under the rubric of governmental reform.

There have been other calls in the distant past, the not too distant past, and present day for reinventing and reengineering government. Although e-government appears to be the crucible for the current reform efforts, if one listens closely the echoes of the voices of reform from the present and past can be heard eerily molding together in harmony as the old is resurrected or reinvented “as the new.” However, what we do not know is what effect this evolving reconceptualization will have upon traditional, physically-based government. An examination of the character and structure of our existing government is a good starting point.

The government created by the framers of the U.S. Constitution was that of a representative republic—a representative republic that has over time become democratized. Gary Wills argues that Lincoln’s Gettysburg Address was the seminal act democratizing the Constitution framed by the founders (Wills, 2000). Lincoln reframed the governance process as “government of the people, by the people, and for the people. . . .” It is perhaps this ideal, as well as the mythos of democracy, that underpin the efforts of those who knowingly, or unknowingly, advocate for e-government, e-democracy or cyberdemocracy and more direct participation in government activities. However, we have yet to examine what considerations have been given to the limits of change within our democratic institutions or the effects and/or implications of the architecture of government web sites upon citizens at the expressive, behavioral, and societal levels.