



# A blueprint

for Successful E-government  
Implementation:

*Steps to accelerate  
cultural change  
and overcome  
stakeholder resistance*

A Resource Paper  
Sponsored by the  
**Association for  
Federal Information  
Resources Management**

—June 2002—

The **Association for Federal Information Resources Management** (AFFIRM) was founded in 1979 with the goal of advancing the management of Federal IRM. AFFIRM's membership is composed of individuals from the Federal Government, industry, and academia. AFFIRM's focus is on senior management issues of interest to the Federal Government. Additional information is available on the Internet at [www.affirm.org](http://www.affirm.org).

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*June 1, 2002*

**Dear Colleague:**

For the past six years, the Association for Federal Information Resources Management (AFFIRM) Emerging Issues Forum has prepared a series of issue papers on topics of importance to the Federal information technology community. On May 1, 2002, the Forum conducted a focus group session with 13 senior government officials to explore the steps government can take to overcome the cultural barriers to successful e-government transformation. This report summarizes the opinions expressed by the participants regarding the state of e-government in the Federal government.

AFFIRM hopes the report will prove useful to both government and industry executives as we continue to seek to implement the electronic government of the future. We will continue to sponsor other similar studies to advance the state of knowledge and practice in managing Federal information resources and solicit your comments.

I want to personally thank the AFFIRM Emerging Issues Forum committee members for their hard work, Allan Holmes, editor in chief of Federal Computer Week, for his excellent moderating, and Dan Chenok of the Office of Management and Budget and Dave McClure of the General Accounting Office for helping to craft the initial framework document. And, of course, the focus group members for taking time out of their busy schedules to contribute to this important initiative.

Sincerely,

**Emory Miller**

President

AFFIRM

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Conducted May 1, 2002

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## I. Executive Summary

The purpose of this year's AFFIRM roundtable discussion was to examine the barriers to e-government implementation; target what e-government should be in FY2008 and determine what steps need to be taken to reach that designated target.

There was a general consensus that the most significant challenge to full e-government transformation is overcoming strong cultural, organizational and resources barriers. The participants characterized the e-government environment in FY2008 as one in which citizens and government workers embrace the promise and need for e-government, risk taking is encouraged, interagency communication and cooperation are enhanced, and the needed improvements to the budgetary process are made.

Several immediate steps were identified that, if taken, would accelerate the transformation to the desired end-state. **These include:**

- |                                                                                                                                                                                                                                                                          |                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Institutionalize regular dialogue, shared vision and partnership among the top organizational leaders (CIO, CFO, COO, HR, and CEO).</p> <hr/>                                                                                                                      | <p>6. Establish a congressional appropriations committee or group to separately fund e-government projects.</p> <hr/>                                                                |
| <p>2. Initiate a stakeholder/employee involved problem solving/process improvement program driven by actively involved leaders.</p> <hr/>                                                                                                                                | <p>7. Formalize incentives for managers to create temporary interagency teams that solve problems and create solutions and implementation strategies.</p> <hr/>                      |
| <p>3. Create a government-wide risk management-training and risk incentive program.</p> <hr/>                                                                                                                                                                            | <p>8. Agencies should hire managers (HR, finance, IT, program) with the necessary hybrid set of skills - management, technology and process.</p> <hr/>                               |
| <p>4. Develop a balanced risk vs. value portfolio (4-quadrant matrix) for the entire government IT budget.</p> <hr/>                                                                                                                                                     | <p>9. Transfer current change agents working common improvements from within agencies to OMB so they can "work at the table" together to solve the major resources issues.</p> <hr/> |
| <p>5. Obtain executive and legislative branch agreement on how to transform cross-agency business processes and funding. The executive branch should establish a formal clearinghouse in which agencies can evaluate cross-agency e-government systems and projects.</p> |                                                                                                                                                                                      |

The following document is divided into three topic areas: **cultural, organizational** and **resources**. Each section describes the characteristics of the "*current*" and "*to be*" environment and the *specific steps* that can be taken to reach these objectives.

