

DEFENSE BUSINESS BOARD MINUTES

Open Meeting

January 22, 2015

8:30 AM to 11:30 AM

Pentagon, Washington, D.C.

The Defense Business Board (DBB) is a Federal advisory committee within the Department of Defense (DoD), established and operated in accordance with the Federal Advisory Committee Act of 1972 (5 U.S.C., Appendix, as amended) and 41 C.F.R. § 102-3.50(d). The DBB meets quarterly and held its second public session for fiscal year 2015 on January 22, 2015 from 8:30 AM to 11:30 AM in room 3E863 in the Pentagon, Washington, D.C. The next meeting is scheduled for April 23, 2015.

DBB Members

Mr. Robert L. Stein, Chair
Ms. Nancy Killefer, Vice Chair
Dr. Cynthia Trudell, Ph.D., Vice Chair
Mr. Denis A. Bovin
Mr. Howard E. Cox
Ms. Roxanne J. Decyk, J.D.
Mr. Kenneth O. Klepper
Mr. David H. Langstaff
Ms. Rochelle B. Lazarus
Mr. Emil Michael, J.D.
Mr. Philip A. Odeen
Mr. William R. Phillips
Mr. Mark H. Ronald
Mr. Kevin E. Walker
Mr. Daniel I. Werfel, J.D.
Mr. Joseph R. Wright
Mr. Jack C. Zoeller

DBB Ex Officio Members or Alternates

Carol Cha, Government Accountability Office
Mark Sandy, Office of Management and Budget

DBB Staff Support

Marcia Moore, Acting Executive Director & Designated Federal Officer (DFO)
Colonel Leslie Caballero, U.S. Army, Military Representative
Commander Bruce Defibaugh, U.S. Navy, Military Representative
Kelsey Keating, Program Analyst
Captain Shelby Mounts, U.S. Navy, Incoming Military Representative

Public Attendees

1. Debra Del Mar, Vanguard Advisors, LLC
2. Jon Etherton, Etherton and Associates
3. Heidi Jacobus, Cybernet Systems
4. Steve McCain, K&L Gates LLP
5. Paul McLeary, Defense News

6. Jordana Mishony, Inside the Pentagon
7. John Threlkeld, American Federation of Government Employees

Department of Defense Employees:

1. Brian Beachkofski, U.S. Air Force, Acquisition
2. Paul Dunbar, U.S. Air Force, Strategic Initiatives Division
3. John Fischer, Office of the Undersecretary of Defense for Acquisition, Technology and Logistics
4. Suzy Fitzpatrick, Office of Deputy Chief Management Officer, Policy & Decision Support Directorate (ODCMO)
5. Thomas Hessel, Office of the Undersecretary of Defense for Personnel and Readiness
6. Scott Lewis, ODCMO, Policy & Decision Support Directorate
7. Angela Long, ODCMO
8. Carrie McVicker, Office of the Undersecretary of Defense for Personnel and Readiness
9. Megan Meese, ODCMO
10. Gregory Nishimura, U.S. Navy, Management, Business Operations
11. Colonel Stan Sliwinski, U.S. Army, Headquarters, Department of the Army, Office of Business Transformation
12. William R. Smith, Headquarters, Department of the Army, Office of Business Transformation
13. Terry Thoen, Office of the Chairman Joint Chiefs of Staff
14. David Tillotson, DoD Assistant Deputy Chief Management Officer
15. Commander William Urban, U.S. Navy Office of Secretary of Defense, Public Affairs
16. Patrick A. Winkler, Office of the Undersecretary of Defense, Comptroller
17. James Yamanaka, ODCMO

PUBLIC SESSION

At 8:30 AM, Marcia Moore, DFO, opened the session and introduced the members of the public. None of the members had a conflict of interest with the topics on the agenda. The deadline for public comments was January 17, 2015. Though the announcements stated that there were no written comments for the meeting, one written comment dated January 21, 2015 was recorded after the meeting. That public comment is courteously included in these minutes.

[The following summaries should be read along with the handouts. Please note the errata sheet also.]

Presentation of Task Group Out-briefs

Mr. Robert Stein, DBB Chairman, introduced Phil Odeen, Task Group Chair for the *Guiding Principles to Optimize DoD's Science and Technology Investments Task Group*.

Mr. Odeen began with opening comments and introduced himself as the Task Group Chair, and the members being Ms. Decyk, Mr. Zoeller, Mr. Howard Cox, and Mr. John O'Connor. Mr. Odeen described the initial formulation of the Terms of Reference, key task questions, and the methodology used by the Task Group to arrive at findings and recommendations.

Key task questions posed to the group through the Terms of Reference were (1) How can DoD focus its S&T investments in a period of declining budgets to support future warfare capabilities? (2) What can DoD learn from the way private sector manages its S&T spending? (3) How can DoD leverage its S&T investments by exploiting the much larger private sector investments? (4) How can DoD focus its S&T resources in areas where the private sector is poorly suited to contribute?

Methodology for the group focused on the review of current DoD strategic and financial documents and evaluated private and public sectors to identify practices that led to success or failure in the field. Following that, interviews were conducted of both DoD and private sector companies to better define best practices for science and technology management of investments.

Mr. Odeen then described the Task Group's findings and recommendations.

Findings of the Task Group were relayed as (1) Commercial S&T best practices differ markedly from those of DoD, (2) DoD faces a number of S&T challenges, (3) DoD processes are poorly structured to attract cutting edge commercial technology, and (4) Recent DoD initiatives show promise to remedy some of these problems. Mr. Odeen described each of the findings and related a case study of a major pharmaceutical company as a good example of the correlation of best practices found in the private sector for S&T investment management. In the case study he related S&T strategy is a focus of corporate leadership and technology development and pipeline of associated research and development is tightly managed.

Mr. Odeen presented the recommendations of the Task Group as follows:

- (1) VCJCS, USD(AT&L), and USD(P) should establish a structure and process to develop an S&T strategy, set S&T priorities, identify objectives and metrics, track progress and allocate funds.
- (2) USD(AT&L) should take steps to more aggressively exploit commercial technology which is more advanced in most areas critical to military capabilities.
- (3) USD(AT&L) should ensure Defense Industry is provided a more in-depth understanding of DoD's prioritized technology needs.

- (4) The R&D establishment, led by ASD(R&E) should focus its internal S&T effort on military unique technologies and not replicate technology available in the private sector
- (5) The S&T strategy should include requirements for the capabilities of the DoD workforce and facilities needed to execute the strategy.

He further spoke to each recommendation in detail and summarized to the Board that Commercial S&T best practices differ fundamentally from DoD's, DoD should learn from these practices to develop a clear S&T strategy, establish a rigorous management process to track progress, address issues, and make tough choices when programs get into trouble, attack the impediments that frustrate DoD's efforts to exploit commercial technology and deter commercial companies from contributing, and revamp the compensation system to reward successes. Mr. Odeen reinforced that despite budget pressures DoD still has the resources to invest in the capabilities it needs for the future and that the commercial sector can, and should be a major provider of technology to meet DoD military capabilities.

The Board entered into deliberation and voted to adopt the recommendations unanimously with no dissenting opinions or comments. There was no public comment provided at the meeting.

Mr. Robert Stein, DBB Chairman, introduced Kenny Klepper, Task Group Co-Chair for the ***Transforming DoD's Core Business Processes for Revolutionary Change Task Group***.

Mr. Klepper began with opening comments and the introduction of himself and Ms. Decyk as the Task Group Co-Chairs, and the members being Mr. Odeen, Mr. Michael, and Mr. O'Connor. Mr. Klepper described the initial formulation of the Terms of Reference and a question that was posed with DSD Work, "modify information technology (IT) to do what?" This shifted the focus of the study to look at DoD through the lens of core business processes and IT being an enabler. Mr. Klepper explained the data collection and analysis process that was conducted by the Deputy Chief Management Office. The process was a collaborated effort throughout the Department with transparency in the data collected and analyzed to target productivity gains, and not to compare the Services' data to each other.

Mr. Klepper discussed DoD's six core business processes administrative costs (FY 2013 actuals) in terms of workforce labor and costs. He described a path for the Department to save over \$125 billion in the next five years through productivity gains in four areas: 1) Contract Spend Optimization; 2) Labor Optimization; 3) IT Modernization; and 4) Business Process Re-engineering. Mr. Klepper highlighted the greatest contributions to cost savings are contract optimization and labor optimization. With early mobilization being the single biggest lever – every billion saved in 2016 is worth five billion in fiscal years 2016 to 2020 due to the compounding effect.

Ms. Decyk followed Mr. Klepper and discussed the crucial element of change management and strategic communications as it applies to organizational change and technical solutions. To successfully achieve productivity gains through business process re-design, innovation, and technology – the fundamental enabler is the workforce. The very top senior leader must have a clear vision that is aligned with a strategy and widely communicated. Every employee must understand the intent, purpose, and effects of organizational change to feel a part of the process and embrace new ways of doing business. Ms. Decyk also described the requirement for an effective governance structure with clear decision making authority to effectively lead change efforts and to instill an enduring momentum.

Mr. Stein motioned for a vote on the Transforming DoD's Core Business Processes for Revolutionary Change Task Group's recommendations. The DBB voted unanimously in favor of the Task Group's recommendations.

Mr. Stein opened the floor for public comments. Though no comments were received, a question was asked by Ms. Debra Del Mar, Vanguard Advisors. She asked, "What recommendations has the Department implemented from the DBB study, 'Business Management Modernization Program?'" Mr. Klepper explained that the Task Group did review previous DBB reports and other DoD studies, but the DBB doesn't have a response on how previous DBB recommendations were implemented¹. Heidi Jacobus also questioned the committee on DoD's use of innovative technology. Mr. Klepper acknowledged the impact of technology changes on DoD and that the DBB doesn't have a response on how previous modernization recommendations were implemented.

Mr. Stein adjourned the DBB's January 22, 2015 public session at 11:22 AM.

END OF PUBLIC SESSION ADJOURNMENT

Attachments:
Written public comment
Handouts
Errata sheet

CHAIRMAN'S CERTIFICATION

I hereby certify, to the best of my knowledge, the foregoing minutes are accurate and complete.



Robert Stein
Chairman
Defense Business Board

¹ Please see the bibliography of the final report for a list of the previous DBB and DoD studies reviewed by the Transforming DoD's Core Business Processes for Revolutionary Change Task Group. Questions intended for the DoD are not addressed by the DBB. Members of the public are encouraged to state comments rather than questions.

**WRITTEN
PUBLIC
COMMENT**



J. David Cox, Sr.
National President

Eugene Hudson, Jr.
National Secretary-Treasurer

Augusta Y. Thomas
National Vice President
for Women and Fair Practices

January 21, 2015

Mr. Robert (Bobby) L. Stein, Chairman
Ms. Roxanne J. Decyk, Member
Defense Business Board
1155 Defense Pentagon
Room 5B1088A
Washington, DC 20301-1155
Email: osd.pentagon.odam.mbx.defense-business-board@mail.mil

Dear Chairman Stein and Member Decyk:

On behalf of the American Federation of Government Employees, AFL-CIO, which represents more than 650,000 federal employees, including 270,000 in the Department of Defense (DoD), who serve the American people across the nation and around the world, I appreciated the opportunity to meet with you earlier this month in order to discuss the sourcing and workforce management concerns of the Department's reliable and experienced civilian employees as well as the general outlines of your upcoming report. This was AFGE's first official contact with the Defense Business Board (DBB)—other than an informal meeting with a DBB member arranged by a senior DoD official to discuss my participation on the board—and it proved to be a pleasure too long deferred, especially given your cordiality.

I hope AFGE can provide formal input earlier in the process with respect to future reports from the board. The members of the DBB come from varied and distinguished backgrounds, and their familiarity with and expertise over private sector methods and systems are unquestioned. However, I respectfully suggest that the board lacks the same familiarity with the abilities and interests of the civilian workforce. I don't think the DBB's members with business backgrounds would fail to take into account private sector workforces in assessing the operations of their firms. And I think it would be a mistake for the board to pass up opportunities to work with the exclusive representative of civilian employees to build upon the robust capabilities of the Department's in-house workforce. Obviously, I think the best way to institutionalize the DBB's formal consideration of the civilian workforce is through AFGE's membership on the board. However, I would certainly consider thoughtful alternatives. I think it's in the board's interest to have input and buy-in from civilian employees. Formal involvement by the exclusive representative of civilian employees would also enhance the credibility of the board with the in-house workforce, which cannot help but notice that many members of the DBB have done business with the Department and may do so again.

Following up on our discussion, I do hope that we can work with the board on encouraging the Department to develop a more rational approach towards workforce management. I think the following principles are consistent with how members of the DBB have managed their own businesses:

1. *Abandon caps and other arbitrary constraints on the size of the civilian workforce, so that it can instead be managed by budgets and workloads—if there is work to be done and money to pay for that work to be done, then that work should be assigned to the military, civilian, or contractor workforces, consistent with law, cost, policy, and risk mitigation.*



Would any business arbitrarily limit the amount of work it could perform in-house, so that additional work had to be outsourced even if it cost more or was not performed as well? Of course not. Nevertheless, the Pentagon, perhaps at the behest of the Office of Management and Budget, continues to impose a cap on the Department's in-house workforce that prevents managers from using civilian employees just because they are civilian employees, thus requiring instead the use of military and contractor workforces, regardless of important cost and performance considerations.

2. *Develop an inventory of contract services and integrate the results into the budget process, consistent with longstanding statutory requirements, so that the Department can better identify and control its significant service contract costs.*

The Department has shown that it can reduce its military and civilian workforces. Absent the inventory, however, the Department cannot enforce reductions in service contract spending. At a time when the Department must reduce its costs, the absence of an inventory of contract services will surely make inevitable disproportionate cuts in the military and civilian workforces. Would the businesses run by DBB members lack the necessary insight into their service contract costs? Of course not. Nevertheless, work on the inventory has stalled, and it is possible that a proven methodology that has buy-in from contractors, AFGE, the Congress, OMB, and senior level Pentagon officials could be junked in favor of an inferior alternative.

3. *Use the Department's costing methodology to determine whether it would save money for taxpayers if certain functions are insourced and use the Department's inventory of contract services to identify contracts that include inherently governmental, closely associated with inherently governmental, and critical functions that are inappropriate for private sector performance.*

The Army in particular generated significant savings from insourcing in a short period of time, according to Congressional testimony. The Government Accountability Office (GAO) reports that components have made little progress identifying and correcting instances in which at-risk functions have been wrongly outsourced. A modest insourcing effort early in the Obama Administration yielded significant savings, but it was shut down, in large part because of the cap on the size of the civilian workforce. Would any of the firms run by DBB members automatically foreclose insourcing options? Nevertheless, DoD, despite admissions by former Secretary Gates and former Comptroller Hale that civilian employees are generally significantly cheaper, particularly for the performance of long-term functions, has abandoned insourcing at precisely the time when it must economize.

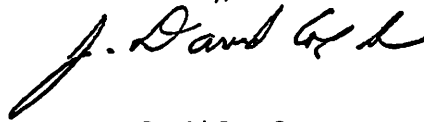
I look forward to reading your report when it is released next week. Your emphasis on analytics and reliance on cost data is to be commended. Although we have concerns with DoD's costing methodology, which are shared by GAO, AFGE still believes that it should be used in assigning new work and insourcing privatized work. Maybe we can work together on ensuring the Department uses that costing methodology in all appropriate circumstances?

I was encouraged by your rejection of arbitrary cuts and automatic outsourcing, which, unfortunately, have been staples of earlier DBB reports. I did, however, want to let you know about the reintroduction of legislation that would impose an arbitrary 15% cut on the civilian workforce, or 120,000 jobs. Thankfully, this legislation was rejected last year (H.R. 4257) on a bipartisan basis, and

Congress should dismiss it again this year. In a recent press release, the author of this bill (H.R. 340) boasts of the DBB's support: *"Reduce our Defense civilian workforce by 15% by FY 2022. This percentage was recommended by the Defense Business Board, a trusted, authoritative, and independent source of expertise."* It seems to me that the first order of business for the DBB should be to repudiate this egregious legislation. Mr. Chairman, you have my word that I will not abuse my telephone privileges, but this is a matter I would like to follow up on with you personally.

Thanks again for our meeting. I look forward to renewing our discussion before too much time has passed.

Sincerely,

A handwritten signature in black ink, appearing to read "J. David Cox, Sr.", written in a cursive style.

J. David Cox, Sr.
National President

cc: Deputy Secretary Robert Work

HANDOUTS

MEETING AGENDA

DEFENSE BUSINESS BOARD
The Pentagon, Washington, D.C.
Room 3E863

Thursday, January 22, 2015

Purpose of the meeting: The Defense Business Board will receive presentations and recommendations on the “Guiding Principles to Optimize DoD’s Science and Technology Investments” and the “Transforming DoD’s Core Business Processes for Revolutionary Change” Task Group studies.

8:30 AM Convene with Administrative Remarks
Marcia Moore, Designated Federal Officer

8:30 – 9:50 AM **Task Group Presentation:**

- *“Guiding Principles to Optimize DoD’s Science and Technology Investments”*

9:50 – 11:30 AM **Task Group Presentation:**

- *“Transforming DoD’s Core Business Processes for Revolutionary Change”*

11:30 AM Adjourn



DEPUTY SECRETARY OF DEFENSE
1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

JUN 17 2014

MEMORANDUM FOR CHAIRMAN, DEFENSE BUSINESS BOARD

SUBJECT: Terms of Reference - "Guiding Principles to Optimize DoD's Science and Technology Investments"

The Department of Defense (DoD) spends about \$12.0 billion annually on science and technology (S&T). This funding is essential for building the knowledge and technology base for future DoD capabilities and is the source for critical "leap-ahead" technologies that advance DoD's warfighting capabilities.

Since the Defense Reform Initiative in the 1980s, DoD has increasingly relied on its contractor base to perform its research and development (R&D). This practice may lead to the unintended consequence of ignoring areas uniquely important to DoD. Additionally, DoD's R&D budget is projected to decrease commensurate with overall defense budget reductions resulting from the Budget Control Act of 2011. The downward trend in the size of DoD's R&D investment as a portion of gross domestic product compels DoD to investigate leveraging investments made by the larger economy. Another consideration is the scale of R&D performed by others in areas where DoD is not engaged or does not have the requisite workforce or infrastructure. The private sector, universities, and others are aggressively pursuing emerging technologies, possibly causing DoD to lag behind the larger R&D community.

Given the anticipated government spending reductions and increased investment from private sector, the DoD needs a portfolio management strategy and the right tools to ensure its R&D funds are directed to achieve maximum benefits for the Department. To inform this effort, I am establishing a Task Group under the Defense Business Board (DBB), DoD's advisory board tasked with providing independent advice and recommendations on best business practices. The DBB Task Group will conduct a study with the objective of reviewing the management processes used by companies and organizations, known and accepted for world-class innovation, to make decisions to optimize their S&T investments and the processes they use to forecast and plan for future R&D. The results of the study will be given to the Secretary of Defense following the DBB's October 2014 meeting and will address:

- Business decisions (e.g. R&D projects, capital investment, workforce) resulting from emerging S&T and how the decisions vary across the following types of organizations:
 - Global 500 corporations;
 - Venture capital and private equity firms;
 - Technology startups; and
 - Universities and research centers
- How can DoD learn from outside R&D investment best practices to better direct and leverage basic research funds to benefit the defense mission;



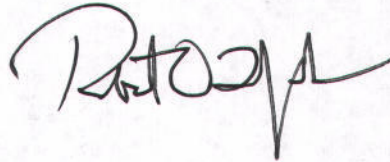
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- How can DoD better invest in R&D to attract fledgling technology development companies that focus on emerging capabilities?

In accordance with DoD policy, Ms. Roxanne Decyk and Messrs. Philip Odeen, Howard Cox, Jr., and Jack Zoeller are designated as members of the Task Group, for the life of this study. Mr. Odeen is also designated as the chair of the Task Group.

As a subcommittee of the Board, and pursuant to the Federal Advisory Committee Act of 1972, the Government in the Sunshine Act of 1976, and other appropriate federal statutes and regulations, this Task Group shall not work independently of the Board's charter and shall report its recommendations to the full DBB for public deliberation and approval. The Task Group does not have the authority to make decisions on behalf of the Board, nor can it report directly to any federal representative. The members of the Task Group are subject to 18 US Code Section 208, which governs conflicts of interest.

A handwritten signature in black ink, appearing to read "Philip Odeen". The signature is stylized and cursive, with a large initial "P" and a long, sweeping underline.

DEFENSE BUSINESS BOARD
ERRATA SHEET
Open Meeting
January 22, 2015
8:30 AM to 11:30 AM
Pentagon, Washington, D.C.

The slide #14 of the Guiding Principles to Optimize DoD's Science and Technology Investments Task Group's presentation was updated to correct typos that did not affect the findings and recommendations of the DBB.

1. Bullet I: 'VCJS' was corrected to 'VCJCS'.
2. Bullet II, first sub-bullet: 'FAR Part 15' was corrected to 'FAR Part 12'.

DEFENSE BUSINESS BOARD



Optimizing DoD's Science and Technology Investments

January 22, 2015

Overview

- **DoD Science and Technology budgets large but declining**
 - \$12B Base Budget
 - \$30B when including weapons development with DoD labs
 - 6.1- 6.3 Budgets down 18% since 2010

- **Our tasking: Key Questions**
 - How can DoD focus its S&T investments in a period of declining budgets to support future warfare capabilities?
 - What can DoD learn from the way private sector manages its S&T spending?
 - How can DoD leverage its S&T investments by exploiting the much larger private sector investments?
 - How can DoD focus its S&T resources in areas where the private sector is poorly suited to contribute?

This DBB Task Group report should be considered in conjunction with the 2014 DBB Task Group report on Innovation



Methodology

- Reviewed current/past DoD strategic and financial documents and reports/studies from think tanks and government agencies
- Evaluated efforts in private/public sectors and DoD experience to identify practices that resulted in both success and failure
- Conducted interviews with individuals from the private sector and government, including:
 - Current and former CEOs and Chief Technology Officers (CTOs) of Fortune 500 companies with experience in leading successful technology developments
 - Senior defense industry executives with responsibility for their companies' R&D activities
 - Private sector individuals with knowledge of the small and emerging companies focused on cutting edge technology
 - Current and former DoD leaders with responsibility for the full range of S&T and R&D activities
- Task Group
 - Mr. Phil Odeen (Chair), Mr. Howard Cox, Ms. Roxanne Decyk, Mr. Jack Zoeller, Mr. John O'Connor (Consultant), and CDR Bruce "Crash" Defibaugh, USN (DBB Military Representative)



Findings - Overview

- I. Commercial S&T Best Practices differ markedly from those of DoD
 - Companies tightly link S&T to corporate business strategy
 - Top level leadership (CEO/COO) is deeply involved in managing S&T
 - Companies have structured S&T management processes with metrics, milestones, and regular reviews
 - Reviews result in tough choices: continue, kill, or double down
 - Compensation system reinforces the S&T process, rewarding success and “intelligent failure” – Don’t penalize taking sound risks
 - Companies make extensive use of partnerships with universities, small companies, and venture funds to augment the in-house development staff
 - Start-up companies cluster around major research universities which attract many other cutting edge companies
 - Crowdsourcing is a growing practice that has proven successes in government as well as non-profits and the private sector



Case Study – Large Pharmaceutical Company

R&D is central to corporate success; New products are their life blood

S&T strategy is the focus of corporate leadership

- What are the unmet medical needs 10 years in the future?
- What transformational products are possible given the evolution of science?
- