Organizational Transformation Series

# Transforming Information Technology at the Department of Veterans Affairs


Jonathan Walters
*Governing* Magazine

IBM Center for
The Business of Government

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ORGANIZATIONAL TRANSFORMATION SERIES

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The Business of Government

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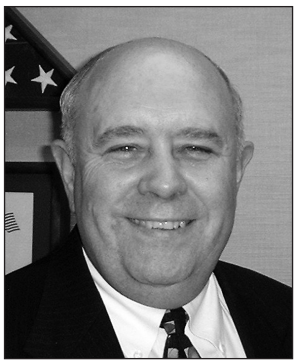
# FOREWORD

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, "Transforming Information Technology at the Department of Veterans Affairs" by Jonathan Walters of *Governing* magazine.


Albert Morales

Jonathan Walters' report chronicles the Department of Veterans Affairs' (VA) efforts to realign and centralize its information technology activities. Describing it as an "ambitious, audacious and arduous crusade," Walters makes it very clear that this is still very much a work in progress. There are significant hurdles ahead and certain significant adjustments will no doubt need to be made for this ambitious undertaking to be ultimately implemented and sustained by the VA. Yet at the same time, the effort offers the VA's new leadership a clear and established roadmap for moving the effort forward, because a lot of hard work has been done for them.

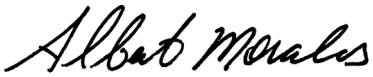

John Lainhart

In addition to his captivating description of the VA experience, Walters also identifies ten lessons learned—based on the experience of change management at the VA—which are clearly applicable to any organization confronting a change management initiative.

According to February 2008 Government Accountability Office testimony, the department has established and activated three governance boards to facilitate budget oversight and management of its investments. Further, VA has approved an IT strategic plan that aligns with priorities identified in the department's strategic plan and has provided multi-year budget guidance to achieve a more disciplined approach for future budget formulation and execution. While these steps are critical to establishing control of the department's IT, it remains too

early to assess their overall impact. Thus, their effectiveness in ensuring accountability for the resources and budget has not yet been clearly established.

We hope that this particularly timely and informative report will be useful to the new Secretary of Veterans Affairs and his leadership team, as well as executives across government who are also dealing with change management initiatives, including reform of their Information Technology programs.



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# EXECUTIVE SUMMARY

In October 2005 the U.S. Department of Veterans Affairs launched what many believe to be the most ambitious organizational information technology overhaul and consolidation ever to be attempted in the federal government.

With increasing pressure coming from outside entities, including Congress and the Government Accountability Office, and pushed by a group of influential insiders, the department in 2005 laid out ambitious and controversial plans to consolidate control over what had become a sprawling, aging and unwieldy system of computer and communications technologies spread across the department's more than 1,000 medical centers, clinics, nursing homes and veterans' centers.

According to an October 2005 memo from a former VA chief information officer, the VA CIO had direct control over only 3 percent of the department's overall IT budget and 6 percent of the department's IT personnel. Individual medical directors in the field had virtually complete control over decisions about IT investment, which had resulted in a substantially ad hoc and disjointed IT system virtually impervious to rapid, nationwide sharing of client information, universal system upgrades or patches, or system-wide distribution of new, proven applications.

As pressing as questions about the functional capacity of the system were, the overall security of the system was equally urgent, with scores of unsecured laptops and thumb drives floating around the system containing confidential information about millions of veterans. Meanwhile, mainframes sat unsecure in frequently precarious circumstances, near old steam and sewage pipes, with no backups available. Indeed, the push to gain control over the sprawling system was reinforced powerfully in 2006, when an IT security breach compromised the confidential information of some 26 million veterans.

The heart of the overhaul was the creation of a governance plan and the adoption of a full set of best IT practices that the VA hopes will ultimately result in a secure, integrated, reliable and responsive IT system aimed at efficiently delivering high quality health care services to veterans, while supporting the thousands of health care professionals who work for the VA.

Under the plan, the department has centralized all IT budgeting, planning and development, including putting full control of the department's IT budget and staff under the VA's Office of Information and Technology in Washington, D.C., while placing a premium on encrypting, securing and accounting for every piece of computer hardware in the system.

The ongoing effort has been difficult and controversial. An organization based substantially on an ethic of dispersed authority and control has proved to be an extremely difficult environment in which to try to centralize and consolidate. There has been wholesale resistance to the consolidation effort from a wide variety of powerful players both inside and outside of the VA.

As of this writing, the transformation is a work in progress, but has made substantial progress towards the "One-VA" vision laid out in the consolidation plan. But while the effort is still a work in progress, it has the potential to be a useful model for other large-scale public sector entities wishing to modernize and consolidate similarly unwieldy and dispersed systems.

Some of the VA lessons include the obvious, including the absolutely critical role that leadership plays in any large-scale organizational change effort. But some lessons are less so, including the VA's novel and innovative approach to the contract that it let for outside help with the transformation effort, an approach that ought to prove useful to any organization availing itself of outside help with transformation.

Meanwhile, the VA has clearly made substantial progress in consolidating planning, budgeting and personnel and in securing all the information contained in its massive IT system. Specific initiatives include moving data to regional processing centers with improved "fail over" capacity. A new contract is allowing for increasingly rapid and reliable deployment and upgrading of computer hardware and software system-wide.

While questions about the transformation remain—in particular about whether the development arm of the VA is up to quickly designing, testing and deploying new software—the reforms at the VA appear to be taking root. No doubt the growing pains will continue, but with continued work and investment, the VA has the potential to solidly secure its place as a model for how to do large-scale IT transformation in a logistically and politically complicated—some would even say openly hostile—environment.

# Introduction

## Drivers for Change at the VA

By 2004 serious pressure was building on the Department of Veterans Affairs (VA) to get a handle on its sprawling information technology empire. Far flung mainframes and a patchwork of computer networks were neither secure nor standardized. The VA's main operating system was considered out of date and not up to the job of allowing rapid, nationwide sharing of client information or accommodating new uses, applications, or effecting efficient universal patches for software problems or upgrades.

The Government Accountability Office had been calling for a major IT realignment and upgrade at the VA for years, and Congress was beginning to pay much closer attention to what was going on at the VA, as well—interest that would take on a new urgency in the wake of a security breach in 2006 that compromised confidential information about 26 million veterans.

At the same time, influential and active insiders at the VA had also been expressing concern about the age, efficiency and security of the whole VA IT system. The concern culminated in early 2005 with then-VA Secretary R. James Nicholson authorizing a system-wide study to come up with options for what a restructured and modernized IT structure at the VA might look like.

The VA had recognized the critical importance of a new IT strategy which was described in the VA Strategic Plan FY 2006-2011:

> "Implement a One-VA information technology (IT) framework that enables the consolidation of IT solutions and the creation of cross-cutting common services to support the integration of information across business lines and provide secure, consistent, reliable, and accurate information to all interested parties."

The VA faced many challenges in achieving its One-VA vision. IT systems and services were completely decentralized. Meanwhile, budget decisions were not only decentralized, but completely detached from any system-wide IT strategy. According to an October 2005 memorandum from a former VA CIO, the CIO had direct control over only 3 percent of the department's IT budget and 6 percent of the department's IT personnel. Since the late 1980's, the Government Accountability Office (GAO) had pointed out several times that given the department's large IT funding and decentralized management structure, it was crucial for the department CIO to ensure that well-established and integrated processes for leading, managing, and controlling investments were followed throughout the department. Further, a February 2005 contractor assessment of VA's IT organizational alignment also noted the lack of control for how and where money was spent. The assessment found that project managers within the field facilities had the ability to shift IT money to support varying projects, even projects having nothing to do with IT. Also, according to the assessment, the focus of department-level management was only on reporting expenditures to the Office of Management and Budget and Congress, rather than on managing these expenditures within the department.

The resulting plan for IT realignment—including single IT authority at the VA central office (VACO)—was revolutionary and unprecedented in the federal government in its range and ambition—and would become even more ambitious as transformation unfolded.

The hallmark of the effort was the scope of change—a complete reorganizing of the IT personnel reporting structure and field operations, procurement policies and development. But the effort was also characterized by the bitter and sustained opposition that it engendered throughout the VA. A health care network that had turned its reputation around in the 1990s by emphasizing field autonomy, flexibility and rigorous performance standards was suddenly being squeezed into a top-down organizational chart that many in the field and at VACO argued would be a recipe for a health care meltdown.

According to informed observers inside and outside the organization, the effort to centralize IT in the sprawling, high-profile and politically charged VA, is far and away the most ambitious undertaking of its kind ever in the federal government.

Because of the breadth and depth of the effort at VA, it clearly has the potential to offer a wide variety of lessons to other large organizations—at all levels of government, federal, state and local—for how and in some cases perhaps how *not* to go about such an ambitious, audacious and arduous crusade.

Furthermore, given the decentralized and sprawling (some would even argue borderline-anarchic) nature of the organization, the egos involved, the amounts of money involved, the high human and political stakes, along with the high profile of the organization and the constituency it serves, it is easy to argue that if the VA can make significant progress on such an ambitious undertaking, any organization can.

And more organizations no doubt will try, following the lead not only of the VA, but such private sector powerhouses as Hewlitt Packard, Cisco Systems, IBM and Dell, all which realized that the days where decentralized IT nodes in the same organization working in relative isolation—while certainly a positive force for encouraging creativity and innovation—just presents too unwieldy a model in a world of rapidly evolving information technology.