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## II. Cultural Barriers

### Cultural: Current Environment

“Chief information officers across government have discovered time and again that the biggest challenge to creating e-government, or even just installing a new system, is not the technology but the cultural changes that must be made to accommodate the technology.”<sup>1</sup> There was clear roundtable agreement that culture would be the biggest obstacle toward reaching a successful end state. While some employees resist change, others welcome it. The real problem comes when those who welcome change i.e., “they get it,” cannot be freed to assist in the transformation. In essence, they are not given the opportunity to help change happen. A second point is that the Federal Government needs to better manage risk; providing appropriate incentives would be part of that. Finally, in order to bring about a true cultural transformation, a sufficient degree of security, privacy, and trust must exist. It was the opinion of the roundtable participants that this did not exist to the degree necessary.

#### Detailed Comments:

1. While some government employees often resist change, prefer the status quo and feel threatened, others do get it but are not given sufficient opportunities to focus on the transformation to “full e-government.” We cannot think of federal employees, in general, as being resistant to change. In many cases, they will do what they are told by their leadership even to the extent of working on broken processes.
2. Stakeholder resistance comes in various forms. Since we operate in a risk tolerant environment, we need to manage in a risk tolerant environment. Even though failure is ok, we do not recognize that as such. There must be incentives to take risk. However, some federal agencies, key to e-government, support e-government in the abstract or not at all (risk avoidance vs. risk management). Those who “don’t get it” will have a big learning curve problem. Most members of Congress do not view e-government as a priority or understand its efficiencies and advantages. Federal unions view e-government as changing job functions and/or bringing about
- loss of jobs. Constituents, including citizens and businesses, may need to adjust to new processes inherent in e-government programs. This can cost them money, threaten their special interests, threaten their privacy/security (trust in government) or bring about change they consider undesirable. Finally, while federal agencies continue to operate in a stovepipe environment, integrators perpetuate the notion of silos to exist. Integrators need to be given incentives to change, as well. Barriers, perpetuated by stakeholders or otherwise, need to be minimized.
3. Poor communication within agencies and across government inhibits cooperation needed to plan for, develop and deploy e-government solutions. Agency priorities and politics may not place e-government initiatives at the top of agencies’ agendas.
4. There is an overall lack of confidence in security and privacy procedures.
5. Enterprise architecture and business processes need to be developed. Leadership is most important to move to a new model.

<sup>1</sup> *Federal Computer Week*, “Wanted: Expert ‘change managers,’” May 20, 2002, p.28

## Cultural: “To Be” Environment

As the cultural “To Be Environment” comes to fruition, federal employees have the opportunity/more opportunity to succeed. Employees can actively participate in creating positive change because the barriers to success in the transformation to e-government have been minimized. Instead of risk avoidance, risk management has become policy. Under risk management, risk taking is encouraged thus enhancing positive and creative thinking. This further encourages more innovation. While this is occurring, trust is enhanced because citizens and businesses realize that they can conduct their transactions in an appropriately private/secure environment.

### Detailed Comments:

1. Over the 5-year transformation period, government employee and citizen concerns will be mostly overcome. This is due to their trust that information will be protected and that barriers to effecting improvement and positive change have been made.
2. Creativity and entrepreneurial thinking and risk taking are rewarded regardless of outcome.
3. Transformation has been able to move forward because:
  - Federal agencies embrace the concept and need for e-government
  - Members of Congress buy-in to the need for e-government
  - Federal union concerns are addressed/minimized
  - Constituent special needs are addressed
  - Cross government lines of communications are established and formalized
4. E-government (more efficient/speedier provision of government services) becomes an integral part of agency operations.

## Cultural: Steps to Get There

Moving from the Current Environment to the To Be Environment requires leadership, first of all, to take ownership and to repeatedly drive the message down from the top. And, it is this leadership that addresses and eliminates the blocking barriers. To move forward, a recognition/reward process must be put in place to recognize those who are transformation leaders and advocates; these advocates/leaders must not only come from IT but from the business/program areas, as well. Programs will be funded based upon successful illustration that internal processes have been /and are being reengineered to move the organization forward.

### Detailed Comments:

1. Institutionalize regular dialogue, shared vision and partnership among the top organization leaders (CIO, CFO, COO, HR, and CEO). Develop strong partnerships across agencies.
2. Create a program to expose/demonstrate program offices to the potential of technology. Pilot innovative projects that incorporate sound risk management principles.
3. Create a reward structure. Need to find and celebrate change agents. Institutionalize public recognition/reward process for those who demonstrate transformation behavior. Reward cross agency/multi-year innovative (risk taking) projects.
4. Require organizations requesting IT funding to demonstrate they are re-engineering their processes. Target the capital planning process as a means of driving to “there.” (“There” is driven by leadership.) Establish financial/program/technical criteria for wise investment decision making—including when to pull the plug. Hold some money in reserve every year for government “entrepreneurs” who can then compete for that money to be used in the transformation process. Institute a technology investment contest for small innovation projects. Congress must help in breaking down barriers in funding. Articulate and measure incremental process improvements
5. Initiate a stakeholder/employee involved problem solving/process improvement program driven by actively involved leaders. Push the message down often and consistently “from the top.” Senior executives/political appointees must push e-government as being important and then drive accountability for it every day. Increase awareness on good leadership and risk taking. Leadership must focus on the positive. Political leaders must set expectations as well.
6. Manage in a risk management vs. risk avoidance environment – provide incentives for risk taking. Create a government-wide risk management-training program. Develop a balanced risk vs. value portfolio (4-quadrant matrix) for the entire government IT budget. There is risk; but thought must be given to business plans and probability of outcome. Need to manage risks operationally and extend the horizon of what must be reached. Incremental progress is needed. The government must change its mindset.
7. Security and privacy must be considered as part of the business environment and not just part of the IT environment. Perfect security/privacy is too costly so risks must be considered. A Congressional security framework for agencies is needed. This legislation will require program management people to state how security and privacy will be impacted.

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### III. Organizational Barriers

#### Organization: Current Environment

The greatest return on e-government services is realized when similar functions in an organization are combined and put online. Employees, customers and business partners have easy access to the same information and systems are not duplicated for each division, bureau or office. However, the primary obstacle to implementing agency-wide and government-wide electronic services and practices is the stovepiped organization of agencies. In addition, the business processes that agencies have created match those stovepipes.

The stovepipes are promoted through the current congressional agency funding process, which only fund individual programs. This process does not promote cross-agency programs, which are typically the e-government services and practices, the roundtable agreed.

In addition, incentives – such as financial rewards or performance measures – for government employees to reach across stovepipes to work with colleagues on e-government services do not exist.

#### Detailed Comments:

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"><li>1. Most agencies' and integrators' stovepipe organizational structure and business processes prevent inter-agency and intra-agency electronic delivery of information and services.</li><li>2. The Congressional appropriations structure mirrors the stovepipe structure in the executive branch, making it difficult to fund cross-agency e-government projects.</li><li>3. Incentives such as performance measures are not designed or do not exist to encourage federal managers to reach across inter- or intra-agency boundaries to develop e-government</li></ol> | <p>applications and systems. Federal managers find conducting return-on-investment analyses, which would demonstrate the efficiencies of cross-agency e-government projects, is too difficult, and they resist the practice.</p> <ol style="list-style-type: none"><li>4. The security vulnerabilities of government information systems hampers the efforts needed to make more data and processes available for e-government projects. The lack of agency enterprise architectures, which would simplify the technology development of cross-agency e-government applications, also impedes cooperation.</li></ol> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Organization: “To Be” Environment**

In five years, agencies will be less bound by stovepipes and better able to work more easily with colleagues to develop and deploy electronic services and applications. This collaboration will be facilitated by a capital funding process that allows cross-agency, cross-government e-government functions to be created, vetted and funded.

<p><b>Detailed Comments:</b></p> <ol style="list-style-type: none"><li>1. Agency managers work through a formal structure to manage and seek appropriations for integrated e-government cross-agency systems. Managers have aligned the government enterprise systems along business processes. Managers engage in frequent and productive communication across stovepipes.</li><li>2. Managers have put in place necessary cross-agency/cross-function funding and performance measurement mechanisms that promote and</li></ol>	<p>reward e-government projects that cut across boundaries. Money from savings generated by e-government projects is pooled for other uses in the agency. Managers are well versed in return on investment and routinely use the practice as part of measuring the success of e-government projects.</p> <hr/> <ol style="list-style-type: none"><li>3. Government information systems are secure, and IT managers adhere to an agency- and government-wide enterprise architecture.</li></ol>
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## Organization: Steps to Get There

To transform the organizational structure so that e-government implementation is more successful, the Federal Government must institute a combination of employee and managerial rewards for those who encourage out-of-the-stovepipe e-government application development. New organizations that permit cross-agency funding for e-government solutions should be created. Stovepipes are institutionalized, and only with strong incentives and recognition from top leaders in the executive branch and in Congress that stovepipes hamper e-government, will the obstacles be removed.

