

Transformation of the Department of Defense's Business Systems



Jacques S. Gansler
Professor and Roger C. Lipitz Chair
Center for Public Policy and Private Enterprise
School of Public Policy
University of Maryland

William Lucyshyn
Director of Research, Senior Research Scholar
Center for Public Policy and Private Enterprise
School of Public Policy
University of Maryland



2009

PRESIDENTIAL TRANSITION SERIES

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William Lucyshyn

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FOREWORD

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, "Transformation of the Department of Defense's Business Systems," by Jacques S. Gansler and William Lucyshyn, School of Public Policy, University of Maryland.

The Department of Defense launched an ambitious effort to transform its vast network of back office mission support systems in 2001. It has since invested large amounts of funding in the effort. What progress has the initiative achieved to date? What has been its impact? Should the new Administration continue the existing effort, terminate it, or revise its approach? This report provides answers and insights into each of these key questions.

The authors of this report have extensive experience in assessing the Department of Defense business modernization efforts. The authors describe the wide-ranging transformation of defense mission support systems, which started with more than 4,000 systems needing coordination. The effort expended \$440 million in its first four years and experienced criticism that little was changing. Congress intervened in 2005, mandating a new governance structure leading to a greater focus on results that matter to the warfighter.

The authors anticipate that the transformation effort will likely take another decade. They offer a series of recommendations to strengthen the initiative's leadership, staffing, governance, and the management of business transformation.

While this report focuses on the experience of the Defense Department, it also offers a broader set of lessons for large scale business transformation efforts in other agencies. We hope that this report will be a useful resource for both policy makers and public managers as they continue transforming government to be more results-oriented, efficient, and productive.



Albert Morales



Robert E. Luby, Jr.

A handwritten signature in cursive script that reads "Albert Morales".

Albert Morales
 Managing Partner
 IBM Center for The Business of Government
 albert.morales@us.ibm.com

A handwritten signature in cursive script that reads "Robert E. Luby, Jr.".

Robert E. Luby, Jr.
 Vice President, Supply Chain Management
 IBM Global Services
 robert.e.luby@us.ibm.com

EXECUTIVE SUMMARY

The Department of Defense (DoD) is one of the largest and most complex organizations in the world. DoD's budget dwarfs that of the world's largest corporation, it employs millions of people that operate worldwide, and the Department carries orders-of-magnitude more inventory items than the largest retail corporations. Yet its business systems are far from world class; they are still based on several thousand, non-integrated, non-interoperable legacy systems. In addition to the inefficiencies and errors generated by this amalgam, it is difficult, if not impossible, for the senior leadership to get the enterprise visibility necessary to make sound management decisions.

In order to meet the 21st century national security requirements, the Department needs business systems that enable it to be flexible, adaptive, and accountable. Recognizing these deficiencies, the Secretary of Defense initiated a transformation initiative in July 2001. This report aims to examine this effort; review the lessons learned; and, finally, make recommendations aimed at maintaining and accelerating the program's recent momentum.

Transformation in the Public Sector

Several trends that both public and private organizations face in the 21st century, create the environment that drives transformation. The first of these is the continuing impacts of the information technology (IT) revolution, and the increased connectivity made possible by the internet—enabling continuous and immediate horizontal communication—while accelerating globalization. Second, and partly as a consequence of the first, is the new and larger role that knowledge plays in the operation of most organizations. Third is the increased criticality of security; information assurance as well as physical security.

The importance of this was, obviously, highlighted by the terrorist attacks of September 11, 2001, which demonstrated the disruptive potential to public and private facilities from new forms of innovative attack. Finally, and perhaps most important, will be the growth in federal entitlement spending, and the downward budgetary pressure this will exert on discretionary programs; most notably, defense. As a result of these trends, organizations won't be able to just improve or reengineer processes; they will need to be transformed; which will require them to do new things in new ways (Rouse 2006).

DoD's Initial Attempt at Defense Business Transformation

The business transformation effort within DoD can be traced back to demands from Congress for better management and accountability of appropriated funds for all federal agencies and organizations. The GAO was also pushing DoD, along with the other federal agencies, to produce clean financial audits. There was an underlying assumption that the kind of accounting practices followed by the private sector (financial accounting) would add value to government activities.

In July 2001, Secretary of Defense Donald Rumsfeld issued a memorandum to the Department of Defense establishing the Financial Management Modernization Program (FMMP) under the sponsorship of the Under Secretary of Defense (Comptroller). Although the program included all business activities, as well as finance and accounting, its early focus was clearly on obtaining an auditable financial statement. Developing a DoD financial management enterprise architecture was identified as a critical first step. Much of the effort of the program over the next several years

was devoted to that end. The FMMP was renamed the Business Management Modernization Program (BMMP) in May 2003.

Through 2005, the BMMP increased DoD-wide systems visibility by identifying the existing inventory and developing an understanding of over 4,000 business systems. Although the program claimed some progress, such as publishing a standard for uniform coding of financial data, BMMP faced significant challenges. The limited results also came at a significant cost—approximately \$440,000,000—leading some to wonder if more progress could have been made.

There were numerous issues with DoD's initial transformation effort. We outline three here. First, there was the lack of appreciation for the breadth and depth of the DoD Business Mission, and the unwieldy scope of the required transformation. Second, the initial overall direction of the business transformation strategy maintained a focus on obtaining a "clean audit," rather than an effort to transform the overall business management processes of the department. Finally, the program focused almost exclusively on building an architecture, rather than delivering business capabilities. Even with that focus, after three years of work there was little significant change in the content of the architecture, or in controlling how the department was spending funds on existing and new business systems (GAO 2004).

Any large-scale transformation, such as the one being attempted by DoD, would be complex and problematic. However, the slow progress of BMMP demonstrated the need for a new approach, if the transformation was to be successful. The new approach was implemented in 2005.

Current Transformation Effort

Several specific provisions were included within the National Defense Authorization Act (NDAA) for FY 2005, that compelled the DoD to sharpen its focus on the development and modernization of its business systems. One key requirement, designed to rein in the uncoordinated and escalating cost of business systems, requires certification approval of any business system modernization in excess of \$1 million, over the system's development and modernization lifecycle, by a Defense Business

Systems Management Committee (DBSMC), chaired by the Deputy Secretary of Defense. The Act also mandated that the DBSMC become the principal agent responsible for DoD Business transformation. This external pressure significantly altered the trajectory of the Defense Business Modernization effort. The DBSMC was chartered to comply with the requirements in the NDAA FY 2005. In addition to the DBSMC, a series of Investment Review Boards were established to assist in the review of all business system modernization investments over \$1M.

DoD also adjusted its approach to business transformation and sharpened its focus on improving its ability to more efficiently complete its mission and articulated the following four strategic objectives:

- Support the Joint Warfighting Capability of the DoD.
- Enable Rapid Access to Information for Strategic Decisions.
- Reduce the Cost of Defense Business Operations.
- Improve Financial Stewardship for the American People.

The DBSMC recognized the need to focus their energy on enterprise-wide imperatives, and introduced the concept they identified as "tiered accountability:" relying on accountability at multiple tiers of the DoD organization. The new approach also recognized the need for horizontal integration across the functional competencies. Business systems capabilities would now be prioritized based upon their alignment across the five Core Business Missions (overseen by the appropriate Under Secretary), with a focus on end-to-end business processes.

The Deputy Secretary of Defense and the DBSMC acknowledged the need to institutionalize the transformation process, and established the Business Transformation Agency. The Business Transformation Agency (BTA) would provide day-to-day management of the business transformation effort at the DoD Enterprise level, ensure that it aligns to the warfighter's needs, and provide direct support to the DBSMC and other transformation governance bodies. Once it was established, the BTA identified the DoD's business enterprise priorities as: personnel visibility, acquisition visibility, common supplier

engagement, materiel visibility, real property accountability, and financial visibility. With these as a focus, the BTA began to develop their products, such as the Business Enterprise Architecture, and the Enterprise Transition Plan.

The BTA also assists with the investment review process on behalf of the Investment Review Boards (IRBs), since the requirement to certify IT investments of over \$1M (over the system's life cycle) created a significant level of effort, and could have easily overwhelmed the IRBs. Finally, the BTA was given the responsibility for the acquisition, development, and deployment of 27 information systems, each of which is focused on delivering an enterprise-wide capability; and all of which must be integrated. To provide oversight for these programs, the BTA designated an office of Defense Business Systems Acquisition Executive (DBSAE).

The BTA was organized just over three years ago; during that time the trajectory of DoD's Business Transformation has been significantly altered. Real progress has been made in completing and revising the business enterprise architecture. The latest version represents a major step forward. First, the building of the family of architectures, which are needed to adequately guide the investments across all of DoD (GAO 2007). Second, the enterprise transition plans have been developed and updated on the planned schedule. Those plans describe the department's approach to business transformation and define the priorities that DoD will use to manage major information systems and transform human resources, materiel supply, property management, weapons system development and financial management programs. Third, a well-managed, timely system has been put in place to efficiently review the IT investments, in order to comply with the NDAA 2005. Finally, programs placed under the BTA umbrella have demonstrated a much-improved management.

DoD's Business transformation landscape continues to change. The FY 2008 National Defense Authorization Act (NDAA) implemented the requirement for a Chief Management Officer (CMO) and Deputy Chief Management Officer (DCMO), and directed that the Director of the Business Transformation Agency report to the DCMO. There were several other initiatives, including the requirement for a

Performance Improvement Office, as well as designating a specific continuous process improvement strategy (Lean Six Sigma), and the designation of three senior governance councils, that will all influence DoD's Business Transformation.

Findings and Recommendations for the New Administration and Congress

Although DoD is over ten years into its journey to transform its business management, little progress was made until Congress passed the FY 05 NDAA. That law provided the impulse for the DoD to refocus the program's priority and restructure the governance, eventually leading to the establishment of the Business Transformation Agency. These actions put in place a structure and a variety of disciplines; and meaningful progress began to be made that included the development of a useful Enterprise Transition Plan, common data rules, data standards, and a structure to manage the development of enterprise systems.

The DoD has a scope and scale that continues to present a significant challenge, and, unfortunately, given the timeline of this transformation initiative, today's snapshot of success may not accurately predict a future that remains almost a decade away. The legacy systems, processes, and supporting organizations developed over decades, have been optimized to serve subordinate organizations' goals and objectives, rather than overall DoD enterprise management. Consequently, efforts to transform these systems and processes inevitably meet with significant inertia and resistance.

Maintaining the progress made, and accelerating the pace will be a critical task for the new administration. The following are our significant findings and recommendations:

Leadership of Business Transformation

FINDING 1: Leadership emphasis has proved critical to energize DoD's Business Transformation.

FINDING 2: Initial DoD business transformation efforts were plagued by a lack of stability in leadership at the program level.

FINDING 3: Within DoD's components, especially in the military services, uniformed leadership is critical, but not always evident.

Recommendation 1: The new Administration must continue to make Defense Business Transformation one of its top Department of Defense priorities.

Recommendation 2: Congress, the new Administration, and especially the Secretary of Defense, Deputy Secretary of Defense, and the Service Secretaries and Chiefs, must continue to ensure that Defense Business Transformation effort is able to recruit, hire, train, and retain the necessary key personnel.

Governance of the Business Transformation

FINDING 4: Evolving from DoD's legacy, stove-piped structure into integrated, enterprise-wide systems naturally meets with individual and organizational resistance.

FINDING 5: DoD's business modernization program governance requires a committed steering body of cross-functional, senior executives.

FINDING 6: There are three federal laws that continue to complicate the Defense Business transformation (i.e. Goldwater-Nichols, Clinger-Cohen, and the NDAA FY 2008).

FINDING 7: Even with the establishment of the Business Transformation Agency, some important organizational issues remain.

FINDING 8: The BTA directly manages only some of the enterprise systems, but its involvement with the many other large business information systems managed by the Services and components is necessary, and can be of great value.

Recommendation 3: Congress and the new Administration must work to resolve specific organizational barriers to BTA's ability to act on transformation initiatives.

Management of the Business Transformation

FINDING 9: DoD employees often lack the necessary experience and skills to spearhead the planning and managing of the implementation of the business' transformation, within the scope envisioned.

FINDING 10: Successful transformation requires adequate and stable resources, especially sufficient funding.

FINDING 11: An architectural approach is necessary to conduct true business transformation, since it focuses on functions and processes, not systems.

FINDING 12: Some DoD business modernization programs have tried to do too much in a single initiative.

