

Facilitating Cross-Boundary Leadership in Emerging E-government Leaders

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Abstract

To achieve the vision of E-government organizations across the federal, state, and local government are challenged to improve efficiency and effectiveness, and to afford citizens the same access to information and services they have come to expect from E-business. E-government also has the potential to foster participation in governance. To achieve E-government objectives, leaders must collaborate across boundaries with their counterparts in other departments, organizations, and levels of government. In 2002, the Information Resources Management College, National Defense University began focusing on the development of cross-boundary leadership as the foundation of its new E-government Leadership Certificate.

Keywords: E-government, leadership, collaboration, education

Introduction

The United States federal government is in the throes of perhaps one of the most revolutionary changes in the way government operates and interacts with its citizens. Spawned by the great possibilities of the Internet and the fact that we are living in an increasingly interconnected society, government is radically changing its processes. President George W. Bush identified electronic government one of the key elements in his Management and Performance Plan. This is adding to the pressure on agencies to step up to the plate to make sweeping reforms in the way they do business. These reforms are tied to funding. At the same time citizens are demanding more services from their government at reduced costs.

To respond to citizen expectations, political mandates, and world events, government agencies are implementing a wide range of E-government solutions. E-government is designed to facilitate easier, less time-consuming, and more interactive engagement with the government, and to make the business of local, state, and federal government more effective and efficient through the use of technologies.

To carry forth these E-government initiatives leaders must turn their focus outward to the customer, rather than inward to the organization. E-government success will require agencies and agency leaders to work together across traditional boundaries to improve services significantly and to reduce operating costs. This undoubtedly requires crossing organizational boundaries that are rigid and not regularly crossed. The old command-and-control leadership, already under fire by the new generation of workers, suffers further in this new environment. Effective leaders of E-government initiatives must be enthusiastic and savvy communicators who engage participants through collaboration and partnerships.

Together they build new bridges to realign resources, incentives, rewards, and policies to support cross-boundary initiatives. This paper begins with a description of the networked nature of government and builds a case for a new kind of leadership that must emerge to meet the expecta-

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tions and challenges of E-government. The competencies of this new kind of leader are the foundation of a new graduate-level curriculum designed to develop cross-boundary leaders to meet the challenges of E-government.

The Evolving Networked Nature of Government

Organizational hierarchies, the familiar structures built to organize decision making and communication through their layers and departmental structures, have centralized authority and information, differentiated talents and functions, and have led to complexity and the development of specialized units derisively called silos today (Toregas, 2002). Today the effectiveness of hierarchies is being challenged by the complexity of issues, the overload of information available via the Internet, and the proliferation of human networks of communication and action. Communication technologies, which foster informal communities, are fundamentally changing the way businesses, universities, government agencies, and other organizations operate because they allow individuals and organizations to connect with others across boundaries in ways heretofore unavailable. Networks can respond quickly, are flexible and adaptable, can deploy rapidly, and tend to decentralize decision making and power.

Information sharing is a key element and a powerful stimulus to building community (Osborne & Plastrik, 2000). Networked communities composed of relatively enduring affiliations of interacting entities are formed on the basis of shared interests, services, missions, customers, suppliers or other linking mutual concerns. By their very nature they are less directive and more facilitative in providing support, guidance, incentives, and performance evaluation than hierarchies. Members of networks ignore rigid organizational boundaries as they enthusiastically engage in projects and problem solving with like-minded, creative, and collaborative innovators who seek to make change. As information becomes more ubiquitous and networks more interoperable, knowledge workers in flatter organizations are challenged to make decisions.