To harness the full power of IT—and, not incidentally, to operate systems in as secure a fashion as possible—leading edge organizations have decided that they need to get a tighter grip on far flung networks of users, and that a premium needs to be placed on IT compatibility, interoperability and standardization.

## About VA

To understand how massive the job of centralizing and securing IT systems at the VA has been—and continues to be—it is necessary to understand just how large and complex an organization the VA actually is and to know something of the organization's tumultuous history.

The Veterans Administration was officially created in 1930 by executive order, signed by Herbert Hoover. At the time the system consisted of 54 hospitals, employing 31,600 people serving 4.7 million veterans. Its focus was on tertiary care for indigent veterans.

Today, the Department of Veterans Affairs is organized into three administrations:

- **Veterans Health Administration (VHA)** is responsible for the VA health system
- **Veterans Benefit Administration (VBA)** is responsible for ensuring veterans get their pensions and other benefits, including educational benefits
- **National Cemetery Administration (NCA)** is responsible for administering burials and operating VA cemeteries

The 500-pound gorilla in the administrative threesome is the VHA, with a budget of about $35 billion, and which oversees a sprawling complex of 155 medical centers, 872 ambulatory clinics, 135 nursing homes, 45 residential rehabilitation treatment programs, 209 veterans' centers and 108 comprehensive home-care programs. These VA facilities, meanwhile, are affiliated with 107 medical schools, 55 dental schools and more than 1,200 other schools nationally. The VA estimates that its system helps train upwards of 90,000 health professionals a year.

As of 2008, the VA health care system had nearly 7.8 million enrollees, who were being served by more than 200,000 health care and support professionals nationwide.

Also feeding into the complexity of the organization—and how it uses information technology to meet and forward its mission—the VA does considerable amounts of medical research, focusing on areas of particular concern to veterans, from cardiac

and diabetes care, to trauma care (physical and mental), to improvements in artificial limbs.

And as if all that wasn't enough, part of the VA's mission is also to step up during national disasters as a backup health care system, something it did with distinction in the aftermath of Hurricane Katrina, and a role that absolutely requires a high-functioning and robust IT infrastructure.

## Overview of Report

This report chronicles the VA's efforts to realign and centralize its IT activities. It needs to be stated clearly and up front that it is still a work in progress, that there are significant hurdles ahead and certain significant adjustments that will no doubt need to be made for this ambitious undertaking to ultimately be implemented and sustained by VA. A new Administration in the White House also adds to the weight of the challenge—but at the same time also offers new leadership a clear and established roadmap for moving the effort forward; a lot of hard work has been done for them.

The work that has been done at the VA has been controversial, to say the very least. High level officials have resigned on account of the push, either because they didn't agree with it or were just burned out by the fight.

Having noted all of that, the VA continues to move forward with the ambitious effort of centralizing all IT, IT staff, administration and development under VACO, creating an "IT Governance Structure," and building an integrated IT process and organizational model using IBM's Process Reference Model for IT (PRM-IT) which draws on best practices from both CobiT (Control Objectives for Information and Related Technology) and ITIL (Information Technology Infrastructure Library).

According to February 2008 Government Accountability Office testimony, the department has established and activated three governance boards to facilitate budget oversight and management of its investments. Further, VA has approved an IT strategic plan that aligns with priorities identified in the department's strategic plan and has provided multi-year budget guidance to achieve a more disciplined approach for future budget formulation and execution. While these steps are critical to establishing control of the department's IT, it remains too early to assess their overall impact. Thus, their effectiveness in ensuring accountability for the resources and budget has not yet been clearly established.

Proponents of transformation argue that those issues will be worked out as the initial tumult caused by reorganization settles down. Clearly, however, the new VA Secretary Eric K. Shinseki and his top staff are going to necessarily have to become students of the reform effort and also become active advocates in order to keep it moving forward.

# IT Transformation at VA

## Overview of VA IT Transformation

The VA IT Transformation approved by the Secretary had two major components.

- **The VA IT Governance Plan** set forth a new way to govern IT at VA and enabled the CIO to centralize its decision making. The goals of the plan focused on the importance for more effective IT Governance, what more effective IT Governance entailed, and described the VA IT Governance Model. The model enabled executive committees to better align IT strategy to business strategy, maintain and develop the Enterprise Architecture, enhance Information Protection/ Data Security, manage the IT investments, oversee the management of IT services, and reconcile disputes regarding IT. The original governance model was modified in 2008 to be more responsive to field issues, and for placing the VA CIO above higher ranking VA officials on the IT governance organizational chart (see chart, pg. 19).
- **The new organization structure** included the Assistant Secretary for Information and Technology (who serves as VA's CIO), the CIO's Principal Deputy Assistant Secretary, and five Deputy Assistant Secretaries. The five Deputy Assistant Secretaries were new senior leadership positions within the Office of Information and Technology (OI&T) created to assist the CIO in overseeing functions such as cyber security, IT portfolio management, systems development, and IT operations. The new organizational structure implemented improved management processes and practices balancing the "demand" for IT Services with the "supply" side of available resources through managing resources, building/maintaining the applications suite,

### Box 1: VA IT Transformation Timeline

**2005**

**October:** Secretary issues Memorandum approving the concept of a federated IT system and charges the Assistant Secretary for Information and Technology with the development of an interim federated model

**November:** Congress approves legislation mandating VA CIO to manage all IT resources and authorizes a separate IT appropriation for the VA

**2006**

**March:** Secretary approves the federated IT system model as the framework for the VA's IT system

**May:** (1) Consultant report recommends VA move to a centralized IT management system; (2) Laptop computer and hard drive with 26 million veterans' records stolen from home of VA employee

**July:** Realignment contract awarded to support IT transformation

**October:** (1) Single IT leadership model under VA CIO approved by Secretary; (2) All operation and maintenance personnel assigned to Office of Information and Technology

**December**: IT personnel detailed

**2007**

**February:** (1) IT Governance Plan approved by VA Executive Board; (2) Office of Information and Technology structure approved

**April**: (1) IT Governance Plan approved by Secretary; (2) All IT personnel assigned to Office of Information and Technology

# Transforming Health Care at the VA in the 1990s

Strains in the VA health and mental health care systems have surfaced recently given the new and increased burden of caring for wounded and disabled veterans from two concurrent wars, but overall the VA today gets consistently high marks for the service and care it provides veterans. This wasn't always the case, and the way in which the VA turned its clinical performance around is central to understanding why IT transformation at the VA has been especially controversial.

As recently as the late 1980s and early 1990s, many of VA's health care facilities were considered woefully inadequate and rated as delivering some of the most sub-par care in the nation. "Having seen the VA while I was in the service back in the 1980s, I swore I'd never go to one their hospitals," says Joe Shaffer, who retired from the army in 1995, and who led the VA IT transformation effort, first under VA CIO Bob McFarland and then under former CIO Bob Howard. "They weren't providing good service; they didn't have quality, cutting edge medical care."

Indeed, there were even discussions of shutting the system down given its reputation for poor quality care and shabby service to veterans.

That began to change dramatically in the early and mid-1990s with the arrival of Dr. Kenneth Kizer as head of the VHA. Kizer's vision for the VHA was one where individual facility directors would be given the people, the money and the authority to do whatever was required to improve the quality of care at their facilities. Care would be customer focused and adaptive, depending on clients and their needs. With that new focus and flexibility would come a comprehensive set of performance measures for which all facility directors would be held directly accountable.

As part of the push, the VA itself was reorganized into about two dozen "integrated health care networks," known as VISNs, which would encompass a range of health care services. The idea behind the reorganization was to make the VA a more holistic and comprehensive provider of a broad range of health care services, from walk-in clinics to high-tech, high-stakes surgical units.

The facility directors and the VISNs were encouraged to innovate, with the enlivening understanding that as they looked to improve access and care, not only would they be competing against one another for resources based on performance, they just might be in a fight for their very existence in the context of a national health care system.

Again, by all accounts, the improvements in the breadth and quality of care that ensued in the wake of the Kizer initiatives were nothing short of revolutionary. And the most often-cited reason for that remarkable turnaround was decentralization and autonomy. The organization was given permission to experiment in the field, to try new ways of doing business and new ways of reaching out to veterans, offering new services in improved health care settings encompassing a much broader range of options for veterans seeking care.

Given that this decentralized approach is credited with the 180-degree turnaround in health care services at the VA, and given that facility directors in the field became used to the autonomy that came with such an approach, it is not hard to imagine the response from the field when word that the VA was considering a major push to centralize control of all information technology began to crystallize into reality.

The ideological struggles that would ensue, says Jeff Shyshka, Deputy Assistant Secretary in the Office of Administration Technology Operations and Infrastructure, would be difficult at best, pitting a small group of IT staff determined to fight for what they believed was right, using every means at their disposal.

supporting operations and monitoring IT in five key areas: enterprise management, business management, business application management, infrastructure, and service support.

## The Need to Transform IT in VA

While the fights over IT transformation would prove to be spectacular and messy, the fact is, IT in the VA was out of date and out of control, and lots of people—including, not incidentally, members of Congress—knew it.

And so contrary to popular current legend, the impetus for the push on IT consolidation was *not* the explosive news in May 2006 that a VA laptop and hard drive containing 26 million names and social security numbers had been stolen from the home of a central office employee (more on that later). The real impetus was the realization among a handful of VHA staff that something had to be done system-wide to get a better handle on IT among and between the hundreds of far-flung VA facilities around the country.