Recommendation 4: The Congress, the Secretary of Defense, and the Service Secretaries and Chiefs must continue to ensure that Defense Business Transformation effort and the Business Transformation Agency have adequate and stable resources.

Recommendation 5: The new Administration must work to strengthen the role of the BTA to lead the management of DoD's Business Transformation.

Introduction

The 21st century brought into sharp focus the significantly different and challenging national security environment that the United States would face in the foreseeable future. In response, DoD has embarked on a path to transform the nation's military forces, seeking creative, innovative strategies and solutions for the new threat environment. Special attention has been given to reaping the full advantage of modern information technology. The Secretary of Defense recognized that DoD's business systems and processes were well behind the private sector in their implementation of integrated enterprise business management. Along with the transformation of DoD forces, DoD's business systems and processes also needed urgently to be transformed, again, to take full advantage of the performance and cost benefits of modern IT.

As a result of rapid IT advances, the private sector made great strides in implementing integrated enterprise management systems over the past two decades. DoD, however, presents a greater challenge than most, if not all, private firms. DoD is the nation's largest employer, with more than 1.4 million active duty, 826,000 National Guard and Reserve, and 720,000 civilian personnel. With a budget allocation of \$658.6 billion during FY 2007, DoD is also the single largest government agency. It has \$1.4 trillion in assets and \$2 trillion in liabilities (DoD 2007).

To manage this very large and complex organization, DoD developed and maintained 4,150 different business processes and systems (based on DoD BMMP data provided to GAO in 2005 (GAO 2005c)). This complexity, coupled with a lack of interoperability and integration, often resulted in inconsistent and unreliable management

information and thus yielded suboptimal performance. DoD, however, did not have an enterprise architecture for its financial and financial-related business operations, or for any of its other operations (for example, personnel and logistics), and lacked the management structure, processes, and controls to effectively develop and implement one.

To begin addressing these deficiencies, the Secretary of Defense designated improving "financial management" operations (which included not only finance and accounting, but also the broader business areas such as logistics, acquisition, and personnel management) as one of DoD's top 10 priorities. The Financial Management Modernization Program (FMMP) was established in July 2001 with this goal in mind. Its initial objective was "to restructure and consolidate over 2,000 DoD business systems and processes" (Tibbits 2004).

The program was renamed the Business Management Modernization Program (BMMP) in May 2003. Its objective was expanded to address broader business issues, such as the development and implementation of an enterprise architecture (for all 4,150 business systems), including business process reform. The initial results of this program led to the development of organization-wide financial data standards and a BEA. These first essential steps took more than four years to complete and came at a total cost of approximately \$440 million. During this initial period, the program focused primarily on developing the capacity "to achieve a clean financial audit." Consequently, other enterprise tasks, such as reengineering business processes, received less emphasis. This reflected an initial lack of consensus on program priorities and resulted in a less than enthusiastic buy-in from key stakeholders.

The Secretary of Defense initially designated both the Under Secretary of Defense (Comptroller) and the Assistant Secretary of Defense (Networks and Information Integration) as co-managers for all BMMP efforts. Domain owners (principal staff assistants) were assigned leadership roles within their functional areas. (Domain areas and corresponding domain owners are listed later in this report.) A Business Modernization and Systems Integration (BMSI) Office was set up to serve as the program management office for BMMP (Tibbits 2004). However, this original transformation framework was directed at optimizing “stove-piped” functions such as IT, human resources, and budgeting. Because business processes are horizontal in nature, and any efficiency creating change needs to reflect that reality, this initial approach did not make much progress toward achieving the envisioned transformation. In addition, the senior leaders of the military services (who play a key role in establishing priorities and resources) were not brought into the process.

This report examines DoD’s business transformation effort. It first summarizes the recent trends in public sector transformation. It then reviews lessons learned from DoD’s initial transformation efforts and moves on to examine the current transformation initiative, beginning with the major revisions made by the Secretary of Defense in 2005 and the establishment of DoD’s BTA. In the subsequent section, it assesses DoD’s current program and identifies lessons learned, and it concludes with findings and recommendations.

Transformation in the Public Sector

There are several trends that both public and private organizations face that create the environment that drives transformation. The first of these trends is the continuing impacts of the IT revolution. IT has allowed organizations to become flatter and less hierarchical, easing communication and data distribution. IT has helped organizations streamline administrative processes, supply chains, and financial processes, improving management and reducing costs. World-class companies, such as Wal-Mart, Cisco, and FedEx, have integrated IT into every phase of their operations, with dramatic improvements in efficiency and performance. The private sector has also coupled IT with the connectivity made possible by the Internet, enabling continuous and immediate horizontal communication and generating new Internet-based business models. Firms, such as Google and Amazon.com, have achieved large stock market valuations with their entirely web-based businesses. The IT revolution has also accelerated globalization. Today the Internet and high-speed data networks allow real-time integration of information among distant agents. As a result, knowledge work, such as performing financial analysis, reading an x-ray, designing microcircuits, and developing software, can be performed anywhere. One consequence has been the more frequent use of outsourcing and offshoring strategies, as firms strive to become more competitive. The public sector significantly lags in its ability to fully leverage IT to the degree demonstrated by the private sector.

Second, and partly as a consequence of the first trend, is the new and larger role that knowledge, in organizational performance and decision making, plays in the operation of most organizations. Knowledge assets depend greatly on the nature of the business. They can be the knowledge of markets,

products, technologies, supply chain processes, and patents that a business owns. These knowledge assets enable business processes to generate profits, add value, or achieve business objectives. Today information and specialized expertise are the most valued assets that an organization can possess.

The third major trend is the increased criticality of security, with an emphasis on information assurance. The events of 9/11 have highlighted the vulnerability of public and private facilities to the disruptive potential of terrorist attacks. With increased dependence on information technologies, the importance of knowledge assets has created many new vulnerabilities, especially in the context of new global supply and value chains. However, when wisely implemented, knowledge assets are also a source of resilience for many organizations, making security an extremely critical issue. Government agencies and businesses are reported as spending billions of dollars on ensuring that their information is secure. In 2006, for example, spending for security in U.S. enterprises (both public and private) was 7.3 percent of IT budgets on average and totaled \$61 billion (GRID Today 2006).

Fourth, and perhaps most important, is the increased growth in federal entitlement spending. This growth in mandatory spending programs, such as Social Security, Medicare, and Medicaid, will limit the ability of the United States to invest additional funds in discretionary programs, most notably defense. By 2017, the annual growth rate of Social Security spending is expected to rise from 4.5 percent to 6.5 percent, while Medicare and Medicaid are projected to grow in the range of 7 percent to 8 percent annually. The spending in these programs is tied directly to the rising costs of living and health care

in the United States and to shifting demographics. Although defense spending has been increasing since the Cold War drawdown (especially since 9/11), when considered as a percentage of gross domestic product (GDP), it is nowhere near historic wartime record levels. Additionally, as a result of increases in mandatory expenditures, the United States has a greater portion of its budget devoted to those items than in the past. Between 1966 and 2006, spending in mandatory programs doubled, while discretionary spending was cut in half; thus, mandatory expenditures have rapidly outpaced defense spending as a percentage of GDP. As mandatory costs continue to rise, greater portions of the budget must be allocated to cover these expenditures. As a result, discretionary spending priorities, such as defense, must be decreased to account for the increases in mandatory spending (unless there is a large growth in revenue, from a large expansion in the economy, unlikely with the current financial crisis).

These trends are among those that have shaped the environment in which DoD must craft and carry out a management transformation strategy. Because of these influences, management transformation is not just a matter of business process improvement or reengineering, but requires a holistic approach to changes in a dynamic environment, often prompting organizations to do new things in new ways (Rouse 2006). Enterprise transformation is an integrated change process that seeks to improve organizational performance, and it must occur across the entire organization. This process affects all facets of an organization including its leadership, strategy, finance, and organizational structure, processes, and systems. In the end, transformation aims to align people, processes, and technology more closely with the organization's strategy and vision. It must be a high management priority in order to be a success.

Objectives of Public Agency Transformation

Enterprise transformation is often driven by an organization's failures, whether experienced or anticipated, related to meeting current and future needs. Transforming the way an enterprise operates is thus expected to favorably alter its performance and correct deficiencies. For example, health-care service providers are increasingly automating their information systems, including creating electronic patient

records. This automation should significantly reduce the administrative burden within the health-care distribution process, but it also involves doing a different kind of work. Transforming the enterprise is thus not only about improving how work is performed currently, but also about performing new, different tasks. "Transformational change is strategic and disruptive—aiming for significant, quantum improvements in effectiveness and significant cost savings. Incremental change is more evolutionary, focused on tactical moves where more modest management improvements and efficiency gains are the goal" (Breul 2005).

It is important, however, to identify the key transformation objectives for public agencies. The former Comptroller General, David Walker, believes that transformation is a new model for government organizations and has identified top-level objectives for federal agencies. According to Walker (Walker 2007), government organizations should transform so that they can:

- Become less hierarchical, process-oriented, stove-piped, and inwardly focused
- Become more partnership-based, results-oriented, integrated, and externally focused
- Achieve a better balance between results, customer, and employee focus
- Work better with other governmental organizations, nongovernmental organizations, and the private sector, both domestically and internationally, to achieve results
- Focus on maximizing value, managing risk, and enhancing responsiveness within current and expected resource levels

Transforming public agencies often changes the purpose and functions of an enterprise or in some cases requires the creation of a new organization (the establishment of the Department of Homeland Security demonstrates the challenges that this presents).

Transformation of a government agency also requires the long-term, dedicated commitment of critical resources in the form of time and money as well as top people. However, this commitment is often inconsistent, since the benefits are long-term and hard to measure and carry risks that are short-term

and obvious. Transforming the Internal Revenue Service's (IRS's) organizational structure and mission and introducing new technology involved a lengthy and high-risk process, which was plagued by erratic funding. However, the overall benefits have been enormous. The new, consumer-friendly orientation of the IRS is evident by a visit to its website (www.irs.gov). These extensive changes, however, often require making controversial decisions that can temporarily reduce morale and agency effectiveness. At the IRS, the organizational changes affected every one of the senior executives and virtually every facet of the organization. The former Administrator, Charles Rossotti, described it this way:

"Structure is an important determinant of how an organization works, because people, money, and authority necessarily are managed through it. Structure determines who writes personnel evaluations, who awards contracts, and who decides which cases or projects to undertake; all important attributes of power. How this power is distributed greatly influences what an organization accomplishes." (Rossotti 2005)

So how is transformation to be managed? Many factors impact the trajectory of a transformation effort. These include an ever-changing external environment, changes in organizational mission, and changes in technology. But most important, transformation will be driven by leadership climate and commitment. To be truly successful, transformation must become a part of the organizational ethos, embedded in the daily operation of the enterprise; it should become a process without a foreseeable end.

DoD's Initial Attempt at Defense Business Transformation

The DoD manages twice the budget of the world's largest corporation, employs more people than the population of a third of the world's countries, provides medical care for as many patients as the largest health management organization, and carries five hundred times the number of inventory items as the world's largest commercial retail operation. (DoD 2006)

Background

As noted above, the Department of Defense is one of the largest organizations in the world. Its worldwide operations span a broad range of organizations, agencies, activities, and commands. As these organizations developed their information systems, they evolved so that processes, objectives, structures, and functions varied widely across the services and defense agencies. These non-interoperable legacy systems frequently resulted in duplications of effort, errors and inconsistencies, and, of course, a great deal of inefficiency. This section traces the antecedents of the reform process now underway and highlights the lessons learned from the initial transformation efforts that preceded the formation of DoD's Business Transformation Agency in 2005.

The business transformation effort within DoD can be traced back to demands from Congress for better management and accountability of funds appropriated for all federal agencies and organizations. With this aim, Congress passed the Chief Financial Officers Act (CFO Act) in 1990. A principal goal was to strengthen accountability and sound management by requiring federal agencies to prepare financial

statements and by then having them independently audited. Congress passed the Government Management Reform Act (GMRA) in 1994, permitting the consolidation and streamlining of the many reports that agencies were required to submit to Congress. Later, to correct the lack of standardized, integrated financial systems, Congress passed the Federal Financial Management Improvement Act (FFMIA) in 1996. FFMIA requires that the 24 agencies covered by the 1990 CFO Act implement and maintain financial management systems that comply with federal guidelines, applicable accounting standards, and the U.S. Government Standard General Ledger. During this same timeframe, the Clinger-Cohen Act of 1996 was passed as a response to the large amount of funds that individual agencies were devoting unsuccessfully to improve their IT systems. Clinger-Cohen placed the responsibility of IT management squarely with each respective agency and required federal agencies to appoint a chief information officer (CIO). With the enactment of these laws, major federal agencies had to have both a CFO and a CIO, creating new levels of accountability.

DoD was facing a range of financial management and related business process challenges that were pervasive across all its business operations. President Bush identified improved financial management as one of the five keys to enhancing the performance of the government in the President's Management Agenda (PMA). The PMA also highlighted an unqualified financial audit as necessary to support operating, budgetary, and policy decisions, reinforcing the requirement of the CFO Act of 1990 (Conyers 1990). The GAO was also pushing DoD, along with the other federal agencies, to produce clean audits. There was an underlying assumption that the kind of accounting practices followed by

the private sector (financial accounting) would add value to government activities. Whether this assumption is true has yet to be determined (Hanks 2005). However, because of fundamentally flawed business systems and persistent weaknesses in internal controls and processes, not one of the military services was able to pass the test of an independent financial audit (GAO 2005a).

Based on a request from the Secretary of Defense, the Institute for Defense Analysis (IDA) conducted a study to recommend a strategy of improvement for the financial management systems within DoD. The IDA's report, *Transforming DoD Financial Management Systems: A Strategy for Change*, was issued in April 2001 and made the following assessment:

“Current DoD financial, accounting and feeder/operational management systems do not provide information that could be characterized as relevant, reliable and timely. Nor is the “support of management decision-making,” generally an objective of financially-based information, currently developed or planned for future development. Front-end investment and much work need to be done to accomplish a necessary transformation. Many positive projects are currently underway in DoD; however, they are narrowly focused, do not have sufficient senior leadership and urgency behind them, and are not part of an integrated DoD-wide strategy.”

Transformation Begins

It is not, in the end, about business practices, nor is the goal to improve figures on the bottom line. It's really about the security of the United States of America. And let there be no mistake, it is a matter of life and death. Our job is defending America, and if we cannot change the way we do business, then we cannot do our job well; and we must.

— U.S. Secretary of Defense Donald H. Rumsfeld, September 10, 2001

In July 2001, Secretary of Defense Donald Rumsfeld issued a memorandum to DoD establishing the

Financial Management Modernization Program (FMMP). He wrote, “One of my highest priorities is to have reliable, accurate and timely financial management information upon which to make the most effective business decisions. Because we do not always have that information, we must change the Department's business operations and systems” (Dorobek 2001). The FMMP was established under the sponsorship of the Under Secretary of Defense (Comptroller). Although the program addressed all business activities with emphasis on finance and accounting, its early focus was on obtaining an auditable financial statement.

The scope and potential impact of DoD's BMMP were difficult to comprehend (see Table 1). As a complicating factor, DoD's organizational structure had naturally evolved to form “silos,” such as the individual military services and DoD agencies, and these often functioned without interacting with each other. Similarly, there were also “functional silos,” such as human resources and finance. In this environment, the resultant business systems were developed with significant differences in content and format (DoD reported having 2,274 different business systems in FY 2003) and were generally non-integrated, non-interoperable, redundant, and cost ineffective. Moreover, it was difficult to compare business needs, systems, and technology capabilities with these parochial solutions.

Developing a DoD financial management enterprise architecture was identified as a critical first step. Much of the effort of the program over the next several years was devoted to this goal.

An enterprise architecture entails an attempt to develop a clear and comprehensive description of an organization (such as a federal department or agency) or a functional or mission area that cuts across more than one organization (such as logistics, human resources, and financial management). The “Holy Grail” of an enterprise architecture is to create a map of IT assets and business processes as well as a set of governance principles that drive a constant discussion about business strategy and how it can be expressed through IT. The description of the enterprise architecture consists of snapshots of both the enterprise's current, or “as-is,” operational and technological environment and its target, or “to-be,” environment. A capital investment roadmap

Table 1: Scope and Impacts of the BMMP Effort

5.5 Million Employees, Service Members, and Beneficiaries
Paychecks and W-2s
Personnel records and actions
Medical and dental records, appointments, admissions, and discharges
Training records, plans, and scheduling classes
Travel requests, tickets, and vouchers
\$400+ Billion+ / Year
267 appropriations
124 million accounting transactions
11.2 million invoices
\$700+ Billion in Assets
Buildings at 6,700 Locations in 146 Countries
\$620 billion in real property assets <ul style="list-style-type: none"> • 2.3 million square feet of buildings • 3.2 million acres
1,312 Major Weapons Systems
4.6 million parts and supplies managed
150+ Federal Source Laws and Regulations (Ex. Title 5, 10, 32, 3)
4,200+ specific requirements from source laws
2,274 Systems ... and Counting
Different standards and interpretations of rules and requirements

Source: Adapted from Briefing at Defense Acquisition University, Dr. Paul Tibbitts, Director, BMMP, May 12, 2004.

for transitioning from the current environment to the target environment can also be included. These snapshots further consist of views, which can be one or more of conceptual or logical representations of the enterprise (Dorobek 2001). Developing an enterprise architecture became a major objective of the transformation effort.

The FMMP was renamed the Business Management Modernization Program (BMMP) in May 2003 and placed under the joint sponsorship of the Under Secretary of Defense (Comptroller) and the Assistant Secretary of Defense (Networks and Information Integration). This was done to reflect the more comprehensive nature of the transformation underway at DoD, linking financial management reform to the broader concept of business

process reform. In September 2003, the Secretary of Defense reconfirmed this commitment by designating DoD business transformation as one of his top 10 priorities. The program's original strategy was to identify the seven business process domain areas and assign a domain owner for each process. These domains areas and domain owners are the following:

- Acquisition/Procurement, Under Secretary of Defense (Acquisition, Technology, and Logistics (AT&L))
- Finance, Accounting Operations, and Financial Management, Under Secretary of Defense (Comptroller/Chief Financial Officer)
- Human Resource Management, Under Secretary of Defense (Personnel and Readiness)
- Logistics, Under Secretary of Defense (AT&L)
- Strategic Planning and Budgeting, Under Secretary of Defense (Comptroller/Chief Financial Officer)
- Installations and Environment, Under Secretary of Defense (AT&L)
- Technical Infrastructure, Assistant Secretary of Defense (Networks and Information Integration/Chief Information Officer)

The work then progressed, developing the enterprise architecture vertically within the domains.

Through 2005, the BMMP increased DoD-wide systems visibility by identifying the existing inventory and developing an understanding of the then more than 4,000 business systems. The program had also claimed the following specific achievements:

- Created data standards within DoD by building and publishing a Standard Financial Information Structure (SFIS) with uniform coding of financial data for use in all DoD information systems
- Analyzed requirements from legislation, regulation, and policy, and identified those pertinent to financial compliance
- Developed the BEA, which will provide a blueprint for DoD's future business processes, data, and technology and which should form the foundation for the transformation effort

- Created an awareness of and improved control over IT spending by developing a systems assessment process for examining both new and legacy systems to see whether they comply with the developed BEA and are worthy of subsequent investment
- Encouraged cross-organizational cooperation by building working relationships between and among functional domains and military services to ensure that cross-process requirements were incorporated into systems development

Despite these achievements, BMMP has faced significant challenges. These results came at a significant total cost—approximately \$440 million—leading some to wonder whether more progress could have been made. The initial single-minded focus on developing an enterprise architecture was certainly too comprehensive and too technical. The goal of attaining a clean audit—an early program priority and still an objective—existed in parallel with the need to reengineer business processes and deliver better support to warfighters. The result was not enough buy-in from all stakeholders and a lack of consensus on program priorities that limited progress. The final major challenge for the BMMP was a lack of continuity in

program leadership. The program had six different managers in four years (see Figure 1); this made the task of maintaining a consistent program vision and strategy difficult, if not impossible.

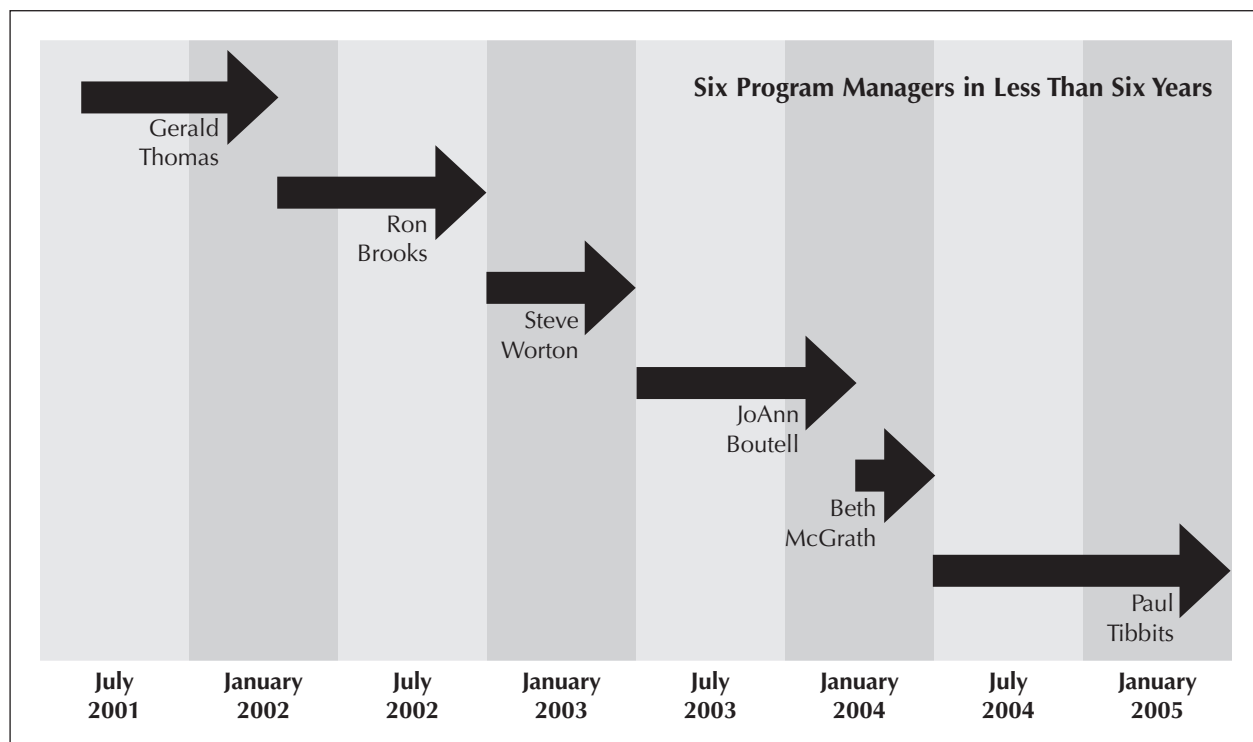
Assessment of Initial Transformation Effort

All too many consultants, when asked, "What is 2 and 2?", respond, "What do you have in mind?"

— Norman Ralph Augustine

There were numerous issues with DoD's initial transformation effort. First was the lack of appreciation for the breadth and depth of the DoD Business Mission and for the unwieldy scope of the required transformation. It was, in fact, as complex and costly as a major acquisition and should have been treated accordingly. The DoD Comptroller's staff did not have the experience or the talent to organize and lead an effort of this magnitude. This issue was exacerbated further by frequent program leadership changes. Second, the initial overall direction of the business

Figure 1: BMMP Leadership Challenges



Source: Interview with Dr. Paul Tibbits, April 2005.

transformation strategy focused on obtaining a “clean audit” rather than on transforming the overall business management processes of DoD. This issue led to disengagement by other functional communities and stakeholders. Third, the program focused almost exclusively on building an architecture rather than on delivering business capabilities. This task proved far more difficult than anticipated and absorbed virtually all the program resources. As work progressed, the number of DoD business systems identified during the period 2003–2005 increased, as shown in Table 2. After three years of work, GAO assessed that there was little significant change in the content of the architecture or in controlling how DoD was spending on existing and new systems (GAO 2004). Moreover, DoD was continuing to spend billions of dollars (\$19 billion in FY 2004) to operate, maintain, and modernize these systems (FCW Staff 2004).

Any large-scale transformation, such as the one attempted by DoD, would be complex and problematic. However, the slow progress of BMMP demonstrated the need for a new approach if the transformation were to be successful. The new approach was implemented in 2005.