The increasingly networked nature of government is a result of, and a response to, the need to address complex issues that cross organizational boundaries, the diffusion of authority, the rapid advances in technology, and public unwillingness to accept and fund poor performance (Linden, 2002). Government leaders today must function as members of informal and nurturing networks, where no one is formally in charge and where collective objectives outweigh and sometimes contradict organizational ones, thereby creating the need for new skills in cross-boundary communication and leadership (Toregas, 2002). Cross-boundary leaders are often faced with budgetary, financial, legislative, and cultural inhibitors to achieving their goals. At the federal level they are developing cross-agency portals (e.g., disabilities.gov, Firstgov.gov) and government-to-government portals (e.g., statelocal.gov, financenet.gov) that focus on the customer. To be successful they must also build coalitions, scope the change effort, analyze the obstacles, be bold, understand limits and risks, clarify decision limits and authorities, place a credible manager in charge of each business process, know the people and culture across the borders, and dismantle the borders (Price Waterhouse Change Integration Team, 1995).

Expectations of E-government

Businesses as well as educational and other not-for-profit institutions are using information technologies to deliver on their missions effectively and efficiently, and to be more accessible to customers, students, and clients. By taking advantage of information technologies and applications, these organizations expect to reduce transaction costs, promote low-cost distribution of information, and reduce barriers and cross boundaries, thereby broadening markets and competition (Oblinger & Katz, 2000). E-business transactions and communications among businesses and their suppliers and customers streamline processes and allow for more customized services and products. Citizens now expect government agencies to be as user-friendly, transparent, virtual, and responsive as Amazon and E-Bay, and citizens expect

government offices and agencies to engage in e-commerce practices to become more effective and efficient to save taxpayer money.

Our expectations and our personal behavior have changed in regard to information, communication, and speed of access and transactions. E-government allows citizens in their homes as well as their offices to gather information via the Internet and to interact with government agencies to conduct business such as registering their cars, obtaining hunting and fishing licenses, and planning a trip to a state or national park. E-government, while providing opportunities to streamline business processes and communication, seeks to promote better service to, and engagement of, citizens. Perhaps more importantly in today's environment, E-government also seeks to achieve goals related to national security and homeland defense through collaboration across federal agencies, levels of government, and countries. E-government is an opportunity and a mandate being addressed by many local, state, and federal government organizations across the United States; Canada, Denmark, Australia, Singapore and New Zealand are also leaders in E-government implementation.

E-government, the application of E-business concepts by government organizations, encompasses a wide range of initiatives at federal, state, and local levels to improve effectiveness and efficiency, to afford citizens 24/7 access to information and services, and to enhance opportunities for participation in governance. The roots of E-government can be found in former Vice President Al Gore's efforts to reinvent the federal government as smarter, faster, and more effective. A significant element in this reform effort was its focus on the customer. This led to a major transformation in the way government employees thought about their jobs and how they did them (Kettl, 2000, p. 17). In *From Red Tape to Results: Creating a Government that Works Better and Costs Less*, Al Gore (1993b) recommended creating partnerships within and between agencies and encouraging crossing internal and external boundaries to integrate service delivery and more collaborative development of policy. Operating like a 'boundaryless company' government should be a place where the primary loyalty of employees is to serve citizen needs and cross-agency work is commonplace (p. 2). The E-Government Act of 2002 builds upon the Government Productivity and Results Act of 1992, the Paperwork Reduction Act of 1995, and the potential of information technology for integrating public services.

These significant reform initiatives focus on improved performance of the federal government, a set of complex bureaucracies patterned after large businesses of an earlier era. In this hierarchical system the work of government employees is divided into pieces to be completed following clearly defined rules and procedures. This slow and costly approach of government has perpetuated itself over the decades, and its "emphasis on process steals resources from the real job: serving the customer" (Gore, 1993a, xxxv). The culture and reward systems of government have socialized employees to look inward and to focus on their organization's goals, no matter how small or unconnected to the larger mission of the agency or public they serve. Today's cumbersome bureaucratic agencies are enmeshed in standard operating procedures, and are no longer responsive to the speed and access of information, the potential of information technology, or the expectations of citizens. A true focus on customers, whether they are other organizations or citizens, requires a major change in culture and orientation.

