

E-Government Is An Outcome

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Eric Anderson became the city manager for Des Moines, Iowa, in 1995. He was tasked with bringing financial stability to a city that had operated at a deficit for three consecutive years, with developing an effective economic development strategy, and with improving services to citizens. He came to an organization that was inward-looking, marked by suspicion and distrust between council and staff, which suffered from internal conflict and poor communication, and which was mired in complacency. Anderson understood that to achieve the goals which had been established, the information technology (IT) function would have to be substantially improved and that the culture of the organization would have to change in radical ways.

In 1997, Michael Armstrong became the city's first chief information officer (CIO). The IT environment that he found predictably mirrored the city organization in many ways. The IT unit was a division of the Finance Department, with low organizational visibility and little strategic impact. Existing staff did not possess the skills that would be required to move the organization forward.

IT was fragmented, outdated, and ineffective. The central IT function was viewed as irrelevant at best, rogue systems proliferated, and investment decisions were made at the departmental level. The existing network was limited in reach and unreliable. Neither Internet access nor electronic mail (email) was available. Most business processes were still manual. No standards or architecture were in place. The state of IT was best symbolized by one department head who had taped his children's artwork over his monitor screen. That was the best use he could find for the equipment.

Beginning the Transformation

Anderson began the organizational transformation with a substantial downsizing of staff, reducing the city's 2200 employees by 250 positions. He also began a strategic technology planning effort that resulted in the hiring of a CIO and development of an initial vision and plan. By 1998, the initial work of building infrastructure and modernizing the IT environment had begun.

Work began in earnest in 1998, using a strategic plan that had been developed by the business users of the organization. A cable franchise agreement provided access to fiber optic cable throughout the city. New workstations were deployed. Internet access, email, and electronic scheduling were implemented. Email, in particular, began to change the way the organization communicated.

Key Decisions

A number of key decisions were made at this time. Many of these continue to guide and define our efforts:

1. We would manage IT as an enterprise function. Decision-making would be moved to the enterprise level and would become collaborative. Funding for IT would be centralized in the IT departmental budget.
2. Applications and services would be shared across the enterprise to the greatest extent possible.

3. Any application that crossed departmental boundaries would be defined as an enterprise application.
4. We would support the minimum number of technologies possible, and we would provide IT staff with the tools that they required to operate effectively.
5. We would support only one environment. The organization had determined that a distributed environment would best fit its need, so we planned for migration away from our mainframe.
6. We would remove variation from the IT environment. Variation increases costs more than any applicable factor.
7. We would continually strive for excellence, both in IT and the organization as a whole. Problems would be solved, not mitigated.

Difficult Days, Difficult Work

In early 1999, we reorganized the IT department, reducing staff from thirty to eighteen. We were successful in bringing in new skills and talent that could carry us forward, and our service and support capabilities rose dramatically. This was a difficult task that we undertook as gently and humanely as possible. All those who left the organization who did not choose to retire found jobs within sixty days.

On the organization side, change efforts were also underway. We began to examine business processes in a systematic fashion, including employees at all levels. We began to share the same vision and values as an organization. As department heads left the organization, the city manager was successful in hiring replacements who were both comfortable with technology and working in a collaborative environment. Productivity began to improve as new automated tools were deployed.

We began a spiral of disruption and recovery as major new IT systems were implemented. We began with ERP (Enterprise Resource Planning) which disrupted the core business processes of the entire organization. During this time, many employees who were not comfortable with intense change left the organization. New hires tended to be more comfortable in this environment. As we began to recover from the initial implementation, we began electronic permitting and licensing, then Citizen Relationship Management (CRM), and Public Safety systems. We saw that as each implementation was completed, both IT and the organization were better prepared for the next. Both the IT culture and the general organization culture gradually transformed to one which prized cooperation and collaboration, and which was strongly focused on improved service to citizens.

Mileposts

One of the watershed events in this transformation was the relaunch of the city's web site in early 2002 — with access to services and information becoming the primary focus and departmental identities de-emphasized. Usage immediately increased by more than 50 percent and has grown by 100 percent per year since.