Table 2: Increase in the Inventory of DoD Business Systems, 2003–2005

Domain	Apr 2003	Feb 2005	Difference
Acquisition	143	179	36
Financial Management	752	600	(152)
Human Resources	665	713	48
Installations and Environment	128	473	345
Logistics	565	2,005	1,440
Enterprise Information Environment	21	40	19
No Domain*	0	140	140
Total	2,274	4,150	1,876

Note: Based on an analysis of BMMP reported inventory of business systems as of April 2003 and February 2005.

* A specific domain was not assigned to these systems.

Source: GAO 2005c.

Current Transformation Effort: A New Approach

National Defense Authorization Act for FY 2005: Catalyst for a New Direction

Congress was becoming increasingly frustrated with the perceived lack of progress in DoD's business modernization effort. Several specific provisions were included within the National Defense Authorization Act for FY 2005 that compelled the DoD to sharpen its focus on the development and modernization of its business systems. One key requirement, designed to rein in the uncoordinated and escalating cost of business systems, requires certification approval of any business system modernization in excess of \$1 million over the system's development and modernization lifecycle. This certification is given by a Defense Business Systems Management Committee (DBSMC), chaired by the Deputy Secretary of Defense.

The Act also mandated that the DBSMC become the principal agent responsible for DoD Business Transformation. The DBSMC is responsible for overseeing transformation in the Business Mission Area (BMA) and helping to ensure the warfighter's needs and priorities are met. DoD was also required to complete its business enterprise architecture, and a transition plan for implementing it, by September 30, 2005. This external pressure significantly altered the trajectory of the Defense Business Modernization effort.

Based on this guidance, the Deputy Secretary of Defense promulgated a memorandum, dated Feb 7, 2005, formally establishing the DBSMC within the DoD. It also identified its mission to provide renewed executive leadership, in both direction and execution, to the DoD's business transformation efforts.

The DBSMC, as originally structured, (see Figure 2 on page 20) was chartered to comply with the requirements in the NDAA FY 2005. As a consequence, the DBSMC would now set the overall business transformation priorities and recommend the policies and procedures required to attain cross-department interoperability of DoD business systems and processes, and would, appropriately, be chaired by the Deputy Secretary of Defense. To accomplish its objective, the DBSMC also provides the final review and approval of the business enterprise architecture and the business systems investment decisions, and monitors the progress of the transformation. Finally, the Under Secretary (AT&L) was designated the Vice Chair of the DBSMC (changed with the NDAA FY 2009), and the functions of the BMMP office were moved into his organization.

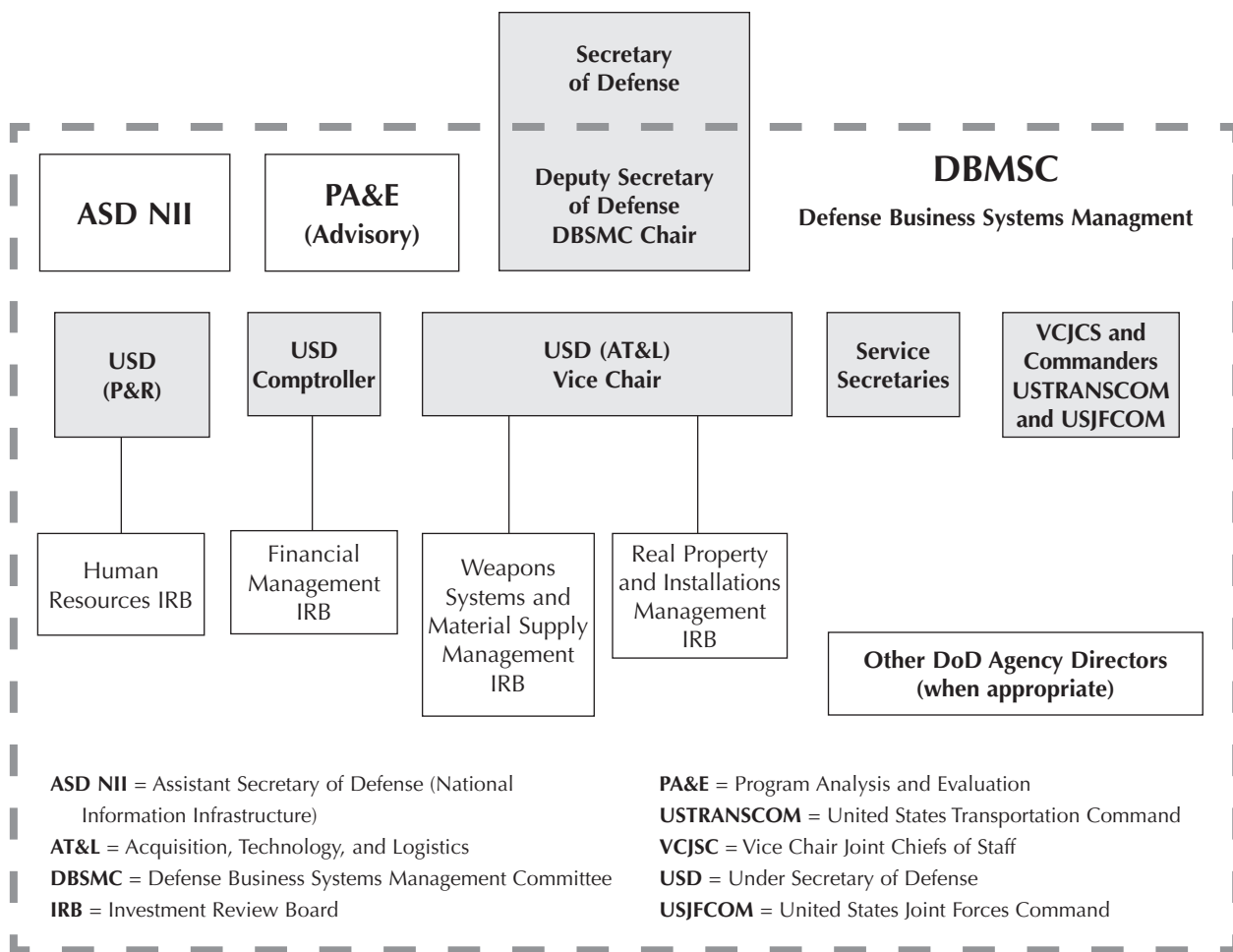
In addition to the DBSMC, the NDAA FY 2005 required the establishment of a series Investment Review Boards (IRBs) to assist in the review of all business system modernization investments over \$1M. These boards assess investments relative to their impact on the end-to-end transformation within their designated areas of responsibility. They then make investment recommendations to the appropriate investment Certification Authority, which are eventually approved or disapproved by the DBSMC.

DoD Sets Strategic Objectives for Business Transformation

DoD also adjusted its approach to business transformation and sharpened its focus on improving its ability to more efficiently complete its mission and articulated the following four strategic objectives:

- **Support the Joint Warfighting Capability of the DoD.** The business infrastructure of the future

Figure 2: Governance Structure of the Defense Business Systems Management Committee (DBMSC)



Source: Adapted from The DoD Enterprise Transition Plan, September 28, 2007.

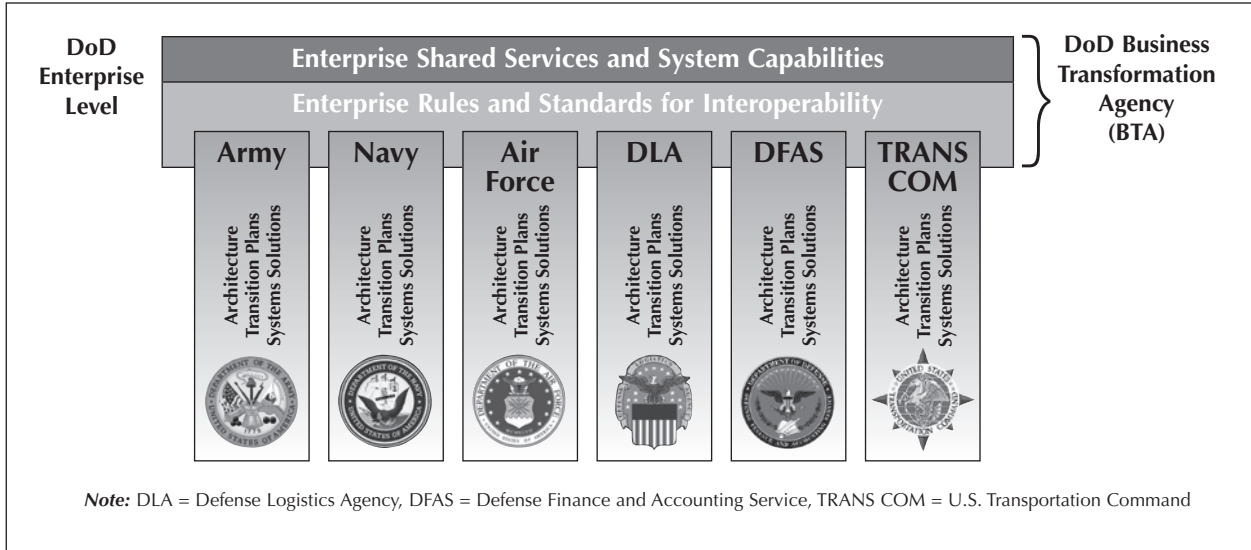
must be able to provide mission-driven, adaptive, and agile business services and information.

- **Enable Rapid Access to Information for Strategic Decisions.** Improved business operations will help produce the information that DoD leaders need to make sound and timely decisions.
- **Reduce the Cost of Defense Business Operations.** DoD faces many demands from operational requirements and modernization need, and will continue to face budgetary pressure; as a result, business operations must be as efficient as possible.
- **Improve Financial Stewardship for the American People.** Accurate, timely and reliable financial statements can help manage performance, and demonstrate compliance to federal accountability laws and regulations, as well as accountability to the American people.

Tiered Accountability Approach Put in Place

The DBSMC recognized the need to focus their energy on enterprise-wide imperatives. They introduced the concept they identified as “tiered accountability:” relying on accountability at multiple tiers of the DoD organization. This concept requires each tier in the DoD organizational hierarchy to focus on its requirements (those relevant for that specific tier) and leave the responsibility and accountability for other elements of business management and execution to other tiers in the organization (see Figure 3) (U.S. Department of Defense 2007). At the Enterprise level, DoD provides program management discipline that delivers a layer of corporate services across the Department. Component-level business transformation then becomes the responsibility of the Component Headquarters.

Figure 3: DBSMC Emphasis on Tiered Accountability as Its Approach to Implementation



Source: Adapted from The DoD Enterprise Transition Plan, September 30, 2008.

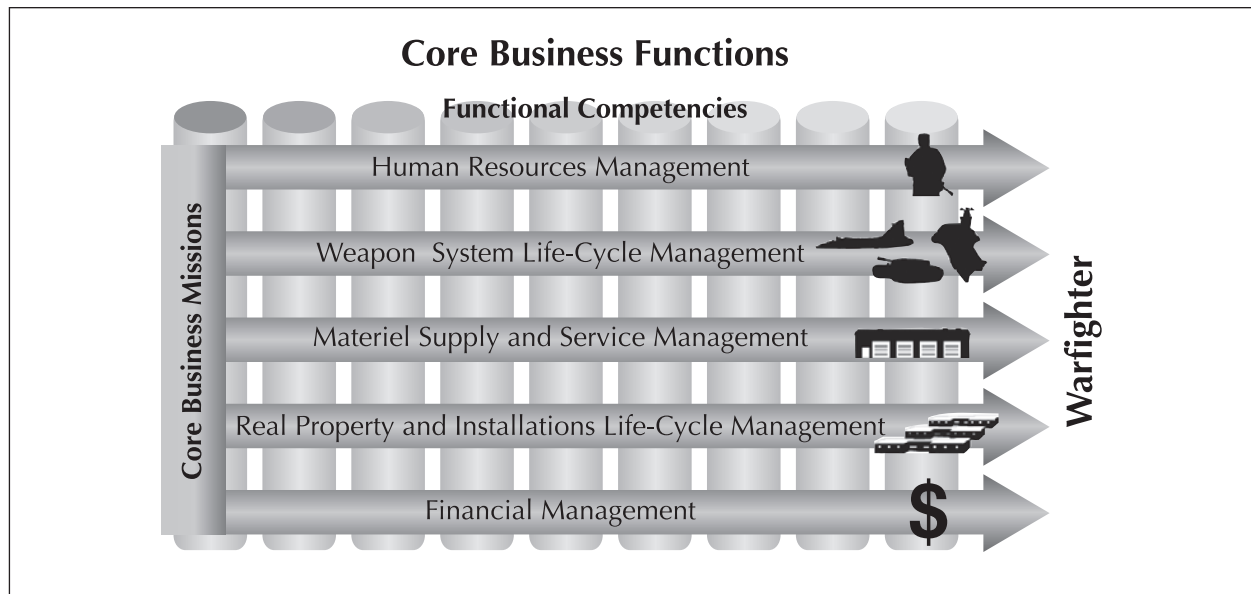
Use of End-to-End Business Flows

The new approach also recognized the need for horizontal integration across the functional competencies. Business systems capabilities would now be prioritized based upon their alignment across the five Core Business Missions, with a focus on end-to-end business processes, which emphasized activities to support the warfighter (see Figure 4). These Business Missions are overseen by the appropriate Under Secretary.