To reform government to be more customer-centric as well as effective and efficient using information technologies requires organizations and agencies at different levels and jurisdictions to communicate and collaborate in new ways. Federal agencies, state and local governments, which traditionally focus on their own missions and narrowly defined publics, must now communicate, share information, and cooperate to enhance services across governments. By redefining the enterprise to encompass all citizens, the "public" to which any organization or agency is responsible is enlarged. Under the leadership of Mark Forman, Director for Office of Electronic Government at the Office of Management and Budget, the federal government mandate is to simplify and unify "the silo" redundant systems designed by individual agencies to meet their specific mission, organizational or constituent needs. Not only are these government systems redundant and expensive, they are not interoperable, a consequence of which

is the inability to share information and to serve customers effectively and efficiently. In response, major projects are underway to consolidate multiple systems into federal enterprise-wide E-government systems for common functions including travel, rule making, and payroll by implementing the best one or two systems across many agencies. These efforts by their nature make visible the processes of organizations and allow best practices to be identified and shared. For today's homeland security and law enforcement needs, federal agencies, state and local jurisdictions must create compatible systems that make it possible to share data, so we can avoid the information gaps faced by the first responders on September 11th.

The challenges of reinventing government and implementing E-government reveal the complexity of conducting government across agencies, levels, and sectors. We face "wicked problems" as opposed to "tame problems" (Conklin, undated) because of the size, complexity, and social issues of government. Wicked problems have no clear-cut solution, no fixed borders, and no experts who possess all the required knowledge. They demand collective intelligence, or more precisely, tools and methods to create shared understanding and shared commitment (Rittel & Webber, 1973). They require the collective wisdom of people with different perspectives and expertise across organizations and networks. Together they can create solutions by sharing knowledge and perspectives, by crossing-boundaries. To reach a solution conversation has to take place across many boundaries (Addleson, 2003).

E-government Calls for a New Kind of Leadership

Leadership as it is commonly understood focuses on the accomplishment of the mission and goals of particular organizations. The performance of leaders of organizations is measured by the delivery of products and services to meet the needs of its customers. Boundaries or borders matter because they outline authority, power, responsibility, funding, and mission of an organization. Successful leaders of organizations have well-developed "vertical muscles" but leaders who assume responsibility for cross-boundary change initiatives need to exercise "horizontal muscles" (Price Waterhouse Change Integration Team, 1995).

Chief Information Officers, who ranked "making the business and cultural changes necessary for full E-government transformation" as second of their top ten concerns (Association for Federal Information Resources Management, 2002), and others who undertake E-government leadership projects, are currently evaluated and rewarded for their performance related to the achievement of their IT organization's mission and goals. Now, as they assume responsibility for E-government efforts, they need to work across boundaries as never before with their counterparts in other departments, organizations, agencies, and governments. Even when they imagine the benefits of sharing resources and data, and recognize the value of designing common systems and applications instead of expensive redundant ones, the current culture, policies, reward systems, funding sources, regulations and laws (in some cases) can be potential obstacles. Worthwhile cross-organizational efforts require shared resources and common interests to develop, implement, and sustain, but they are complicated by the fact that funding, sponsors, and recognition come from multiple sources, not just through any E-government leader's own organization.

One of the foundational competencies of E-government leaders is the facilitation of partnerships, collaboration, and sharing of time, personnel, resources, and credit with other units and organizations for the greater good. Collaboration is essential because of the complexity of the challenges facing us, the blurring of organizational lines and the networked nature of our organizational world, the increasing diffusion of authority, the rapid advances in technology, and the public unwillingness to accept and fund poor performance (Linden, 2002). According to the U.S. General Services Administration report *Government Without Boundaries* (2002), collaboration must be organized and efficient, should permit different levels of participation, equally consider the priorities and issues across jurisdictions, respect different levels of technical maturity, and appreciation of jurisdictional independence and identity. Some organizations, especially those without adequate funding and customized solutions, are perhaps more

willing to collaborate to take advantage of the intellectual capital and development efforts of members of the group. But other partners, who have already developed and funded customized solutions for their customers, may be less willing to give up their perfect solution for one that fits the group. As stated in *Government Without Boundaries* (2002), cross-boundary initiatives may create new risks, cause new complexity, and may result in reduced control for particular participants. Individual organizational needs, priorities, and legal frameworks are balanced against the needs of the collective vision to create an integrated solution that offers the promise of better overall service, long-lasting results, and lower costs (p. 5).