On the organization side, two events are of special note. The city began an innovative program for providing intense levels of service to distressed neighborhoods. This program required that representatives from many departments as well as from external entities work closely with neighbors to address systemic problems that existed. Then, in 2003, city staff conducted an exercise that identified and defined all lines of service provided by the City (129), along with deliverables and interdependencies. This exercise demonstrated the great degree to which departments depended upon each other to fulfill their missions.

Transformation

By 2004, both the city organization and the IT environment had undergone substantial positive change.

Organizational culture is now characterized by a strong citizen focus. Collaboration and teamwork are the rule rather than the exception. The organization has learned to cope with rapid change and has truly become a high-performing organization. The city's bond rating has been upgraded, and finances are under control. Des Moines has seen an explosion in development during the past four years, including a number of exciting public projects. The city has been honored for innovative service delivery programs and now frequently appears on "Best Of . . ." lists for business environment and quality of life. The city's most recent citizen survey (2004) showed that only 3 percent of the populace considers the quality of life in Des Moines to be less than "good".

In the IT realm, the city now owns a fiber optic network that connects more than seventy facilities, operates at a 99.99 percent availability rate, supports data, voice, and video, and which has become the core of a regional network. The city has twice been rated first in its population class in the Digital Cities Survey conducted by the Center for Digital Government. The city's web site was a finalist in the 2004 Best of the Web competition, placing that site among the top ten municipal sites in the United States. The city is recognized as a national leader in E-Government. All employees now have access to email and the Internet, equipment is refreshed on a regular schedule, and technology training is provided on a continuing basis. An effective architecture and strong standards govern IT investment decisions, which are now made at the enterprise level. IT has become strategic and is a core contributor to enterprise management and decision-making.

IT has become as efficient as it is effective. Moving IT investment decisions to the enterprise level has rationalized the use of IT across the entire enterprise. Consolidation and standardization have led to substantial reductions in IT costs while providing enhanced service:

CONSISTENT ENVIRONMENT			
Server O/S:	1	Databases	1
Server Manufacturers:	1	Network Manufacturers	1
PC Manufacturers:	1	ERP Systems	1
Desktop O/S:	1	CRM Systems	1
Office Suite:	1	GIS Systems	1
Mail/Calendring Systems	1	Public Safety Systems (regional)	1

Des Moines compares very favorably in efficiency benchmarks:

Efficiency
(2003 Figures)

Metric	Des Moines	Average ¹
Staff size	21	59 (Median = 33)
IT Budget/ Total Budget (operating)	1.4%	2.24%
IT Annual Cost/ Resident	\$16.50	\$31.54
IT Annual Cost/ Employee	\$1736.84	\$2899.05

We have identified a number of factors that helped us succeed in transforming both IT and our organization:

1. **The right people doing the right things.** This is difficult to accomplish in government, but is absolutely essential for transformation.
2. **Continuity.** These activities take time. We have been fortunate in having the chief executive officer (CEO), CIO, key business leaders, and IT staff in place for an extended time.
3. **Shared vision and values.** Our task is not to provide great IT, but to work to make our community a better place.
4. **The CEO-CIO relationship.** This must be strong and characterized by mutual vision, goals, and respect.
5. **The “Bridge”.** Someone, preferably the CIO, must be able to translate technical concepts and potential for the business and must communicate business needs to the IT staff.
6. **Institutional will.** Many of the tasks required for transformation are difficult, and many decisions are extremely difficult. The enterprise must be steadfast, decisive, and relentless in its drive to achieve.

Perhaps the most important lesson that we learned was that E-Government was not a discrete goal in and of itself. We do not have an E-Government strategy, and we never attempted to “do” E-Government. We did find that if an organization makes very good use of electronic tools to both support and deliver services, and if the organization can transform itself to consider all things from the citizen’s viewpoint, then E-Government is the natural result. In this situation, E-Government becomes a synonym for good government.

Notes

¹ International City/County Management Association, Center for Performance Measurement — 2003 data