Developing end-to-end business processes is a central part of enterprise resource planning. DoD has identified 15 end-to-end business processes that it is planning to incorporate into the Business Enterprise Architecture (BEA), as shown in Table 3 on page 22.

Six of these business processes have already been incorporated into the BEA including: procure to pay, acquire to retire, budget to report, hire to retire, order to cash, and plan to stock.

Figure 4: New End-to-End Business Processes Framework



Source: Adapted from The DoD Enterprise Transition Plan, September 30, 2008.

Table 3: End-to-End Business Processes Incorporated Into the Business Enterprise Architecture for DOD's Business Modernization

Budget-to-Report*
Plan-to-Stock*
Services-to-Satisfaction
Services Request-to-Resolution
Deployment-to-Retrograde
Hire-to-Retire*
Procure-to-Pay*
Cost Management
Proposal-to-Reward
Concept-to-Product
Order-to-Cash*
Acquire-to-Retire*
Prospect-to-Order
Market-to-Prospect
Environmental Liability

* These six end-to-end business flows have been incorporated into the Business Enterprise Architecture (BEA).

"Procure to pay" is one of the more important end-to-end processes the Department is developing and it encompasses all business functions necessary to obtain goods and services. In the case of procure to pay, as depicted in Figure 5, the process begins with requisition and ends with disbursements and addresses three of DoD's business enterprise priorities. The current business process for procure to pay is very complicated, spans several functional organizations, and often breaks down as execution goes from one functional stovepipe to the next. Attempts to streamline this process have had only limited success in part due to the lack of Enterprise standards, entrenched business rules, and system integration requirements perpetuated by functionally aligned business owners.

Creation of Business Transformation Agency

The Deputy Secretary of Defense and the DBSMC recognized the need to institutionalize the transformation process. They chose the strategic organizational alternative of creating the Business Transformation Agency. The agency, staffed with

personnel with the required skills to drive the change at the enterprise level, would provide a single point of accountability for specific elements of the overall effort. The mission of this new Agency is to transform business operations to achieve improved warfighter support, while enabling financial accountability across the DoD. The BTA will be discussed in greater detail below.

Business Transformation Agency: Objective, Goals and Structure

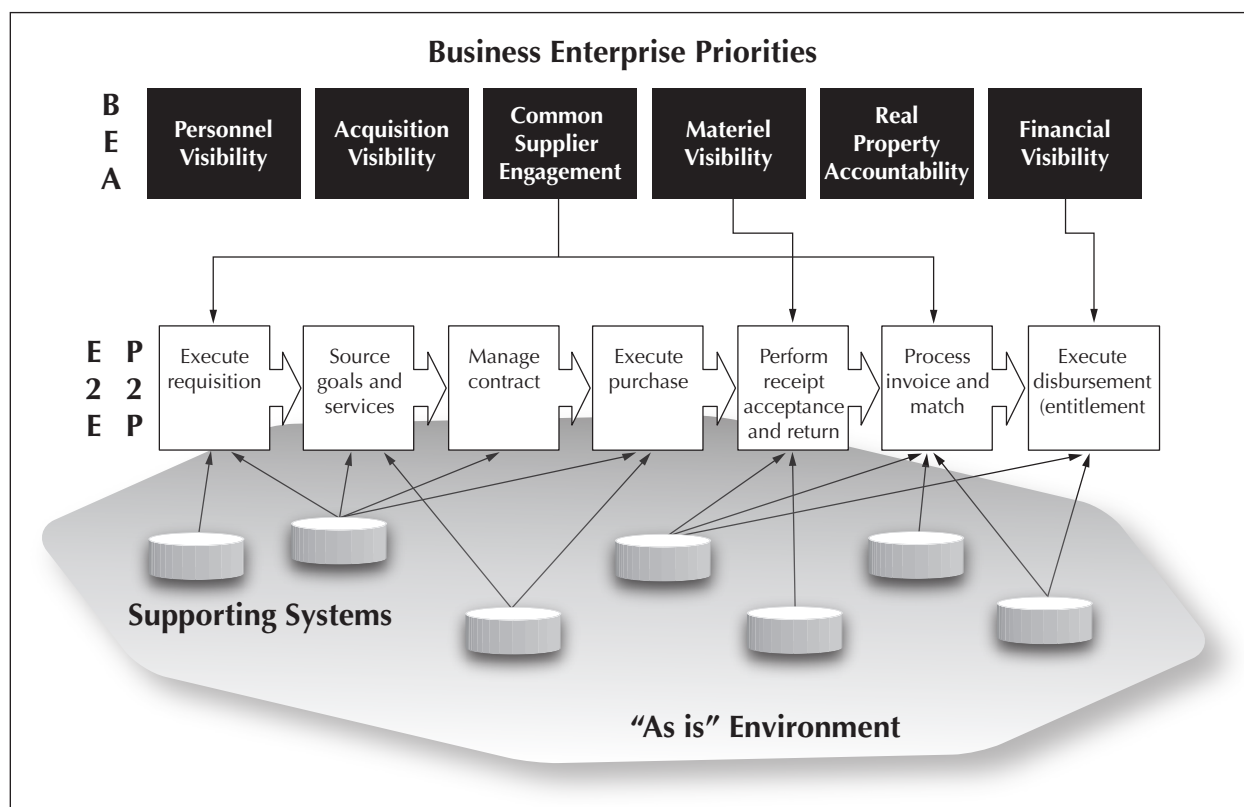
The Business Transformation Agency (BTA) was established to provide day-to-day management of the business transformation effort at the DoD Enterprise level, and ensure that it aligns to the warfighter's needs. It also provides direct support to the DBSMC and other transformation governance bodies. The BTA was created by shifting existing resources into a single unified, focused organization. The aim of this organizational restructuring was to consolidate, coordinate, and integrate DoD's business enterprise-level transformation activities, while providing consistency across the business transformation effort (U.S. Department of Defense 2007).

DoD invests about \$2 billion a year in its business systems maintenance and modernization efforts. The lion's share is spent directly by DoD components, such as the individual military services (about \$1.6 billion in FY 2008).

The BTA's annual budget is approximately \$350 million a year and it has a staff of about 350 (both government and contractors). Approximately half of this is spent to directly deliver DoD-wide services via 27 programs, such as the Defense Integrated Military Human Resource System (DIHMRS). The balance is used to develop and maintain the enterprise-wide Business Enterprise Architecture, participate in the IT investment reviews, and ensure enterprise-wide priorities are identified and kept on schedule. Approximately \$20M is set aside as seed money for new pilot projects, and for accelerating or finishing up a program that may offer significant payback (since components frequently have people and ideas, but not enough budget money to act quickly). (Fisher 2006).

Since its creation in 2007, BTA has undertaken three major initiatives. First, BTA quickly identified

Figure 5: Example of an End-to-End (E2E) Business Process: Pay-to-Procure (P2P)



Source: Adapted from The DoD Enterprise Transition Plan, September 30, 2008.

the DoD's enterprise-wide business priorities and then used these priorities to focus on specific products. These priorities were: personnel visibility, acquisition visibility, common supplier engagement, materiel visibility, real property accountability, and financial visibility.

With these as a focus, the BTA began to develop their products, such as the Business Enterprise Architecture, and Enterprise transition. Their plan was to update these semiannually; this would not only show progress, but also provide for an improved capability every six months. The Enterprise Transition Plan (ETP) was developed to be an integrated roadmap that was aligned with the Business Enterprise Architecture (BEA). It laid out a roadmap for achieving the DoD's business transformation objectives. As developed, the ETP contained time-phased milestones, performance metrics, and a statement of resource needs for new and existing systems that are part of the BEA (for the Component architectures as well). In addition, the plan also included a termination schedule for legacy systems, those that will be replaced by new systems. The ETP has been updated

every six months, and the latest version was released in September 2007.

The initial BEA 3.0, released in September 2005 (as required by the NDAA FY2005), is considered the initial baseline architecture. It was followed by the BEA 4.0 in September 2006 and the latest version, BEA 5.0, was released in March 2008. Now that the BEA has reached an acceptable level of maturity, it will be updated as required.

In the second initiative, the BTA assists with the investment review process on behalf of the Investment Review Boards (IRBs). The requirement to certify IT investments in excess of \$1M over the system's life cycle created a significant workload that could have easily overwhelmed the IRBs. The BTA assisted in developing the review process, and is now an active participant. This aligns with the concept of "tiered accountability." Business system investments below the \$1 million threshold are identified as Tier 4 and need no certification. For investments between \$1M and \$10M, identified as Tier 3, 95 percent of the accountability generally falls on

the component. Once the \$10M threshold is breached, the investments are identified as Tier 2, and investments over \$32M are identified as Tier 1. The Certification and Annual Review processes differ little between Tiers 1 and 2. Given the size of their investment, Tier 1 and 2 systems generally must provide additional system information as requested by the IRB (Tier 1 systems providing significantly greater detail). Additionally, these programs are more likely to be required to make special presentations to the IRB regarding their business requirements. This process enables the IRB's to focus their attention on the most significant issues (Fisher 2006).

And third, the BTA is directly responsible for the acquisition, development and deployment of 27 information systems, each of which is focused on delivering an enterprise-wide capability. Previously these programs were managed by the various components of OSD, and there was no single point of accountability. To provide oversight for these programs, the BTA designated an office of Defense Business Systems Acquisition Executive (DBSAE). The DBSAE serves as the Milestone Decision Authority (MDA) for these programs as well as their program budget, personnel and contracts. Finally, the DBSAE serves as the DoD Component Acquisition Executive for business systems (Pair 2007a). The remainder of the BTA is organized as depicted in Figure 6.

BTA Performance and Achievements to Date

The BTA was organized just over three years ago. During this time the trajectory of DoD's Business

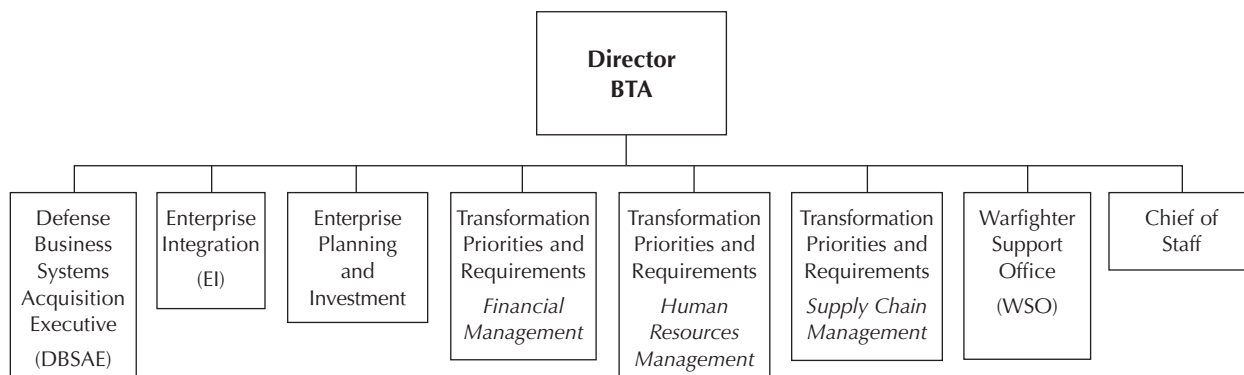
Transformation has been significantly altered. From a seemingly Brownian motion of the previous approach, the new program has demonstrated significant progress in several key areas.

First, some real progress has been made in completing and revising the business enterprise architecture and represents a major step forward toward building the family of architectures needed to adequately guide the investments across all of DoD (GAO 2007). To help implement the architecture (BEA Version 5.0 was released March 2008), the BTA emphasized the initiative to develop standards, an example being the Standard Financial Information Structure (SFIS).

SFIS is a common business language for internal and external financial reporting that allows standardized financial reporting across DoD components. This establishes an approach for converting existing component accounting system data to SFIS compliant data entries for the corporate general ledger.

Second, the enterprise transition plans have been developed and updated on a planned schedule. These plans describe the department's approach to business transformation and define the priorities that DoD will use to manage major information systems and transform human resources, materiel supply, property management, weapons system development and financial management programs. They have identified systems and initiatives that will bridge business capability gaps and provide details on the progress being made in enterprise systems and initiatives, such as the improvements in information visibility through implemented standards.

Figure 6. The Business Transformation Agency Organization, 2008



Source: BTA website.

Third, a well-managed, timely system has been put in place to efficiently review the IT investments, in compliance with the NDAA 2005. Moreover, recognizing DoD's long-standing challenges¹ that have impacted the delivery of business capabilities, the BTA was able to spearhead the development of the Business Capability Lifecycle (BCL) process. The objective of the BCL process is to deliver business capabilities in a compressed timeframe. The BCL requires functional sponsors to rigorously define problems before beginning the development of a solution, and consolidates the requirements, acquisition, and compliance to the BEA into a single governance process. The BCL process consists of three phases: the business capability definition phase, which focuses on upfront analysis to identify the root cause of the problem and determine a solution set; the investment phase, during which the business case is broadened and an analysis of alternatives is conducted; and the execution phase.

Finally, management of those programs placed under the BTA umbrella have demonstrated a much-improved project efficiency. For example, the BTA was able to develop and deliver a secure online absentee voter assistance program in 22 days that allowed DoD military and civilian personnel abroad to rapidly request and receive absentee ballots. The BTA was also able to correct the problematic Defense Integrated Military Human Resource System (DIMHRS), and as a result, the program is now scheduled for rollout with the Army in FY 2009.

DoD's Business Transformation Landscape Continues to Change

Since the major reorganizations required by law in 2005, a number of other elements have been added to the DoD business transformation framework. Some are statutory; others were added by administrative actions of either the White House or the Office of the Secretary of Defense.

Chief Management Officer (CMO) and Deputy Chief Management Officer (DCMO)

Section 904 of the FY 2008 NDAA (Pub. Law No. 110-181) directed DoD to submit a strategic management plan for business operations by July 2008, then update the plan by July 2009, and then provide additional updates every 2 years thereafter. Section 904 also formally acknowledged the Deputy Secretary

of Defense as DoD's Chief Management Officer. The goal was to provide an integrated management structure for defense business operations, and improve effectiveness and efficiencies. Furthermore, section 904 established a new Principal Staff Assistant position—a Deputy Chief Management Officer (DCMO) to assist the Deputy Secretary in carrying out the responsibilities of the DoD CMO, and 904 also directed the Military Departments to create CMO positions. Finally, the statute directs that the Director of the BTA will now report directly to the newly created DCMO. See Table 4 for a timeline of Business Transformation Governance evolution.

Performance Improvement Officer

On Nov 13, 2007, President Bush issued Executive Order 13450, *Improving Government Program Performance*, which among other things directed federal agencies to appoint "performance improvement officers." The goal of the performance improvement officers is to help ensure the agency spends taxpayer dollars effectively, and improve that performance year over year. The order states that the performance improvement officer's function will to oversee the agency's "strategic plans and annual

Table 4: DoD Business Transformation Timeline

Business Transformation Timeline	
2001	Defense Business Board
2001	Financial Management Modernization Program (FMMP)
2003	Business Management Modernization Program (BMMP)
2005	Defense Business Transformation Agency
2005	NDAA FY05–Defense Business Systems Management Committee (DBSMC)
2008	NDAA FY08 - DoD Chief Management Officer, DoD Deputy Chief Management Officer, Service Component Chief Management Officers
2008	EO13450 - Performance Improvement Officer
2008	DoD Directive 5010.42, CPI/LSS Program
2008	DoD Directive 5105.79, DoD Senior Governance Councils
2008	NDAA FY08 – Section 904 and Section 908

performance reports, as required by law," and to "assess performance of each program administered ... and consider means to improve the performance and efficiency of such program." On January 31, 2008 the Deputy Secretary of Defense appointed the Principal Deputy Under Secretary of Defense for Business Transformation to serve as the DoD's performance improvement officer.

Continuous Process Improvements/ Lean Six Sigma

On May 15, 2008, the Deputy Secretary of Defense directed (DoD Directive 5105.79) that the DoD implement Continuous Process Improvement (CPI), and adopt Lean Six Sigma (LSS). This new directive institutionalizes the Department's plan to make LSS and CPI a permanent part of the DoD culture. CPI is a strategic approach for developing a culture of continuous improvement in the areas of reliability, process cycle times, costs, quality, and productivity. Central to the CPI strategy is the use of LSS methods for business process reengineering. LSS is a combination of two business managerial strategies, Lean and Six Sigma, that seeks to reduce variability in process execution and eliminate waste. The new directive calls on DoD Components to use CPI/LSS to improve the full range of processes and activities within their operations, including decision-making processes (England 2008). CPI/LSS provides the Defense Business Transformation effort a framework to examine complicated processes in an organized manner, enabling the process stakeholders to identify specific inefficiencies and eliminate them.

DoD Senior Governance

On May 19, 2008, the Secretary of Defense signed a directive (DoD Directive 5105.79) that designated three bodies to assist him in making key strategic management decisions in a transparent and collaborative manner related to aligning the Department's business operations with strategic goals:

- The *Defense Senior Leadership Conference (DSLIC)* is co-hosted with the CJCS to address issues and to provide advice and assistance to the Secretary on the strategic direction of the Department.
- The *Senior Leader Review Group (SLRG)* meets at the discretion of the Secretary to address DoD issues and priorities of the highest level

and provide advice and assistance to the Secretary of Defense on the strategic direction of the Department.

- The *Deputy's Advisory Working Group (DAWG)* would meet at the discretion of the Deputy Secretary of Defense "to provide advice and assistance to the Deputy Secretary of Defense on matters pertaining to DoD enterprise management, business transformation, and operations; and strategic level coordination and integration of planning, programming, budgeting, execution, and assessment activities of the Department."

FY 2009 NDAA

Section 904, of the NDAA for Fiscal Year 2009 (Pub. Law No. 110-417), changed the structure of the DBSMC, designating the Department's DCMO as the vice-chairman, as opposed to USD (AT&L). The act also requires the Secretary of each military department to establish a business transformation office no later than 180 days after enactment of the act and, acting through the department CMOs, to develop comprehensive business transformation plans.

Members of the Deputy's Advisory Working Group

Membership may vary at the discretion of the Deputy Secretary of Defense. Other DoD officials (including combatant commanders) and other departments or agencies of the Executive Branch, as designated by the Deputy Secretary of Defense, may be invited to attend, as appropriate.

Deputy Secretary of Defense (Chair)	Assistant Secretary of Defense for Public Affairs
Secretary or Under Secretary of the Army	General Counsel of the Department of Defense
Secretary or Under Secretary of the Navy	Director of Administration and Management
Secretary or Under Secretary of the Air Force	Director and Principal Deputy Director, Program Analysis and Evaluation
Under Secretary of Defense for Acquisition, Technology, and Logistics or Principal Deputy	Vice Chairman of the Joint Chiefs of Staff (Vice Chair)
Under Secretary of Defense for Policy and Principal Deputy	Chief or Vice Chief of Staff, Army
Under Secretary of Defense (Comptroller)/Chief Financial Officer or Principal Deputy	Chief or Vice Chief of Naval Operations
Under Secretary of Defense for Personnel and Readiness or Principal Deputy	Chief or Vice Chief of Staff, Air Force
Under Secretary of Defense for Intelligence or Principal Deputy	Commandant or Assistant Commandant of the Marine Corps
Deputy Chief Management Officer	Commander, U.S. Special Operations Command or Deputy
Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Officer	Director, Joint Staff
Assistant Secretary of Defense for Legislative Affairs	Chief, National Guard Bureau or Deputy
	Director, Strategic Plans and Policy – J5
	Director, Force Structure, Resources, and Assessment – J8

Findings and Recommendations for the New Administration and Congress

DoD is now more than seven years into its journey to transform its business management; however, virtually all the progress has been made in the past three years. Much of this turnaround can be attributed to the actions taken by Congress in the NDAA FY 2005 legislation. At that point, the senior leadership could have chosen a minimalist approach, but instead they chose a path to significantly restructure the program's governance and prioritize the program. With the new governance structure in place, the effort to create a BEA began to accelerate and to make significant progress, as acknowledged by GAO (GAO 2005d).

Then with the establishment of the BTA (in October 2005), an institutional critical mass was created that put in place the disciplines necessary to create a useful ETP, common data rules, data standards, and a structure to manage the development of enterprise systems. The BTA has also improved communications dramatically, with user-friendly, detailed websites and program dashboards. The DBSMC has established and implemented IRBs and processes; these have begun to instill the needed control into DoD's business systems investments. Finally, DoD is no longer focused just on reducing its business systems, but also on applying proven private sector business practices to the public sector. These practices include:

- Focus on the customer—in this case, the joint warfighter
- Corporate accountability—in this case, the full support and involvement of the DoD senior leadership
- End-to-end business process improvement, including the flow of information throughout DoD
- A focused set of priorities (Brinkley 2006)

However, transformation in the public sector, particularly at an agency as large as DoD, operates on a timescale vastly different from that experienced in the private sector. In private firms, transformations of business systems can occur on timescales measured in months (or a few years), while at a large public agency, such as DoD, transformation is generally much slower and requires a great deal of persistence (Gansler 2004).

The scope and scale of DoD's enterprise continues to present a significant challenge, and unfortunately, given the scope and timeline of the initiative, today's snapshot of success may not accurately predict a future that remains almost a decade away. DoD's business and financial systems have developed over decades into their current form, which have been optimized to serve subordinate organizations' goals and objectives rather than overall DoD business management. Additionally, each component within DoD has its own values, organizational structure, culture, power structure, and legacy processes and systems. Successful business transformation requires a change in some, or all, of these to ensure effective integration into DoD's enterprise systems. As a result, for many, transformation is a redefinition of who they are and what they do and may at times appear unreasonable—demanding that people, processes, and organizations change, even when they are performing their mission successfully. Finally, when government agencies attempt to change or transform, the stakeholders and organizations, many with competing objectives, view this as an opportunity to implement their agendas or at least influence the process. As a result of these factors, efforts to transform organizations inevitably meet with significant inertia and resistance.

Maintaining the progress made and accelerating the pace will be critical tasks for the new administration. Following are this report's significant findings and recommendations.

Leadership and Staffing of Business Transformation

Findings

FINDING 1: Leadership emphasis has proved critical to energizing DoD's business transformation.

Large-scale business transformation does not occur without senior leadership guidance, commitment, and advocacy. Completing the scope of change envisioned for DoD's business and financial management systems will require the continued, committed leadership of the Secretary and Deputy Secretary of Defense. This leadership is necessary to maintain the focus on the shared outcomes and to provide the authority necessary to achieve the intra-departmental cooperation and integration to implement the changes required. This is especially true at a time when there are many competing demands on resources, and particularly when the department and the military services are fully committed to fighting the demanding Global War on Terrorism. This transformation must be a leadership priority or it will not happen (at least not in the desired time period).

FINDING 2: Initial DoD business transformation efforts were plagued by a lack of stability in leadership at the program level.

The frequent turnover of directors experienced previously by the BMMP (six program managers in less than six years) as well as with the key individuals in specific programs, such as the DIMHRS, contributed significantly to their mediocre performance. The Deputy Secretary of Defense recognized the need to bring in someone from the private sector that had experience in large-scale transformations. Paul Brinkley, now the Deputy Under Secretary of Defense for Business Transformation, was recruited from JDS Uniphase. There Brinkley led one of the largest, most rapid business transformation efforts in the technology industry sector. His vision and leadership were instrumental in restructuring DoD's overall program, and for establishing the BTA. Unfortunately, his talents led him to be also selected

for the leadership of the program to bring Iraq industry under local management—causing him to spend much of his time in Iraq and diverting him from full-time management of the transformation effort.

Individual projects also require sustained leadership. The DIMHRS, for example, had nine leaders in nine years. To attract and retain “the best and the brightest,” transformation projects must become assignments that are career enhancing. Up until now, they have not been the best places for an officer's career prospects, because enterprise transformation goals often conflict with the parochial interests of the organization.

Although DoD has made much progress, the tipping point on its path to transforming its business processes and systems probably has not been reached. Without continued emphasis and leadership continuity, momentum will be lost and progress reversed.

FINDING 3: Within DoD's components, especially in the military services, uniformed leadership is critical, but not always evident.

DoD's business modernization programs that have committed general officer leadership at the three-star level are generally making good progress. The Navy Enterprise Resource Planning (ERP) program, for example, began making significant progress when a Navy Vice Admiral was asked to take ownership and be accountable. The Army's General Fund Enterprise Business System (GFEBS) is another example, where a passionate Lieutenant General put the program on course to replace more than 80 legacy systems (Fisher 2006). Those component programs that did not have this level of military leadership at the top of the agency have not performed as well.

The BTA is an agency, and DoD agencies are also usually headed by three-star flag officers. The BTA, however, is currently headed by a senior civilian. The mission of the BTA is critical to the effectiveness of the military forces. Having a senior military director would project and reinforce that perception to the many stakeholders, particularly the services and combatant commands.

Recommendations

Recommendation 1: The new administration must continue to make Defense business transformation one of its top DoD priorities.

A transformation of this magnitude cannot take place without the informed support of all involved. Therefore, leadership commitment and their communication with all affected organizations and individuals are critical. Well-intentioned organizational transformations can easily fall short when inadequate leadership and communication fail to fundamentally change the behavior and expectations of the organization at large, as well as those of the subordinate multi-layered leadership teams and their employees.

To the degree possible, the link between the business transformation initiative and the department warfighting capability must be highlighted to gain a broader base of support within military components. Transforming and improving DoD's business management, such as improved personnel and asset visibility, will also result in improved combat capability. In their leadership roles, the Secretary and Deputy Secretary of Defense must continue to communicate the sense of urgency and requirements for the transformation in order to motivate the enterprise to take on the required organizational, cultural, and technical changes.

The transformation process also requires continuity in leadership throughout the department. Frequent changes in key personnel often mean extensive changes in approaches to the overall effort, as well as to the many supporting programs. These changes cause delays and set back the program's progress. To the degree possible, the new Secretary of Defense, along with the service secretaries, must ensure program continuity, especially with key senior leadership. In addition, the Secretary of Defense, along with the secretaries of the military services, must demonstrate the importance of Defense business transformation efforts to the military mission by assigning senior military leaders to the large transformation initiatives and then holding them accountable.

Maintaining the involvement of DoD's top leadership is essential to the transformation process to maintain the momentum achieved, consolidate the improvements made, and institutionalize the new transformative culture. This involvement will not be easy, with the many competing demands on the leadership's time and attention. However, it is essential for a successful transformation. Without continued senior leadership attention and emphasis, the momentum gained to date can easily be lost and progress reversed.

Recommendation 2: Congress, the new administration, and especially the Secretary of Defense, Deputy Secretary of Defense, and the Service Secretaries and Chiefs, must continue to ensure that the Defense business transformation effort is able to recruit, hire, train, and retain the necessary key personnel. In addition, when the time comes to replace the very capable, current Director of the BTA, a senior military flag officer (three star) should be named to that post in order to reinforce the link to and importance of this initiative to warfighting.

Successful transformation requires the right personnel. Long-term DoD employees often lack the necessary technical experience and skills to spearhead the planning, management, and implementation of a transformation of the scope required at DoD. The private sector, which in many respects is well ahead of the government in developing integrated and extended enterprise management systems, has more people with experience in these types of IT projects. A critical problem is that the government's personnel system does not have the agility to quickly bring in functional experts from the private sector; nor is it able to compensate them at levels comparable to those of the private sector. DoD also needs to be given adequate flexibilities in pay, benefits, and other variables that can help it attract, hire, and retain the talented individuals needed to oversee these technically complex developments.

Governance of the Business Transformation

Findings

FINDING 4: Evolving from DoD's legacy stove-piped structure into integrated, enterprise-wide systems naturally meets with individual and organizational resistance.

Achieving the business transformation will require significant changes to the current DoD culture, which has developed over decades into a stove-piped structure. Many leaders have indicated that the more urgency and pain the organization is experiencing, the more driven and successful will be the transformation.

The pain and urgency are imminent and will probably come in the form of budget cuts. Although DoD has experienced increasing budgets over the

past several years, that trend is not fiscally sustainable. In the near future, there will be a requirement for budgetary belt tightening and tradeoffs, especially in light of the continuing Global War on Terrorism operations and the services recapitalization and modernization needs. Efficiencies and savings gained from business and financial systems modernization can be applied to help offset those requirements, but there are “up front” resources required to make the changes. In addition, congressional leaders’ interest in improved financial accountability and greater transparency is unlikely to lessen. The current and future budgetary pressures and the continued congressional interest do indeed create an urgent need for change—this is the “burning platform.”

FINDING 5: DoD’s business modernization program governance requires a committed steering body of cross-functional, senior executives.

Even under ideal circumstances, when organizational roles are clearly defined, transformation is difficult. When roles are vague, the direction, goals, and objectives can become confusing and relationships can become contentious; the end result is a failure to achieve the desired progress. Ineffective governance often results also in solutions that are optimized locally, but are suboptimal at the system level.

The new governance structure created in 2005 got the involvement and attention of DoD’s senior leadership through several different venues, such as the IRBs and the monthly meetings of Defense Business Systems Management Committee. The Deputy Secretary spends three to four hours a month on business transformation issues. The level and quality of his involvement has proven to be invaluable. By having monthly meetings of the DBSMC, the Deputy Secretary is now able to better focus on those issues that need his attention. Additionally, as a result of his participation, the principal members of the DBSMC are more likely to show up for the meetings, and consequently, the DBSMC is able to make timely decisions (Fisher 2006).

FINDING 6: Three federal laws continue to complicate the Defense business transformation: Goldwater–Nichols, Clinger-Cohen, and the NDAA FY 2008.

The Goldwater–Nichols Department of Defense Reorganization Act of 1986 and the Information Technology Management Reform Act of 1996 (also known as the Clinger-Cohen Act) both make it more difficult to implement Defense business transformation because they blur responsibility and accountability. Goldwater–Nichols centralized operational authority through the Chairman of the Joint Chiefs and streamlined the operational chain of command. It also assigned full responsibility for all acquisition activities to the Under Secretary of Defense (AT&L), who reports directly to the Secretary of Defense on these issues. However, the Clinger-Cohen Act changed the process for how federal agencies acquire and manage their information technology and systems by designating agency chief information officers and holding them responsible for IT acquisition decisions. As a result, these two laws overlap in the area of IT acquisition and introduce an unnecessary level of complication.

There are still inherent conflicts between the role of OSD and the services as well as between the roles of the CIO under the Clinger-Cohen Act and the acquisition responsibilities of the Under Secretary (AT&L) as defined by the Goldwater–Nichols Act. (See box, “Summary of Key DoD Transformation-Related Laws.”) The apparent overlap of responsibilities, as related to the acquisition of information systems, creates unnecessary friction and tension.

The third law complicating Defense business transformation is the establishment of the position of Deputy Chief Management Officer by NDAA FY 2008. This law directs that the Director of the BTA report to the DCMO. This adds a new layer of management to the BTA. Injecting the DCMO (and potentially the Deputy Secretary of Defense in his role as the CMO) into the control of the BTA, and into the middle of the acquisition process (with the already conflicting requirements of Goldwater–Nichols and Clinger-Cohen described above), may create the potential for additional confusion.

FINDING 7: Even with the establishment of the BTA, some important organizational issues remain.

The establishment of the BTA has provided a focus within the OSD for the business transformation initiative. There are, however, still elements of the OSD

staff developing business systems independently and other elements of OSD that are not fully integrated into the BTA. For example, the Military Health System (MHS)—the responsibility of the Under Secretary (Personnel and Readiness)—was not integrated into the ETP until September 2006. More important, that program is still developing its own business architecture. As a result, some fragmentation remains within DoD's transformation effort.

FINDING 8: The BTA directly manages only some of the enterprise systems, but its involvement with the many other large business information systems managed by the services and components is necessary and can be of great value.

The BTA does not directly control the business information systems managed by the services and components. It does, however, have some limited influence to ensure that they are complying with the overall architecture and moving toward the transformation objectives; it uses a combination of incentives and controls (carrots and sticks).

The BTA engages in a proactive engagement with components in an effort to make the BTA a value-added partner. Because few government employees have experience with developing and implementing ERP systems, the components became very dependent on their contractor system integrators (SI). To challenge an SI on an ERP configuration issue, one needs a level of skill that government employees generally did not possess. For example, if an SI said a feature would cost \$50 million, without the needed expertise, the government would have no choice but to agree. The BTA viewed this lack of expertise as an opportunity to provide a service and help guide the component development.

To accomplish this task, the BTA created an enterprise integration group that could be a bridge between the BTA and the component world. This group is staffed with ERP experts—they all possess a very specific skill set and a minimum of 10 years of experience. This core team is functional, technical, and staffed with senior-level people from the private sector. They can explain and help with configuration ideas, from compliance to interoperability, and also help keep the projects focused on the big picture, from technical and functional

Summary of Key DoD Transformation-Related Laws

Goldwater–Nichols Act of 1986

The passage of the Goldwater–Nichols Department of Defense Reorganization Act of 1986 was an attempt to redistribute authority within DoD in order to meet the demands of joint warfighting. Among its many provisions, the act established the new position of Under Secretary of Defense (AT&L), responsible for all acquisition activities—the acquisition czar—reporting, for all acquisition issues, directly to the Secretary of Defense.

Another objective of the legislation was to provide for more efficient use of defense resources by enhancing the Chairman of the Joint Chiefs of Staff role in the joint assessment of programs and budgets of the military services and other agencies. To accomplish this, the act established the position of Vice Chairman of the Joint Chiefs of Staff as the head of the Joint Requirements Oversight Council. The services, however, maintained their role as the force providers, and the services parochialism was not eliminated.

The Clinger-Cohen Act of 1996

The Clinger-Cohen Act was an effort to impose management on the implementation and management of information systems. Among the major provisions of the act are the establishment of department-level CIOs to provide advice and other assistance to the head of the executive agency and other senior management personnel of that agency to ensure that IT is acquired and that information resources are managed for the executive agency in a manner that implements the appropriate policies and procedures.

The implementation has resulted in DoD directives on interoperability, architecture, and standards for DoD's IT. The act also empowered the DoD CIO to ensure compliance with DoD regulations.

standpoints. This BTA group provides this service free to the components—a “carrot.” This indirect embedding of BTA experts into those programs has also helped with accountability and timely information exchange. Because of the great demand, the BTA is currently unable to meet all the requests for these services (Fisher 2006; Pair 2007b).

The NDAA FY 2005 also provided the necessary means for control—the “stick.” The investment review structure, described previously, provides an excellent means to provide control. Systems not certified lose their ability to spend their budgeted funds (continued spending would be considered an Anti-Deficiency Act violation). This is a powerful, compelling “stick.” Sticks are much more effective when the willingness to “whack” someone with it is demonstrated. Early on, there were several occasions where a program’s certification had been suspended and corrective actions assigned. These programs quickly corrected their deficiencies. As a result, subsequent compliance has been generally good.

Recommendations

Recommendation 3: Congress and the new Administration must work to resolve specific organizational barriers to BTA’s ability to act on transformation initiatives.

The adoption of the changes catalyzed by the NDAA FY 2005 established an effective governance structure and was a step in the right direction. The Secretary of Defense must ensure that this structure continues, and is supported by the senior leaders within the department.

The DoD Enterprise Business Management needs an integrated approach to be effective. This requires addressing specific organizational issues that create barriers to BTA’s ability to effectively implement transformation initiatives. In accordance with the well-accepted military precept of the “unity of command,” the Secretary of Defense should designate the Under Secretary of Defense (AT&L) as the department’s CIO (thus satisfying the Clinger-Cohen requirement). The Secretary of Defense should place the Assistant Secretary of Defense (Networks and Information Integration) in the USD (AT&L) organization, and Congress should modify the Clinger-Cohen Act so that the Assistant Secretary of Defense (Networks and Information Integration) can then remain the CIO.