In fact, suggestions that the VA needed to update its aging computers and operating systems had actually been circulating since the mid-1980s. John Lainhart, formerly with Government Accountability Office (GAO), and one of the consultants who worked on the VA transformation effort, notes with a chuckle that the GAO had recommended back in 1984 that the VA dump it's aging programming language, known as MUMPS (for **M**assachusetts General Hospital **U**tility **M**ulti-**P**rogramming **S**ystem).

MUMPS was a system that had actually been developed in a Massachusetts General Hospital animal lab in the late 1960s with—as its full name implies—the health care research community in mind. In the lightning fast chronology of today's technological advances, "old" doesn't quite do justice to MUMPS's current status in the IT programming language world. The last major MUMPS update was released almost 15 years ago. And it is MUMPS in which the VA's main programming application—VistA (for Veterans Health Information Systems and Technology Architecture)—is written.

But the VA had caught MUMPS with a vengeance because it was easy to use and easy to customize, characteristics that made it highly popular for medical professionals in the field who were rapidly coming up with new ways to collect, analyze and use data to improve clinical care.

Meanwhile, every VA facility was also operating its own mainframe computer. Often, points out Jeff Shyshka, those computers were down in the hospital basement, unsecured, sitting next to or beneath things like aging steam and sewer pipes, with no systems to back them up should disaster strike.

As hardware evolved, desktops sprouted up throughout the VA system like mushrooms. Laptops were everywhere. Hundreds of thumb drives—with all sorts of personal information on patients stored on them—were traveling the nation and world in the pockets and briefcases of VA doctors and administrators.

While the decentralized approach to IT meant that 1,000 flowers were indeed blooming out in the field when it came to using IT to improve medical care, the aging software and the proliferation of hardware created myriad and predictable problems for the VA.

First of all, there was no way to know how secure data was. Second, patching VistA was becoming an increasingly expensive and complicated proposition. New applications were popping up sporadically and haphazardly. Some were powerful and positive, but their potential impact of overlaying them on other facilities operating systems was unpredictable, and could conceivably be disastrous. And when the VA did agree that it needed some new system-wide application improvement like, for one real-life example, a better program for scheduling appointments, developers in the field just couldn't seem to get their collective act together to design and deploy the system—in no small part because of the difficulty in launching enterprise-wide software in such a decentralized environment.

Also, the decentralized nature of the whole IT system meant that some facilities were on the technological cutting edge while others were backwaters. Peter Henry, Director of the VA's Black Hills Health Care System in South Dakota, recalls, for example, visiting facilities with significantly larger caseloads and greater care responsibilities than his, yet that were managing all that with a fraction of the computing power he was employing in his hospitals. He also remembers incidents like poking his head into the office of one administrator and noticing that

Microsoft Office 1995 was up on the screen. "You know," Henry told the administrator, "that software is now three generations out of date."

Meanwhile, data sharing was impossible to execute, at worst, and a nightmare, at best. Again Henry recalls an attempt a few years ago to merge the patient data bases of two of his facilities. One, he says, had about 12,000 names and social security numbers and one had about 10,000. When they blended the two, the total came to 28,000 or so because the new system was double counting duplicate names of patients who had received services at both facilities.

## Launching the Transformation in 2005

With a recent history of problems through decentralization, and the recognition that IT at the VA needed to be wrestled under control, Secretary R. James Nicholson made the decision to begin investigating how the VA might go about getting a better handle on its sprawling IT system.

In 2005, Jeff Shyshka was the VISN 21 Chief Information Officer (CIO), and also chairman of the CIO council, a group made up of the VISN and facility CIOs. Shyshka was working in the field on, among other things, what he describes as "very powerful clinical IT applications" that he thought were worth pushing more broadly throughout the VA, but that he couldn't get the VA's top CIO interested in. As Shyshka tells it, he essentially barged into then VA CIO Bob McFarland's office and demanded to know why he wasn't getting better cooperation from the top of the department.

The heated discussion that ensued, says Shyshka, quickly evolved into a working partnership based on the mutual understanding that IT at the VA needed to be fixed. "We agreed that it just didn't make any sense to have had this totally decentralized environment for as long as we'd had it with as much stuff as was going on at the time," says Shyshka.

While foment for change was stirring inside the VA, another group was beginning to focus some attention on VA's scattered IT empire: Congress. By 2004, the House Veterans Affairs Committee was starting to ask tough questions about IT spending at the VA, versus what the committee viewed as less than commensurate performance and product coming out as a result. Congress was also concerned about the near total lack of accountability when it came to IT spending; there was simply no system for accurately tracking where VA IT money was going or what it was buying.

At the same time the Government Accountability Office was publishing report after report highlighting the inadequacies and vulnerabilities of the VA's sprawling, aging IT infrastructure and architecture. Indeed, the growing scrutiny and the increasingly tough questions were enough to inspire Nicholson to ask McFarland to commission a study of the state of IT affairs at the VA, with an eye toward some sort of as-yet-to-be-defined system and organizational overhaul.

With insiders like Shyshka voicing his concerns, and Congress and the GAO pushing Nicholson and his top lieutenants about theirs, the pieces were falling into place for a major shakeup of IT at the VA. In July 2005, a consultant's report that resulted from Nicholson's request was presented and essentially laid out five options for the VA:

- The first was the **status quo**, which was clearly unacceptable to a growing group of influential insiders and outsiders
- The second was a **geographic-centric model**, where IT reorganization would revolve around regional nodes
- The third was an **administrative-centric model**, which would assign various large pieces of IT to specific levels and entities within the VA
- The fourth was what was being called the **federated model**, which would centralize acquisitions operations and maintenance, and leave IT development as a field activity
- The fifth, a **centralized model** where everything would be brought under the very direct control of the assistant secretary of the Office of Information and Technology

Knowing change was coming, but unsure of its form, Bob McFarland in the late summer and fall of 2005 began to assemble a team to execute whatever the VA decided made the most sense out of the five recommendations. Bob Howard, who at the time was serving as a top advisor to Deputy Secretary Gordon Mansfield, invited a former colleague, Joe

Shaffer, to come in and interview for the job of squad leader for the IT overhaul.

VA officials deliberated through the fall and winter of 2005. In March 2006 it was announced that the VA would pursue the "federated" model. In July 2006, an outside contractor was chosen to help the VA with transformation. The contractor provided program management and subject matter experts to help the VA build its Governance structure, to drive a process oriented IT organization structure, and to layout 36 Core Processes (see Appendix I) needed to move the organization to a centralized process-driven model for service delivery.

## Goals of the Transformation

The transformation laid out on paper for what a new VA IT governance structure would look like under a largely centralized system—along with the policies, practices and new IT infrastructure it would oversee—was ambitious, to say the least.

The VA created numerous layers of technical, organizational and policy principles and practices to guide the effort. To start, the VA developed five guiding principles underpinning all the work it would do around IT centralization. The five guiding principles were:

- **Aligning** the VA's IT strategy with its health care mission
- **Integrating** the VA's IT system to allow the VA to provide the best possible care to veterans and their families
- **Managing risk,** that is, ensuring that all sensitive data related to VA clients and employees was secure
- **Managing resources**, that is, trying to ensure that the VA's personnel and procurement systems supported the overall goal of up-to-date and secure IT at VA
- **Measuring performance,** that is, creating the metrics that would allow VA officials to assess the extent to which budgeting and management were supporting the overall mission of the VA

Additionally, the VA developed a set of nine overarching objectives (see Box 2) that would guide the work of the contractor. The range from establishing

### Box 2: The Nine Objectives of VA Information Technology Realignment

1. Establish guidelines that will standardize and enhance all IT service delivery processes and business practices that support the missions of VA Administrations and Staff Offices fostering partnerships of trust and common goals that support the dynamic structure of the Department.
2. Transition VA's IT community to operate within a Federated IT Management System that separates the Development and Operations & Maintenance domains.
3. Establish required business practices and processes that harmonize the oversight and budgetary responsibilities and of the Office of the CIO, the functionality of the Domains, and business relationships of the IT service provider and the customer for all IT activities across the entire VA.
4. Attain optimum interactions between all business units and the IT service delivery community that are supported by IT governance and decision-making processes.
5. Define the best business practices and processes that establish the relationships between the Operations and Maintenance (O&M) Domain that is the responsibility of the AS/IT (CIO) and the Application Development Domain, to include determination of business needs and priorities that are the responsibility of the Administrations and Staff Offices.
6. Establish detailed agreements to fulfill a service provider and service requestor relationship such as SLAs supporting the business needs of the Administrations and Staff Offices.
7. Establish an effective organizational change management approach that addresses stakeholder transition needs and VA's cultural nuances while transitioning to VA's Federated IT Management System.
8. Institutionalize the organizational structure, functionality and readiness/execution plan for a world class development organization for the Administrations and Staff Offices.
9. Ensure minimal to no disruption of daily activities in each organization during the execution of plans and implementation of processes—in the spirit of "do no harm."

guidelines to standardize and enhance all IT service delivery processes and business practices, to ensuring minimal to no disruption of daily activities in each organization during the execution of plans and implementation.

Informing the IT transformation effort more broadly were seven "key realignment expectations (see Box 3)," broadly stated goals about what the VA was ultimately trying to achieve through transformation. The seven key expectations of VA IT range from "Achieve a 'Gold Standard' for Data Security and Information Protection," to "Achieve a Fully Operational IT Governance Plan."

## IT Governance and New Organizational Structure

To oversee the new approach to IT, the VA defined IT governance, and created an IT governance program, plan and structure consisting of a group of interlocking boards responsible for everything from strategic planning to budgeting and acquisitions.

VA defined IT Governance as: "A structure of relationships and processes to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over IT and its processes." In addition, the IT governance plan recognizes that human beings will be involved and so sets out two sets of human resources related guiding principles essentially related to how people will operate within the new IT governance program. These include "IT Governance Imperatives (see Appendix III)," which, among other things discuss the need for trust and partnerships in order to make the governance plan successful, and "IT Governance Characteristics (see Appendix IV)," a list of the "rules of the game" that ought to infuse the effort, ranging from "builds relationships and processes," to "ensure that everyone is playing by the same rules and doing the right things right."

Several critically needed, very specific IT Governance Guiding Principles (see Box 4) were also identified to ensure among other things that IT governance was recognized as being critical to VA's success and that IT resources and IT program execution result in maximum effectiveness and efficiency across VA to meet requirements and deliver benefits set by VA business leaders.

### Box 3: Key Realignment Expectations for VA IT Realignment Program

- Achieve a "Gold Standard" for Data Security and Information Protection
- Achieve A Single IT Leadership Authority by July 2008
- Validate Office of Information and Technology (OI&T) Construct and Management Process
- Validate Operations and Maintenance (O&M) Construct and Management Process
- Validate Development Construct and Management Process
- Recommend Best Business Processes and Practices that leverages emerging IT capabilities and efficiencies
- Achieve a Fully Operational IT Governance Plan

### Box 4: VA IT Governance Guiding Principles

- IT Governance is critical to the success of VA Governance and business needs
- Business (mission) requirements and benefit realization are the basis for setting IT priorities
- Business leaders (Administrations and Staff Officers) establish IT requirements, business benefits, and priorities based on VA Strategic Plan
- Business leaders oversee full life cycle execution of IT program to manage risk
- The Office of Information and Technology (OI&T) determines technology solutions and IT related life cycle costs
- VA CIO manages IT resources and IT program execution from maximum effectiveness and efficiency across VA to meet requirements and deliver benefits set by Business Leaders
- Use existing VA Governance mechanism to maximum extent possible
- OI&T policies, procedures and processes must be published, communicated, monitored, measured, and reported across VA
- IT Governance enforcement must be equitable, timely, and consistent
- Industry/Government best practices and standards are assessed and implemented as appropriate

## Box 5: Description of IT Governance Structure at VA

**The VA Executive Board**

The VA Executive Board performs the following functions:

- Serves as the VA senior board
- Approves department-wide VA IT strategy
- Decides the overall level of IT spending and priorities
- Establishes funding targets across lines of business in accordance with VA Strategic Plan, congressional or other mandates, etc.
- Assesses VA strategies, program initiatives, and risk identification/reduction activities to ensure improved:
  - Service to our veterans
  - Information protection and data security
  - Resource management
- Provides recourse for issues unresolved at ITLB

**Strategic Management Council (SMC)**

The SMC serves as the senior board making decisions related to IT strategy and technology. The board is chaired by the Deputy Secretary. The board assures the formulation of:

- Budgets
- Strategic planning and policy processes
- Workforce planning
- Capital asset, planning and investment
- Legislation

The SMC provides business recourse for issues unresolved at ITLB. The board meets at least quarterly and more frequently during the early stages of IT Governance implementation. The SMC is the strategic, priority setting, oversight and issue resolution board for IT matters within VA.

**IT Leadership Board (ITLB)**

The ITLB is the first department wide governance board. The ITLB is chaired by the Deputy Secretary and includes the VA CIO, deputy under secretaries along with other key staff as determined by each assistant secretary. The ITLB represents the IT services, strategies, principles, governance, and resources that support business organizations across VA. Specifically, the ITLB performs the following functions:

- Serves as the primary IT strategy and technology board
- Recommends the IT spending levels
- Oversees IT resources and program execution
- Oversees the coordination and performance of IT services and support services
- Oversees system security
- Makes decisions on BNTI and PLTI issues and recommendations
- Resolves disputes within IT governance

**Budgeting and Near Term Issues (BNTI) Board**

The BNTI Board represents the business units and their needs/requirements for investments in IT and monitors the fulfillment of those needs. Specifically, the BNTI Board performs the following functions:

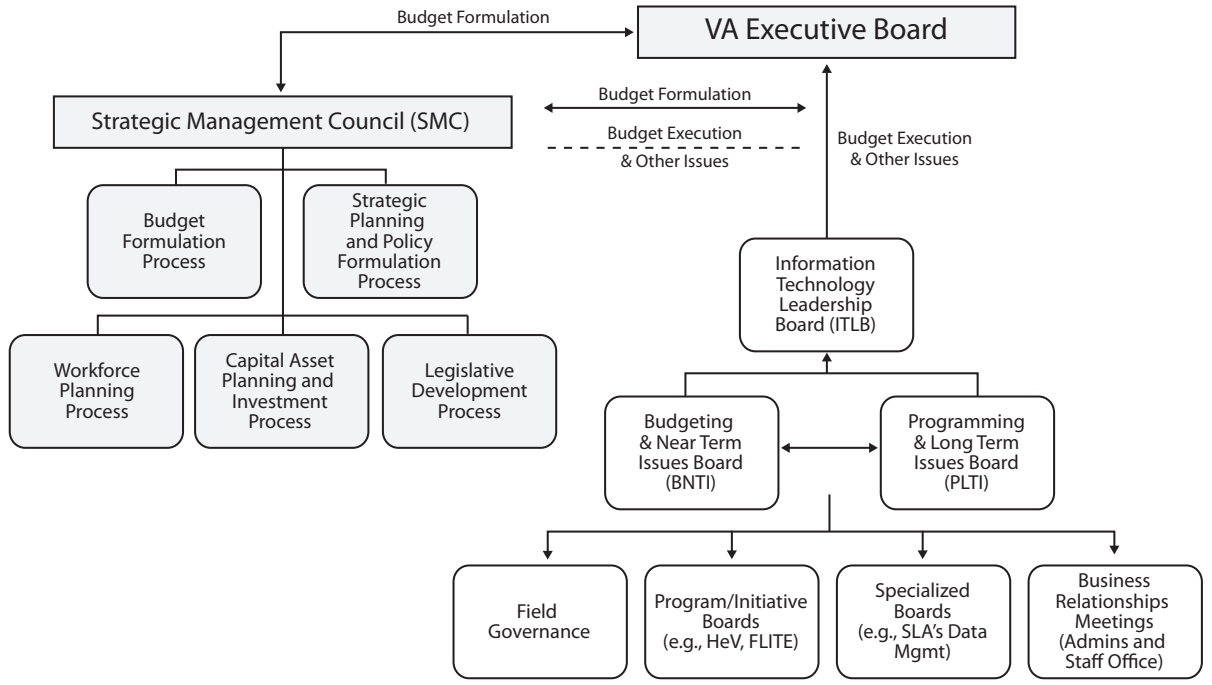
- Develops the detailed budget documents supporting future year budget formulation and current year execution
- Monitors budget and technical performance execution-to-plan and makes recommendations for reallocation or reprogramming as warranted for ITLB consideration (mid-year review)
- Monitors performance such as service level agreements and other metrics
- Utilizes IT costing models and methodologies for validating execution year budget recommendations.
- Enforces technical/information security standards throughout the budgeting process
- Addresses near term issues, as required

**Programming and Long Term Issues (PLTI) Board**

The PLTI board recommends the overall VA priorities for IT related business solutions and defines IT service offerings, infrastructure and technology architecture/standards; and is critical to assuring standardization, interoperability, security, reliability, and flexibility of the IT infrastructure. Specifically, the PLTI Board performs the following functions:

- Develops weighting criteria and prioritization methodology for long-term multi-year IT programming
- Utilizes ITLB-approved weighted criteria, develops future year IT program/project priorities consistent with VA's enterprise architecture, IT strategy, strategic goals, lines of business priorities, and previous year funding allocation
- Develops options and recommendations for program/project "cut-line" based on fiscal reality, prior year execution, OI&T ability to execute, etc.
- Utilizes IT costing models and methodologies for validating future year budget recommendations
- Evaluates business cases and priorities, including required supporting infrastructure
- Evaluates adherence technical/information security standards
- Conducts milestone reviews
- Identifies IT services and required funding for future service level agreements and other metrics
- Recommends technology strategy and enabling technology initiatives and priorities
- Addresses long term issues, as required

## Box 6: IT Governance Structure at VA




Under the VA's IT governance plan, an over-arching VA Executive Board makes policy, formulates budgets and also acts as ultimate arbiter in the case of conflicts among the other boards lower down the organizational chart. A group of sub-boards does everything from capital and workforce planning, to evaluating projects and priorities, to overseeing enterprise-wide IT architecture, including developing technical standards for security, and recommending system improvements.

The VA, with contractor support, did assess 150 VA facilities (hospitals, clinics, etc.) to try and figure out where the VA was with regard to existing IT capacity. But even that comprehensive review didn't prepare VACO for just how much work would be required to consolidate and update far-flung and often out-dated IT systems, says former VA CIO Bob Howard.

Based on the contractor's assessment and on VACO judgments about the state of IT at VA, in February 2007 the Secretary approved a new organizational structure for centralized IT management. The structure was based on industry best practices including CobiT (for "Control Objectives for Information and related Technology) and Val IT, both of which provide a framework for IT governance plans, structures and investments, and also ITIL (for "Information Technology Infrastructure Library), a set of state-of-the-art concepts and policies for managing information technology infrastructure, development and operations.

The new structure was developed to create a system to meet the VA's IT needs that involved building and maintaining key applications, supporting operations, and monitoring IT in five key areas:

- Enterprise management
- Business management
- Business application management
- Infrastructure
- Service support

Service support is particularly important, argues Jeff Shyshka. He says that clinicians and administrators in the field continually express the need for on-the-ground IT technical staff to help with the day-to-day IT issues and problems that pop up at the facility level.

Finally, the VA established a system for evaluating transformation, not only to gauge progress toward its One-VA vision, but to try and ensure that IT is being effectively deployed to support all those working in and being served by the VA.

# Change Management at VA

## The Change Management Challenge

Mapping out system and organizational changes on paper—with neat boxes, arrows and bullet points—is one thing; implementation is quite another. The VA itself notes, "The primary challenge the VA will face in achieving this transformation will be gaining the acceptance and support of all VA personnel, including leadership, middle managers and field staff." What is clear about the VA effort is that it cannot succeed if it only addresses technological transformation—critical to the success is the human factor that is needed to achieve acceptance, change the organization and change the way business is conducted at the VA. The VA transformation is first and foremost about cultural change, for without this, the transformation will not achieve its full potential.

In May 2006, the job of pushing that organizational transformation fell to Bob Howard, who took over as CIO from Bob McFarland, just as the transformation effort was getting off the runway.

### "A Recipe for Failure"

As the team assigned the job of guiding transformation sifted through the five options laid out in the initial report on VA IT transformation, a couple things became clear, says Joe Shaffer, who came to the VA in October 2005, to lead the effort.

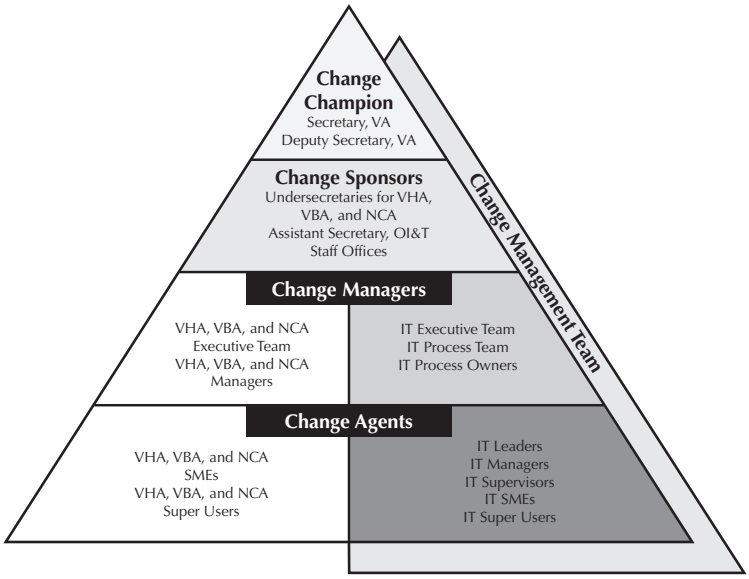
First, says Shaffer, he knew a small team of outsiders with no VA baggage would be needed to move reorganization. But he also understood the he would need the help of trusted insiders, with intimate knowledge of the structure and the politics of IT and the overall organization at the VA to clue Shaffer and his team into potential opportunities and roadblocks, and to keep the new team from making any unnecessary political mistakes as they forged forward. To fill that role, Shaffer found four VHA upper-level career staffers, all of whom had been pushing for an IT overhaul at the VA for years. Without that kind of insider's knowledge, says Shaffer, "IT realignment would have failed."

As Shaffer assembled his team, it was decided by the VA brass that while centralization of IT actually made the most sense (option five of the five presented to it in the fall of 2005), it would be politically impossible to sell within the decentralized culture of the VHA. (A popular saying at the VA, which captures the culture: "When you've seen one VA health care facility, you've seen one VA health care facility"). And so in the spring of 2006 the federated model (option four) officially became the blueprint—a bit blurry to be sure—for how the VA would move forward.

"Basically," says Shaffer, "the federated model took the IT community and divided it into an operations domain and a development domain." Operations would become a central office responsibility; development would remain out in the business units. Shaffer says nobody at VACO was particularly happy with the concept, least of all he. "I said that the federated model is basically a recipe for failure, but we can try to maximize it."

The plan that the VA implementation team came up with and that was approved by the VA executive early in 2006 indicated just how serious the leadership at the VA was about transformation, however. Even before the official adoption of the federated model as the route to transformation, a February

## Box 7: Change Management at VA




- **Change Champion** provides the vision, direction, and sets enterprise-wide priorities and motivates and inspires the organization throughout the change
- **Change Sponsors** "owns" and legitimizes the change program. Works to reinforce and sustain the change vision and direction across and within their respective areas
- **Change Managers** are responsible for the implementation of the change. They help maintain the business' focus on project priorities, align resources, and ensure a successful change program implementation across the organization and within their respective areas
- **Change Agents** are a group of employees, including employees involved with the IT process teams and other influential employees who help coworkers understand and accept the changes

***Source:*** "Department of Veterans Affairs IT Realignment Program," PowerPoint Presentation by Joe Shaffer, July 5, 2007.

2006 VA executive order had established an interim office of the CIO and an organizational and management structure to support the transformation effort.

But the February order did one other massive and hugely controversial thing: It swept all 6,000 or so far-flung IT staff nationwide under the umbrella of the VA's CIO, the vast majority of whom heretofore had been working not for the VA CIO but for the various facilities and networks in the field, and the administrators running them.

No one would be physically moved under the VA Secretary's executive order, and essentially all staff would be doing the same jobs that they'd been doing. They all just suddenly would have a new boss: the VACO CIO. Such a sweeping redrawing of lines of authority, VA officials calculated, would go a long way toward shoring up previously fragmented and tenuous lines of communication and control over IT at the VA.

With the federated model as the template for change, Shaffer and his team in the spring of 2006 went to work developing a request for proposals for an outside consultant to work with the VA on what at the time was calculated to be a $6 million to $10 million transformation plan.

### Two Big Bangs

As the VA was sifting through possible transformation consultants in the spring of 2006, and starting to move the whole project forward, two things happened in rapid succession. Bob McFarland, who originally came to the VA from Dell Computers, resigned as VA CIO just as the transformation effort was gearing up in

earnest. Bob Howard stepped in as acting CIO. Just days after that, news of a massive data breach broke. A laptop computer and an external hard drive containing the names and social security numbers and other personal information of an estimated 26 million veterans had been stolen from the Arlington, Virginia, home of a VA central office employee.

"I came in as acting CIO on May 1," says Howard, "and news of the breach broke on the 16th." And all hell broke loose on Capitol Hill and it rained down on VACO.

But while Howard remembers with something far short of fondness the beating he and other top administrators took during hearings on the Hill, there was one significant and positive side effect of the mess: It only added to the sense of urgency that the VA needed to get a handle on it's far flung IT empire and all the vital information stored within it.

Even as the VA was working through the fallout of the breach, it was also getting RFPs out to a small handful of large computer consulting companies to help with transformation. That contractor was picked in July 2006, and set to work designing the structural and technical details of transformation, including a new IT governance system, security systems and what the actual new IT infrastructure at VA would look like.

## "Stealing the March"

In most case studies of major organizational overhauls, the notion of constant communication between and among all those who will be involved and affected is a major theme, and building "stakeholder" support for change is often cited as critical. This was not the case with the VA transformation effort.

Once the decision to pursue the federated model was made, and the re-detailing of IT staff was completed, Shaffer and key players did do a tour of the country to educate those in the field about what VACO was trying to accomplish through transformation, and what transformation would look like, addressing about a half a dozen large staff meetings.

But as far as trying to win "buy in" from the rank and file or any outside interest groups—like veteran's advocacy groups—Shaffer says he knew better than to expect it or waste much time trying to win it. "I am an advocate of top-down leadership on major transformation projects like the one at VA. This wasn't building stakeholder coalitions and singing 'Cumbaya.' When you do that you're doing nothing but allowing obstructionists the time and opportunity to thwart you."

What Shaffer and company wanted to do was to move and move fast. "It's called stealing the march," says Shaffer. "By the time your opposition is getting organized to fight you, you've already moved on to the next task." And so as an overall strategy for transformation, speed was critical, he says. "The longer that you're doing the transition the more issues come up and people keep sticking needles in you and transition will die of a thousand razor cuts."

For all of Shaffer's tough talk, though, Bob Howard points out that it wasn't a complete game of steamroller. "Joe is right, we did move quickly and decisively, but Deputy Secretary Gordon Mansfield's maxim was always 'First do no harm.'" Mansfield personally spent significant amounts of time communicating with key field staff to answer concerns and complaints about transformation, says Howard.

## Unlikely Strategic Partners

Among those who were most interested in how the transformation effort was unfolding was the Government Accountability Office, which had been dogging the VA about the state of its IT systems since the middle 1980s. As the IT transformation effort was gaining steam through the summer of 2006, the GAO came knocking again.

The normal response of many a federal agency when the GAO comes calling is: "Only give them what they ask for and nothing more," says Shaffer. But Shaffer and company knew that in the GAO they actually had a potentially powerful ally in transformation, and so rather than try to minimize the information they gave GAO auditors, they actually invited GAO in to see everything they were doing. "And so we were scrutinized every month for four hours by the GAO for two years," says Shaffer.

That had the twin benefit of not only allowing GAO to see that the VA was serious about overhauling IT—a fact that would be reflected quite positively in subsequent GAO reports—but the high level of scrutiny was also a check to make sure that every initia-

### Box 8: A New Style Contract

Another important and atypical component of the VA IT transformation effort was the contract it worked out with the lead private sector consultant it would use to help guide the effort.