This first generation of E-government leaders implementing projects across sectors and levels are pioneers. They are tackling the big challenges of E-government and assuming professional risks as they exercise their skills in cross-boundary leadership, while creating a set of promising practices and policies for future generations of E-government leaders. They must keep their eyes on their organization's mission and goals, manage the attitude and commitments of senior leaders of their own organizations, and select concrete evidence of the impact of inter-governmental activities and projects that can be communicated easily, quickly, and powerfully to justify participation beyond their individual organization's boundaries.

Subsequent generations of E-government leaders must develop their cross-boundary leadership if E-government is going to achieve its objectives and if its accomplishments are to be sustained. Cross-boundary leaders must be public servants who are very skillful at communicating, coordinating, and collaborating as members of networks across sectors, levels, departments, and agencies. As participants in networks they must foster trust among members, be selfless risk-takers, and effectively focus on the intended outcomes to achieve lofty goals as well as concrete results for their customers and citizens. They must think systemically, influence others without relying on organizational authority, and share responsibility and accountability with other cross-boundary participants. To be effective cross-boundary leaders must appreciate cultural and organizational differences, and appreciate, create, and take advantage of networks that rely on technology, management, policy, and people. In non-hierarchical organizations or networks leadership of individuals and organizations relies on collaboration, continual learning, diverse perspectives, profound change, and systems cognition (Bonous-Hammarth, 2001).

Educating Emerging E-government Leaders

The author and her colleagues at the Information Resources Management College of National Defense University identified the importance of cross-boundary leadership for E-government leadership, and set out to define it as the foundation for a curriculum to facilitate its development. The Information Resources Management College of National Defense University offers graduate-level educational programs to middle to senior level employees of the federal government, primarily in the United States Department of Defense. Many of its students, both military officers and civilian managers, are preparing to advance to higher levels of management and leadership in the Offices of the Chief Information Officer. The fundamental goal of the CIO Certificate Program is to develop students' critical thinking, knowledge, and skills related to information and information technology policy, planning, and performance. Leadership is a goal of the program because CIOs are strategic leaders in their organizations, responsible for facilitating change, and aligning essential information technology personnel and resources to achieve the organizational mission. The design of a new program in E-government leadership was a logical next step.

In 2000, the college began offering E-business and E-channels courses as part of the CIO Certificate Program. A course in E-government grew out of faculty collaboration and responsiveness to the changing environment of government. In 2002, key faculty collaborated to describe the effective leader in current and future E-government and E-military roles and organizations as demonstrating the knowledge and skills to set new directions, to transform processes and resource uses, and to use information strate-

gically. The faculty articulated thirteen E-government competencies that describe what highly effective leaders know and know how to do.

Table 1: E-GOVERNMENT LEADERSHIP COMPETENCIES		
SETTING NEW DIRECTIONS		
Policy	Understanding the environment, principles, policies, and foundations of E-government	“E-government”
Thinking	Applying systems thinking to complex E-government challenges	
Planning	Planning and organizing strategically for E-government	“Information Management Planning” or “E-services Planning for Improved Government Performance”
Change	Transforming organizations and cultures to sustain E-government	“Transforming to E-government”
TRANSFORMING PROCESSES & RESOURCE USE		
Collaboration	Collaborating across boundaries to achieve E-government goals	
Architecture and Enterprise Integration	Understanding and applying effective architecture and systems for E-government	“Enterprise Architecture for Managers” or “Enterprise Resource Planning”
Human Capital	Using new models to extend human capital for E-government	“Strategic Human Capital Management Issues”
Financial Resources and Investment Management	Planning and managing funds and resources strategically for E-government	“Information Technology Capital Planning”
Performance Management	Managing performance-based E-government programs and projects	“Measuring Results of Organizational Performance” or “Strategic Management of Websites”
Execution/Implementation	Moving from concept to reality	
USING INFORMATION STRATEGICALLY		
Information and Knowledge Resources	Providing the right information and knowledge at the right time within and across boundaries	“Data Management System” or “Homeland Security” or “Knowledge Management”
Security and Privacy	Balancing security, privacy, access issues, and protection of information for E-government	“Security, Privacy, and Access Issues in E-government”