Finally, the role of the DCMO must be carefully monitored by the Secretary to ensure that office does not interfere with the responsibilities of the Under Secretary of Defense (AT&L) as the lead in managing the acquisition of all of DoD’s systems (as defined by Goldwater–Nichols).

Management of the Business Transformation

Findings

FINDING 9: DoD employees involved with business transformation often lack the necessary experience and skills to spearhead the planning and management of the business transformation implementation within the scope envisioned.

In many respects the private sector is well ahead of the government in developing integrated and extended enterprise management systems. Most people with the necessary expertise and experience for the development of these types of IT are in the private sector. However, the government’s personnel system does not have the agility to quickly bring in functional experts from the private sector; nor is it able to compensate them at levels comparable to that of the private sector. The appointment of Mr. Brinkley, the current Deputy Under Secretary of Defense for Business Transformation, is a case in point. It took well over six months from the time Mr. Brinkley was recruited until he was hired and in place at DoD.

A provision included in the National Defense Authorization Act for FY 2004 allowed DoD to establish a program to attract highly qualified experts. That program allows DoD to hire as many as 2,500 talented men and women with the expertise and corporate knowledge to fill critical positions, and to offer a compensation package more competitive with the private sector than might otherwise be feasible. These persons can be employed for five years with the potential for an extension for an additional year.

The BTA has been able to hire small numbers of highly qualified experts to support the transformation process, using the authority granted in the NDAA FY 2004. However, even though the process is shorter and simpler than the government’s normal personnel system, it still takes significantly more time and effort when compared to that of the private sector. Compensation for these experts also continues to lag behind that in the private sector (Fisher 2006; Pair 2007a).

Another issue is that all BTA employees are required to have a security clearance. This requirement

restricts employment to U.S. citizens, eliminating the pool of permanent-resident aliens, where much of the requisite experience and talent resides.

FINDING 10: The transformation of DoD's business processes and systems will require most of DoD's employees to acquire new skills.

DoD's business transformation will impact most of the jobs within DoD. The nature of many jobs will change, and some types of work (data entry and many clerical functions) will be eliminated. The new environment change will create a business environment with a requirement for more knowledgeable workers. Existing personnel will need training and education in higher level skills, such as analyzing and interpreting data, to support the organization's management, planning, and decision-making needs. Finally, in order to maintain their currency with the rapidly evolving systems and technology, employees will need more training, at an increased frequency.

FINDING 11: Successful business transformation requires adequate and stable resources, especially sufficient funding.

Insufficient or inconsistent program funding is a potentially significant barrier. The transformation process will continue to compete for resources with other critical DoD requirements. However, the temptation to view the business modernization budget as a bill payer for other critical requirements must be resisted. Since these transformation programs can easily span a decade, Congress should be wary of large swings in appropriations—these would hamper creating an overall long-term vision and have a significant negative impact on the planning and implementations of the programs.

FINDING 12: An architectural approach is necessary to conduct true business transformation, since it focuses on functions and processes, not systems.

Business transformation frequently becomes an IT transformation. This means that a project approach is often used. A project approach lacks a holistic perspective and results in perpetuating inefficient "silos" of technology, information, and business processes. An architectural approach looks at IT as a strategic asset that can deliver long-term value

and focuses on using the transformation process to achieve the business goals of the enterprise rather than focusing on mere technical requirements. Architectural principles can contribute significantly toward successful transformation.

Moreover, it is important to identify ways to integrate legacy systems with the newly developed systems. If DoD were to replace all its legacy systems, it would not only create huge problems in short-term performance, but considering the resources required, would also be practically impossible. Integrating some of the legacy systems thus becomes crucial in most modernization efforts. The published, federated BEA² allows components to plan for this integration.

With the release of BEA version 4.1, the architecture began to stabilize, allowing DoD components to more easily keep pace with the changes. The BTA also introduced new tools (that were not mandatory to use) that significantly reduced the effort required to ensure that a system was compliant with the published architecture. These tools simplified and reduced the workload and increased the confidence of the component CIOs with their certification processes.

FINDING 13: Some DoD business modernization programs have tried to do too much in a single initiative.

The scale and scope of many of the enterprise-wide implementations can be daunting. Referring to the business modernization effort to replace thousands of existing systems, Paul Brinkley remarked "We're always trying to hit a home run" (Tiboni 2006).

The DIMHRS implementation, for example, will be an order-of-magnitude larger than previous similar systems. When fully operational, the DIMHRS will maintain the records for 3 million people. In contrast, the largest PeopleSoft implementation through 2003 had only 300,000 individuals' records (Jackson 2003). Moreover, an inventory of human resource business systems in February 2005 identified 713 as the total number of systems (GAO 2005b). At that time, the plan was for the DIHMRS to partially or fully replace 113 of these systems—integrating that number of legacy systems into one core operating platform is a significant challenge.

Now, the current ETP states that the DIHMRS will subsume or interface with more than 290 information systems in the first phase across the Army, Air Force, and Defense Finance and Accounting Service (Swatloski 2007; U.S. Department of Defense 2007). This level of integration presents many known and unknown problems. This objective of trying to replace all personnel systems with one single “mother” system was extremely challenging and ambitious and has resulted in significant schedule slips and cost growth.

One of DoD’s most successful business modernization implementations to date has been at the Defense Logistics Agency (DLA)—using a different strategy. DLA rolled out a suite of enterprise applications through its Business Systems Modernization program; DLA, however, adopted the approach of developing and fielding the system in small increments to a limited number of users. This approach allowed developers to test the system extensively and incorporate system changes to correct deficiencies or improve performance (based on test results and user feedback) in support of the full fielding decision (Carlson 2008). On the surface this approach may seem inefficient, but this program was closer to maintaining its schedule and budget and now is fully operational. The BTA has adopted this approach with its “small milestones.”

Recommendations

Recommendation 4: The Congress, the Secretary of Defense, and the service secretaries and chiefs must continue to ensure that the Defense business transformation effort and the BTA have adequate and stable resources.

The Defense business transformation effort will be a decade’s long journey that can yield significant performance gains and cost savings. To achieve these gains in the most efficient way, programs (once approved, and as long as they are demonstrating progress) should receive their programmed funds. With the many interdependencies and synergistic relationships, funding fluctuations in one program can impact several others as well as delay the achievement of the overall enterprise objectives.

Congress should also retain and expand the authority granted under NDAA FY 2004, as necessary, so that DoD can ensure that the necessary talent is

available to recruit the number and quality of personnel for the government workforce to lead and manage this effort. Furthermore, because many of the private sector workforce with the requisite skills are foreign nationals, the security clearance requirements for employment within the BTA should be evaluated and, if appropriate, removed for those positions. Finally, to take full advantage of the benefits presented by this transformation, DoD and its components must provide for the continual development of staff capabilities through training and education opportunities.

Recommendation 5: The new administration must work to strengthen the role of the BTA to lead the management of DoD’s business transformation.

The Secretary of Defense should assign all OSD-level enterprise programs under the BTA umbrella so that the BTA can apply the same disciplined oversight provided to the other enterprise programs. Moreover, the Secretary of Defense must ensure that the BTA has the necessary resources to assist the components in developing systems compliant with the BEA. The BTA should be assigned the pivotal role in providing the control that ensures the compliance with the BEA to enable the necessary integration and interoperability.

Acknowledgments

The authors are deeply indebted to Ankur Huria, a graduate assistant at the Center for Public Policy and Private Enterprise at the University of Maryland's School of Public Policy, who assisted in the research and editing of this report. In addition, we want to thank our co-worker Caroline Dawn Pulliam for her assistance with planning, coordinating, and reviewing the manuscript. We would also like to thank Mr. Paul Brinkley, Mr. David Fisher, Major General "Butch" Pair, and all the other Business Transformation Agency staff that cooperated and assisted with this research. Finally, the authors deeply appreciate the support of Jonathan Breul, John Kamensky, and Mark Abramson, as well as the IBM Center for The Business of Government, for supporting this work.

Opinions, conclusions, and recommendations expressed or implied are solely those of the authors and do not represent the views of the Department of Defense or any other agency of the federal government, or of the sponsors.

Endnotes

1. These challenges included fragmented governance and reporting requirements, and using acquisition policies that are primarily designed for Major Weapons Systems acquisition.

2. DoD's federated BEA consists of a family of coherent but distinct architectures in which subsidiary architectures (at the component and program levels) conform to an overarching enterprise architectural view and rule set.

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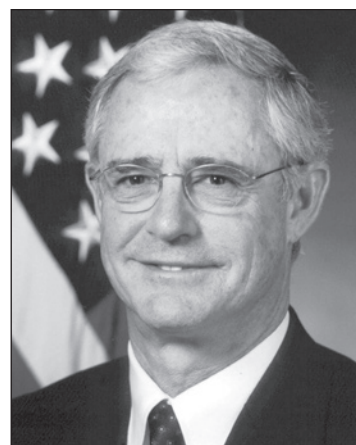
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ABOUT THE AUTHORS

The Honorable Jacques S. Gansler, former Under Secretary of Defense for Acquisition, Technology, and Logistics, is a Professor and holds the Roger C. Lipitz Chair in Public Policy and Private Enterprise in the School of Public Policy. He is also the Director of both the Center for Public Policy and Private Enterprise and the Sloan Biotechnology Industry Center. As the third-ranking civilian at the Pentagon from 1997 to 2001, Professor Gansler was responsible for all research and development, acquisition reform, logistics, advance technology, environmental security, defense industry, and numerous other security programs.

Before joining the Clinton administration, Dr. Gansler held a variety of positions in government and the private sector, including Deputy Assistant Secretary of Defense (Materiel Acquisition), Assistant Director of Defense Research and Engineering (Electronics), Executive Vice President at TASC, Vice President of ITT, and engineering and management positions with Singer and Raytheon.

Throughout his career, Dr. Gansler has written, published, and taught on subjects related to his work. Dr. Gansler recently served as the Chair of the Secretary of the Army's Commission on Contracting and Program Management for Army Expeditionary Forces. He is also a member of the National Academy of Engineering and a Fellow of the National Academy of Public Administration. He is the Glenn L. Martin Institute Fellow of Engineering at the A. James Clarke School of Engineering, an Affiliate Faculty member at the Robert H. Smith School of Business, and a Senior Fellow at the James MacGregor Burns Academy of Leadership (all at the University of Maryland). For 2003–2004, he served as Interim Dean of the School of Public Policy. For 2004–2006, he served as the Vice President for Research at the University of Maryland.



William Lucyshyn is the Director of Research and a Senior Research Scholar at the Center for Public Policy and Private Enterprise in the School of Public Policy at the University of Maryland. In this position, he directs and conducts research that addresses complex public policy problems in an effort to speed improvements in the management and delivery of public services.

During the past few years, he has written extensively on federal government initiatives, such as outsourcing, privatization, and competitive sourcing, to make government more market based. Previously, Mr. Lucyshyn served as the principal technical advisor to the Director, Defense Advanced Research Projects Agency (DARPA), and the Under Secretary of Defense for Acquisition, Technology, and Logistics on the identification, selection, research, development, and prototype production of advanced technology projects. He controlled and directed the multimillion dollar budget and the efforts of 50 government and contractor personnel.

Prior to this appointment, Mr. Lucyshyn completed a 25-year career in the U.S. Air Force serving various operations, staff, and acquisition positions. He received his bachelor's degree in engineering science from the City University of New York in 1971. He earned his master's degree in nuclear engineering from the Air Force Institute of Technology in 1985. He is certified Level III as an Acquisition Professional in Program Management.



KEY CONTACT INFORMATION

To contact the authors:

Jacques S. Gansler

Professor and Roger C. Lipitz Chair in Public
Policy and Private Enterprise
Center of Public Policy and Private Enterprise
School of Public Policy
University of Maryland
2101 Van Munching Hall
College Park, MD 20742
301-405-8754

e-mail: jgansler@umd.edu

William Lucyshyn

Director of Research and Senior Research Scholar
Center of Public Policy and Private Enterprise
School of Public Policy
University of Maryland
2101 Van Munching Hall
College Park, MD 20742
301-405-8257

e-mail: lucyshyn@umd.edu



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For additional information, contact:

Jonathan D. Breul

Executive Director

IBM Center for The Business of Government

1301 K Street, NW

Fourth Floor, West Tower

Washington, DC 20005

(202) 515-4504, fax: (202) 515-4375

e-mail: businessofgovernment@us.ibm.com

website: www.businessofgovernment.org