First, the contract didn't ask that a major "gap analysis" be conducted, which would be a standard practice in gearing up for huge organizational overhauls. While that allowed the transformation team to move forward more quickly, in retrospect, says Bob Howard, such an analysis would have given the VA CIO and his team a much more accurate picture of how much of a mess they were wandering into out in the field, and would have better prepared them for the work that was going to be required to fix it.

The contract that the VA ultimately worked out was also notable for one other particularly innovative twist. The contract didn't spell out in excruciating detail the work products that it expected from its contractor; there were no "statements of work," (SOWs) as in typical agreements. Rather, the contractor was asked to fulfill the requirements set out by a series of "statements of objectives" (SOOs). That is, rather than provide the contractor with a laundry list of finished products it expected to see, VA laid out broad goals it wanted the contractor to help the VA achieve.

That had benefits for both VA and the contractor. From the VA's standpoint the open-ended nature of SOOs would mean it could send the contractor back to the drawing board with relative impunity to do more work, since the extent to which the contractor had fulfilled expectations of SOOs would be in the eye of the beholder—the beholder, in this case, being the VA. But it also allowed the contractor the freedom and flexibility to bring their considerable expertise to bear on solving problems rather than on trying to follow work order specifications. And so the contractor could reach into its kit bag of potential models and strategies to help the VA achieve its goals of centralizing, modernizing and securing IT at the VA.

tive that Shaffer and company was pursuing was above board and, as Shaffer puts it, "squeaky clean." Given the depth and breadth of people who wanted the effort to fail, the last thing the transition team needed was to have to fight off legal and ethical questions about how the effort was being managed, funded and executed.

By the same token, the transition team continued to run every important document and decision past both the VA's inspector general and general counsel.

## The Whole Enchilada

In the fall of 2006, having spent months intensely pushing transformation and doggedly fighting off opposition, Shaffer decided to throw the bureaucratic equivalent of a Hail Mary pass in order to move the VA toward the ultimate goal of a single IT authority.

Shaffer had a fully prepared briefing outlining the plan for what he and McFarland had wanted all along: complete centralization of IT under VACO, which essentially meant bringing development into VACO along with personnel, budgeting and operations. Shaffer's suggestion didn't come out of the blue, however. In the summer of 2006, Secretary Nicholson had actually mentioned the possibility of total IT consolidation at the VA during congressional hearings over the data breach. And so it's probably not surprising that once briefed, Deputy Secretary Gordon Mansfield agreed to the plan and quickly set up a meeting with Secretary Nicholson where Shaffer and his team would lay out the organizational particulars.

It was the final, major piece of the IT transformation puzzle that Shaffer and his team had been working to get in place and it took a mere 60 days to do from the first formal proposal to final execution. Again, it was the sort of speed that Shaffer argues is absolutely critical to making huge change in a large organization before opposition can get organized for the fight.

Given the flexibility that had been built into the original consultant contract, the team at the VA was able to go back to its transformation consultant and without any renegotiation of contract terms shift the focus of transformation from the federated model to the centralized model. By the end of December,

### Box 9: VA IT Accomplishments — 2008

- Developed and disseminated the FY 2006-2011 IT Strategic Plan which provided guidance and goals for IT initiatives and aligned intended outcomes with the Department's overarching strategic planning
- Analyzed IT spending at VA medical facilities and began development of an IT budget forecasting tool and cost model
- Established a multi-year programming process for the Office of Information and Technology to replace the former annual planning and budgeting practice
- Created a robust methodology for monitoring and reporting team performance and causal conditions in software projects, including targets for measures, indicators, executive reports, and analytic training
- Centralized the Software Quality Assurance process to standardize requirements and best practices in support of efficient and effective software development teams
- Developed and implemented a comprehensive assessment tool to evaluate all aspects of information security of IT services (including FISMA, Privacy, Research, HIPAA)
- Created an Enterprise Program Management Office charged with improving the project management discipline, cost and schedule management, and overall accountability of major programs within IT Field Operations
- Launched a national and regional data warehouse initiative to standardize business data storage and management
- Begun implementation of the VA's Enterprise PC Lease program which will provide significant benefits to the VA's deployed desktop computing infrastructure, including:
  - Improve overall standardization in desktop computing platform
  - Lower desktop total cost of ownership across the enterprise
  - Standardize desktop refresh cycles
  - Streamline and improve efficiency in delivering desktop support processes

2006, the VA had an organizational manual and governance plan that reflected the brand new regime at the VA.

As work was proceeding, though, opposition was also growing. VISN and facilities administrators were doing everything in their power to derail the centralization effort; including pulling every political string possible to get the word to Congress that centralization and realignment spelled nothing but catastrophe for the VA. Stephen Warren, who took over for Joe Shaffer in 2007 as the VA's point person for IT transformation, has a keen understanding of how stark the message from opposition in the field can be: If you take away control of IT personnel and money, some in the field say, "patients will die," says Warren. "It has been a huge task to change that focus."

Indeed, Shaffer says flat out that if it weren't for the steadfast support of Secretary Nicholson and Deputy Secretary Mansfield in the face of those kinds of dire warnings, the whole effort would have collapsed. "The courage and leadership award goes to Mansfield," says Shaffer. "He is the man who kept this on track in the face of heavy opposition from assistant secretaries and under secretaries."

## What the New Administration Faces

Today, transformation continues to unfold at VA. According to those both inside and outside VACO, implementation is moving forward—faster in some areas than in others.

In particular, there is a continuing push on standing up the 36 business processes that are at the core of reengineering how the VA links its health care mission to IT. And work is continuing on standing up and defining the roles of the various advisory boards created as part of the overall VA IT governance plan.

There have been some notable successes. Every known mobile computer in the system has been

## Potential Benefits of the VA IT Transformation Model To Other Departments and Agencies

*By John W. Lainhart IV*

I had the unique opportunity to work closely with the Department of Veterans Affairs (VA) in transforming the use of information technology (IT) at VA. I worked closely with VA in assessing and designing their IT governance structure, their IT organization structure, and their IT processes framework and models, as well as working with the IT Realignment Office to communicate the IT Governance plan throughout the department.

In reviewing the IT transformation experience today, the initiative is having numerous benefits which can serve as models for other departments and agencies in the years ahead. These benefits include:

- The department is increasing its enterprise-wide understanding and accepted a new approach to IT Governance, positioning the department for maximum business effectiveness and improved success over the long term
- The department is transforming its business framework and moved to a more effective and efficient IT environment
- The department is developing a more effective regulatory and governance framework for overall business operations.
- The department is developing a framework for enhanced participation, transparency, and accountability in the alignment of IT to the business and the management of IT itself
- The department is institutionalizing a charter for critical IT decision-making bodies for IT across the department
- The department is developing a plan to implement and sustain IT Governance for the benefit of all, employees, veterans, dependents and other stakeholders
- The department is developing a framework for organizing the IT workforce under the centralized model
- The department is assigning roles and responsibilities for IT management to effectively deal with the administration on IT matters
- The department is moving its Office of Information and Technology to a process-based organization defining the target environment for transformation
- The department is institutionalizing management practices based on industry best practices described in CobiT®, Val IT™ and ITIL®
- The department is establishing metrics to track implementation progress and performance improvements

These benefits would not have been occurring without the intensive, often difficult transformation that VA undertook over the last several years. It provides a model from which other departments and agencies can learn from and apply to their own organizations.

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encrypted—including laptops and thumb drives. Another significant accomplishment: negotiating a massive lease contract with a national computer company that Jeff Shyshka says has made acquiring and reconfiguring computers and computer systems throughout the VA a considerably simpler and more straightforward process; he is now trying to do the same with the VA's telecommunications system.

And the VA is also moving more data out of remote and isolated facilities and into data centers—although a high-profile 14-hour outage at a data center in the west, says Shyshka, caused a bit of skittishness at VACO about data centralization. While Shyshka thinks VACO overreacted to the outage, Howard thinks it was reasonable to call for a little greater prudence in the rollover. "The guys were moving too fast and taking too many risks," reflects Howard. In any event, the VA is moving forward on its push to create a network of linked data centers robust enough to withstand any outages and that "fail over" immediately so that field facilities can

continue to operate without interruption. If Shyshka has any frustration at the moment, he says it is in the difficulty he's having hiring people qualified to build and operate such centers.

There are continuing concerns at VACO and in the field, though, about the reorganization. The first is that with facility CIOs no longer reporting directly to facility administrators—but rather to the VA CIO in Washington, DC— there are situations in the field where facility CIOs are being less than responsive to facility administrators.

While Peter Henry says the CIOs in his network are still very responsive and work well with him—on everything from acquisition to applications—some of his colleagues, he says, aren't experiencing the same levels of cooperation and commitment from their IT staff. While there may be scattered instances of a lack of cooperation between facility CIOs and administrators on account of the new lines of reporting authority, former VA CIO Bob Howard says he doesn't think that it's been a significant issue, however.

Even if cooperation has continued in the field, Charles DeSanno—one of the four staffers on Shaffer's "insiders" team, who is now Associate Deputy Assistant Secretary of Infrastructure Engineering—continues to think that sweeping all IT personnel underneath the CIO was a mistake. A hallmark of care at VA, he argues, has always been that the field could move and adapt quickly, and having CIOs report directly to facility administrators was an important part of that dynamic. He says VA could have still achieved its goal of a centralized IT authority without cutting and re-splicing lines of personnel reporting authority.

Meanwhile, under the new organizational chart there are now a daunting seven layers of bureaucracy between the VA CIO and facility CIOs, a distance that doesn't exactly contribute to easy communication or rapid action between and among facilities in the field and VACO, note critics of the arrangement.

Bob Howard says he understood the concerns, but argues that, first, VACO had made provisions—particularly budgetary provisions—for a good deal of field discretion. "So if someone needs a new mouse or a blackberry, they can go ahead and just buy it," he says. And he believed that once the IT governance plan is tuned correctly, that there will be ample opportunity for communicating to VACO IT needs from the field, large and small.

At the same time, concerns have also been expressed about the speed with which new applications are being developed and deployed under a centralized model. Shyshka, who spends most of his time in the field, thinks those issues will be worked out, but the question of VACO's ability to rapidly respond to development requests from the field and turn those into usable products will be one of the major, ongoing tests of the single IT authority model at VA.

It's a test that VACO is more than up to, asserts Paul Tibbits, deputy chief information officer for development. All his development projects and delivery schedules are public, he says "and if people want to hold me accountable fine, there they are."

At that, the entire massive, ambitious final rollover from scattered mainframes and networks running VistA, to a web and data center-based system that is standardized, interoperable and compatible is expected to take another 10 years and cost around $15 billion.

Some at the VA argue that transformation is still a fragile undertaking that could fall apart at any moment. It is also, at the moment, an under-resourced effort according to both those at VACO and in the field.

While Congress has added money for health care services, there has been no commensurate increase in the VA IT budget, which hurts the transformation effort in two ways: first, in order to modernize, the VA CIO needs to invest significant amounts of money. Second, the lack of resources has only added to the already strained relationships between VACO and field operations brought on by transformation effort. Jeff Shyshka argues that if transformation had proceeded in the context of massive investments in IT the controversy surrounding the effort would have been significantly diminished.

At that, though, the total unraveling of the effort seems very unlikely. Given the significant and fundamental changes in budgeting and personnel management, and in reorganization and the strong push

toward "one VA" generally, there probably isn't much chance of significant retrenchment. And so the drive toward a single authority IT at the VA will no doubt continue, albeit in fits and starts, with all the predictable glitches that accompany such a huge—-and essentially human—task.

## Lessons Learned

Based on the experience of change management at VA, the following lessons were learned and are clearly applicable to any organization confronting a change management initiative.

1. *Top leadership has to be utterly committed to the effort.* There were numerous junctures at which the whole transformation effort could have been derailed had it not been for the steadfast commitment of VA Secretary R. James Nicholson and Deputy Secretary Gordon Mansfield. For big change to stick, the executive orders issued by Nicholson were absolutely key to the effort's progress.

2. *Pulling together a team of committed outsiders and insiders is key.* As transformation project director Joe Shaffer notes in the report, it's critical to have both the fresh thinking of outsiders who can bring in-depth knowledge of state-of-the art practices to transformation. But without a group of savvy insiders to guide and support the effort through and around political and logistical minefields, transformation would have been doomed.

3. *When there is likely to be strong push back, speed can be more important than complete consensus.* A hallmark of the VA transformation effort was that it made big moves and made them quickly, which prevented opposition from getting organized and mobilizing. It is important, though, not to completely ignore those being impacted in the field. Deputy Secretary Gordon Mansfield invested considerable time working through issues and concerns that were raised by local and regional administrators about the whole transformation effort.

4. *Anticipate opposition and try to stay two steps ahead of it; action, in many cases, trumps transparency.* Re-detailing all VA IT staff under the VA CIO was among the more controversial components of the transformation. By the time the VA announced the new policy, it was a done deal and the transformation team was already moving on to other initiatives.

5. *Create a sense of urgency—identify potential vulnerabilities and crises and use them to fuel change.* Joe Shaffer describes it as "creating a series of burning platforms." That is, take advantage of actual and perceived emergencies and vulnerabilities in the organization and its systems. The news that a laptop containing the records of some 26 million veterans had been stolen was a golden opportunity to push the security side of transformation.

6. *Set ambitious goals and then sequence tasks and projects in a phased approach using rolling implementation.* Getting to 80 percent of a particular goal is often good enough; move on to the next major task. Don't be distracted by perfection, or the effort could bog down. Shaffer's team, for example, didn't worry if every computer in the VA system hadn't been encrypted. The idea was that a solid plan had been put in place to secure all VA IT.

7. *Keep moving.* Don't micromanage details. While the transformation team developed a logical, sensible and clear roadmap for what a consolidated IT office would look like and how it would operate, they knew it would be years before all the pieces were actually in place. Therefore the transformation team focused on the over-arching processes and procedures that would underpin transformation. They didn't go facility to facility to enforce new policies and directives.

8. *Write consulting contracts that afford the client maximum flexibility and oversight, but that also offer contractors the opportunity for maximum creativity.* As discussed earlier in the paper, the VA decided to write a vendor contract that focused on outcomes and not on outputs. That gave the VA a good deal of discretion when it came to signing off on products, but it also gave vendors the room to be very creative in how it met the demands of the contract.

9. *Take advantage of outside scrutiny.* Outside performance auditors can be powerful allies in pushing for major change. *Bring them inside and share everything with them*. Rather than stonewall the Government Accountability Office, or try to deprive them of all the information about consolidation, the transformation team actually made the GAO an ally in its effort, providing powerful outside support for and affirmation of the transformation effort.

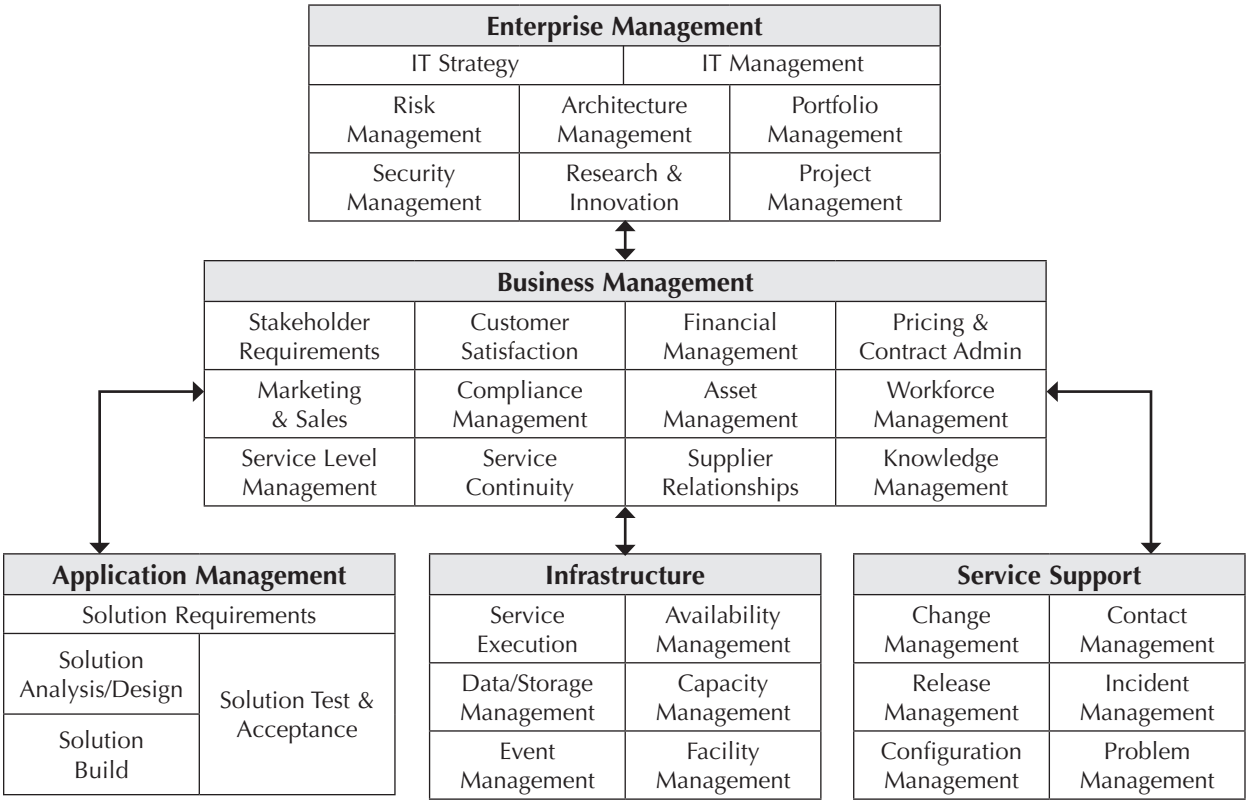
10. *Keep it squeaky clean*. When pushing for major change that is going to attract widespread attention and engender serious opposition, make sure that legal and fiscal checks and balances are in place and in play at all times and that all major decisions are thoroughly vetted by internal legal and compliance overseers. Before the transformation team move on any major policy or initiative it vetted such initiatives thoroughly with the VA's general counsel and inspector general.

# Appendix I: The 36 Core Processes

A key component of the VA IT Transformation was developing and putting in place 36 key processes. The processes were based on industry best practices and were a key component of the realignment effort as Office of Information and Technology moved to a process-based organization.

By implementing these improved processes, VA was able to correct deficiencies it encountered as a result of its previous decentralized management approach. Implementation of the 36 processes resulted in institutionalizing best management practices. With a system of defined processes, the Office of Information and Technology is now able to quickly and accurately measure implementation progress and improve the way IT supports the agency.

Each process has a process owner within VA. As part of the transformation, VA designed and delivered 36 process charters, designs and implementation plans. VA initiated weekly meetings with process managers and subject matter experts. Each process team was coached and trained during the implementation phrase. Each process team also received Information Technology Infrastructure Library (ITIL) training on best practices in managing information technology infrastructure, development and operations.



# Appendix II: Industry Accepted IT Best Practices

## CobiT®

The IT Governance Institute's (ITGI) *Control Objectives for Information and related Technology* (CobiT®) provides best practices across a domain and process framework and presents activities in a manageable and logical structure. CobiT is process-oriented around four domains: plan and organize; acquire and implement; deliver and support; and monitor and evaluate. CobiT is controls-based, with control objectives for all of the 34 processes, as well as overarching process and application controls. CobiT is an IT Governance framework and supporting tool set that allows managers to bridge the gap between control requirements, technical issues and business risks. CobiT enables clear policy development and best practice for IT control throughout organizations. CobiT emphasizes regulatory compliance, helps organizations to increase the value attained from IT, and highlights links between business and IT goals.

## VAL IT™

ITGI's Val IT™ is a governance framework that consists of a set of guiding principles, and a number of processes conforming to those principles that are further defined as a set of key management practices. The Val IT framework provides guidance to: define the relationship between IT and the business and those functions in the organization with governance responsibilities; manage an organization's portfolio of IT-enabled business investments; and maximize the quality of business cases for IT-enabled business investments with particular emphasis on the definition of key financial indicators, the quantification of "soft" benefits and the comprehensive appraisal of the downside risk, Val IT addresses assumptions, costs, risks and outcomes related to a balanced portfolio of IT-enabled business investments.

## IT Governance Implementation Guide Using: CobiT® and Val IT™

ITGI's *IT Governance Implementation Guide Using: CobiT® and Val IT™* provides a road map and process guidance for implementing IT governance for an enterprise, using CobiT and Val IT. The guide helps adopt and instill a CobiT/Val IT-based governance framework, proving a generic action plan that can be tailored and adapted to suit a particular organization. It ensures that the focus is on business needs when improving control and governance over IT processes. It is complete with a tool kit of useful templates, diagnostic tools and reporting techniques, the guide is an invaluable aid to optimizing the benefits of CobiT's and Val IT's principles while also addressing many of the organizational and process changes that are needed within an enterprise.

## Board Briefing on IT Governance

ITGI's *Board Briefing on IT Governance* is a comprehensive description of IT governance concepts, useful as a reference booklet or as a tool for educating top management. It comes complete with checklists and tools to help management initiate and sustain an effective IT governance program. Guidance is also provided on the roles and responsibilities for IT governance, highlighting the parts played by the CEO, business executives, CIO, IT steering committee, the technology council and IT architecture review board. It addresses the five focus areas of IT governance within an enterprise: strategic alignment, value delivery, risk management, resource management and performance measurement.

## ITIL®

The United Kingdom's Office of Government Commerce (OGC) IT Infrastructure Library® (ITIL®) provides a cohesive set of best practice IT service management guidance drawn from the public and private sectors across the world. ITIL provides a systematic and professional approach to the management of IT service provision. Adopting its guidance offers users a huge range of benefits that include: reduced costs; improved IT services through the use of proven best practice processes; improved customer satisfaction through a more professional approach to service delivery; standards and guidance; improved productivity; improved use of skills and experience; and improved delivery of third party services through the specification of ITIL or ISO 0000 as the standard for service delivery in services procurements.

## PRM-IT

IBM's Process Reference Model for IT (PRM-IT) is a comprehensive and rigorously engineered process model that describes the inner workings of and relationship between all of these processes as an essential foundation for service management. PRM-IT includes considerations for the IT Infrastructure Library® (ITIL®); the Control Objectives for Information and related Technology (CobiT®); IBM Rational® Unified Process® technology; Capability Maturity Model Integration (CMMi); and other industry-accepted practices. PRM-IT addresses the processes for all IT activities—equivalent to the CIO's vantage point—to give superior control over IT's activities and help represent IT to business units and other stakeholders. It helps create the map that will lead to a more effective alignment of IT processes and business priorities.

## ITGI

The IT Governance Institute (ITGI) is a nonprofit research think tank, internationally recognized as the leading reference on IT governance for the global business community. By conducting original research on IT governance and related topics, ITGI helps enterprise leaders understand and have the tools to ensure effective governance over IT within their enterprise. ITGI aims to benefit enterprises by assisting enterprise leaders in their responsibility to make IT successful in supporting the enterprise's mission and goals. ITGI exists to assist enterprise leaders in their responsibility to ensure that IT: is aligned with the business and delivers value (ensuring that IT supports business goals and maximizes business investment in IT); its performance is measured; its resources properly allocated; and its IT-related risks and opportunities are appropriately managed.

## OCG

The United Kingdom's Office of Government Commerce (OGC) is an independent office of HM Treasury, established to help Government deliver best value from its spending. The OGC works with central Government departments and other public sector organizations to ensure the achievement of key IT goals, including: delivery of value for money; delivery of projects to time, quality and cost, realizing benefits; improving the sustainability of the Government estate and operations, through stronger performance management and guidance; and driving forward the improvement of central Government capability in procurement, project and program management, and estates management through the development of people skills, processes and tools.

# Appendix III: VA IT Governance Imperatives

## Build Trust

- Trust must be built among the stakeholders in the management of information and technology in the Department
- Trust is not achieved in documents; it is achieved through cooperative partnerships between the business needs of the Administrations and Staff Offices and the IT service provider—OI&T
- Structure alone without a foundation of trust can't function
- IT Governance, through carefully defining roles and responsibilities, provides the requisite foundation to address the central theme of concern—how to establish trust among stakeholders in the management of information and technology in VA

## Build Partnerships

- IT Governance is not an isolated discipline
- IT Governance should form an integral part of VA Governance and needs to be addressed at the most senior levels of leadership
- IT Governance can be seen as a structure of relationships and processes to direct and control the VA to achieve its Department-wide goals by adding value, while balancing risk versus return over IT and its processes
- Senior leaders must ensure that IT operational risks are mitigated and the value that is returned by technology investments meet the strategic goals and objectives of the VA
- Day-to-day communication between the Administrations and Staff Offices with various OI&T offices will continue and is encouraged in order to ensure close coordination between the businesses and OI&T

# Appendix IV: VA IT Governance Characteristics

- *Builds relationships and processes* to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over IT and its processes
- *Specifies the distinction between input rights and decision rights* to clarify the differences between advisory entities (such as Steering Committees) and those assigned to manage the process
- *Specifies the accountability* allocated between business requirement owners and the IT organization to encourage desirable behaviors in the use of IT
- *Assures a process for managing and controlling the use of technology* to create value for the organization and assures benefit realization
- *Oversees the rules and regulations* under which an IT organization functions to serve the business lines
- *Ensures that everyone is playing by the same rules* so that the IT environment works for everyone
- *"Doing the right things right"*

# Resources


### Government Accountability Office Reports and Testimony

*ADP SYSTEMS: VA Actions to Improve Management of Information Resources*—GAO/IMTEC-89-24

*Department of Veterans Affairs: Programmatic and Management Challenges Facing the Department*—GAO/T-HEHS-97-97

*Information Technology: VA Has Taken Important Steps to Centralize Control of Its Resources, but Effectiveness Depends on Additional Planned Actions*—GAO-08-449T

*Major Management Challenges and Program Risks: Department of Veterans Affairs*—GAO-01-255

*Veterans Affairs: Continued Focus on Critical Success Factors is Essential to Achieving Information Technology Realignment*—GAO-07-844

*Veterans Affairs: Progress Made in Centralizing Information Technology Management, but Challenges Persist*—GAO-07-1246T

*Veterans Affairs: Sustained Management Commitment and Oversight Are Essential to Completing Information Technology Realignment and Strengthening Information Security*—GAO-07-1264T

### VA Documents

*Department of Veterans Affairs IT Realignment Program*—January 4, 2008 v. 1

*Department of Veterans Affairs Office of Information and Technology: VA IT Governance Plan*—Version 8.1

### Other Reports/Articles

*Board Briefing on IT Governance, 2nd Edition*. The IT Governance Institute, 2003

*Control Objectives for information and Related Technology 4.1*. The IT Governance Institute, 2007

*Demystifying ITIL; Recommendations for the SMB Market*. Numara Software Inc.

*Enterprise Value: Governance of IT Investments, The Val IT Framework 2.0*. The IT Governance Institute, 2008

*Information Technology Infrastructure Library, Version 3*. UK Office of Government Commerce, 2007. http://www.itil-officialsite.com

*IT Governance Implementation Guide: Using CobiT and Val IT, 2nd Edition*. The IT Governance Institute, 2007

*Process Reference Model for IT*. IBM. http://www-01.ibm.com/software/tivoli/governance/servicemanagement/welcome/process_reference.html

"Revamped Veterans' Health Care Now a Model," *The Washington Post*, August 22, 2005

"SOA: The Dream and Reality," *Government Computer News*, March 3, 2008

*Transforming Government: The Revitalization of the Veterans Health Administration,* IBM Center for The Business of Government, June 2000

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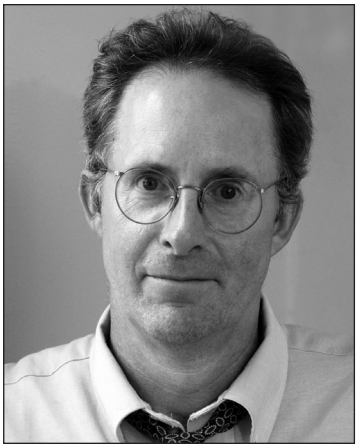

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*The National Security Council: Recommendations for the New President* by D. Robert Worley

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