To validate the E-government competencies fifty thought leaders in government were invited to review the draft E-government leadership competencies and to provide feedback. Twenty-five thought leaders attended luncheons hosted by the college to discuss the intellectual underpinnings of an academic program to be built on these competencies. Rich discussions led to some revision of the competencies and the identification of critical issues and controversies to integrate into a curriculum for emerging E-government leaders. The faculty used the revised competencies as a framework for designing a curriculum composed of selected courses currently offered in the CIO Certificate Program and some new courses to be developed. Table 1 aligns the thirteen competencies with the course or set of course options in the E-government Leadership Certificate curriculum; some courses are required and some may be selected from among alternatives. Across all the courses the faculty emphasize cross-boundary leadership as well as knowledge and skills associated with systems thinking, collaboration, and implementation, and relevant information technologies, using global perspectives and best practices whenever possible.

Integrating Cross-Boundary Leadership into the Curriculum

The development of cross-boundary leadership is an explicit learning outcome of the new E-government Leadership Certificate Program. Each course is being reframed as a leadership development component of the program by including leadership development objectives, instruction, activities, opportunities, and assessments related to the content of the courses. To accomplish this, the faculty, who are multidisciplinary in their academic and professional perspectives, are engaged in discussions, workshops, and scholarly activities related to cross-boundary leadership, collaboration, and systems thinking. As they embrace the concepts of cross-boundary leadership, they are reframing and enriching their courses to include these foundational skills and competencies, as well as relevant global E-government perspectives and best practices. The appropriate technologies related to E-government are being integrated across courses as well. A team of faculty and academic administrators are reviewing the revised curriculum materials in the months ahead to provide feedback to faculty on this new set on leadership objectives and to facilitate sharing of instructional techniques, assignments, and assessments to support the program's cross-boundary leadership goals.

The E-government Leadership Certificate is built on several assumptions. One is that leadership can be taught. A second is that the kind of leadership needed to achieve the goals of E-government is different from the kind of leadership that is focused primarily on achieving the goals of the leader's organization. A third assumption is that program will change the leadership behavior of its graduates. Effective E-government leadership is all about behaving in new ways, ways that acknowledge organizational contributions and celebrate and reward inter-organizational achievements. E-government leaders, through their actions, must motivate superior individual performance and build high performing organizations and networks – not for personal or organizational credit – but to achieve broader societal goals – goals that can only be realized by cross-boundary cooperation and collaboration.

Conclusion

The challenges of leadership in this networked age offer great promise and great challenges. To be successful leaders must manage across networks and leverage partnerships and resources across organizational boundaries. The academic program described in this paper, the first of its kind, focuses on the development of cross-boundary leadership to advance an E-government agenda. The concepts that underlie cross-boundary leadership will be enriched through on-going validation and research with cross-boundary leaders, and the findings will inform the educational program described in this paper. The impact of the program in developing cross-boundary leadership will be continually assessed by engaging the graduates in dialogue about their efforts to advance an E-government agenda.

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Biography

In 1999, **Elizabeth A. McDaniel** became the Dean of Faculty and Academic Programs at Information Resources Management College, National Defense University. She has also worked at the University of Hartford, the University of Connecticut, Nova Southeastern University, and the American Council on Education. Dr. McDaniel holds a Ph.D. from the University of Miami, a master's degree from Barry University, and a bachelor's degree from the University of Florida. As a faculty member and campus leader, administrator, and scholar, she has focused on interdisciplinary education, general and liberal education, innovation in curriculum and instruction, strategic planning, multicultural and international issues, faculty collaboration, distributed learning, and the integration of technologies. Her recent writing relates to faculty roles in outcomes-based education, self-efficacy in higher education leaders, and information leadership.