The roundtable believed a key to encouraging more cross-agency and cross-governmental collaboration on e-government services would be a clearinghouse for projects to be vetted and funded. This clearinghouse would help determine which projects, based on performance measures and capital planning mechanisms, would warrant funding. Congress would have a corresponding group to vet the proposals.

### Detailed Comments:

1. The executive and legislative branches should obtain agreement on how to transform cross-agency business processes and funding. The executive branch should establish a formal clearinghouse to evaluate cross-agency e-government systems and projects. The clearinghouse could also share information on best practices, educate program offices to the benefits of integrated solutions, including the minimal risk they oppose to mission success. As part of this process, agencies should invite industry through the acquisition process to help define technical and architectural solutions that encourage out-of-the-stovepipe processes.
2. Congress should establish a corresponding appropriations committee or group to fund such projects. To demonstrate to Congress the need for and returns on e-government projects, agencies can highlight e-government successes. Congress should consider removing funding barriers that inhibit the pooling of funds for common processes.
3. Agencies should formalize incentives for managers to create temporary interagency teams that solve problems and create solutions and how to implement them. Managers should apply common performance measures and data sharing mechanisms between agencies that have common missions and processes.
4. IT managers should consider creating a process to trade common business process information between agencies so that privacy requirements are not violated.

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## IV. Resource Barriers

### Resources: Current Environment

In general, there appears to be an insufficient number of qualified personnel at both the technical and management levels to accelerate the transition to e-government. The entire annual budget process and lack of local agency control also hinders transformation.

**Detailed Comments:**

1. An insufficient number of qualified personnel and a lack of e-government management experience and skills have slowed the shift to e-government.
2. The annual appropriations process hinders the progress of multi-year e-government initiatives.

Funding the e-government projects is generally insufficient and funding is seldom controlled by the implementing organizations, unless funded “out-of-pocket.”

3. The data required for some interagency e-government projects cannot necessarily be shared between agencies.

### Resources: “To Be” Environment

A new wave of people with e-government experience will enter federal service. In five years the budget process will be modified to provide multi-year full funding for e-government initiatives both internal to an agency and cross-agency.

**Detailed Comments:**

1. Necessary financial incentives (pay) and training programs are implemented to attract and retain qualified federal business and IT personnel and managers and contractors.
2. Full multi-year funding (new and existing ) is provided for e-government including fulfilling the need to continue to fund legacy systems

during the transition. Also, implementing organizations are able to request cross-agency funding for e-government initiatives.

3. The necessary e-Gov IT infrastructure (utilities) requirements are identified and funded. These requirements consider total cost of ownership including the cost of long term maintenance.

## Resources: Steps to Get There

Immediate initiatives that should be implemented to resolve resource issues include hiring new managers who have a broad range of IT and organizational skills; increasing job exchange programs with industry; creating a mechanism to fund government/industry R&D e-business collaboration; and creating an OMB centered working group comprised of agency change e-government agents.

### **Detailed Comments:**

1. Use this as an opportunity to hire managers (HR, finance, IT, program) with the necessary hybrid set of skills - management, technology and process. Establish a college graduate pipeline (career intern program). Increase the exchanges between private and public service employees and between state and local (job exchanges and rotations, benefits transferability).
2. Pull current change agents working common improvements from within agencies to OMB so they can “work at the table” together to solve the major resources issues. This should involve a combination of political and career employees to ensure continuity.
3. Educate senior executives to look for “save money” benefits. Incentivize them so they are able to shift money to improve/replace old legacy systems.
4. Institute government/industry R&D collaboration.

## V. Conclusion

It was abundantly clear from the roundtable discussion that there are significant cultural, organizational and resources hurdles to be overcome before the benefits of an e-Government transformation can be enjoyed. The good news is that there are concrete steps that can be taken now to accelerate this process. These actions demand leadership and cooperation within and between the major stakeholders. And, the will to make IT happen.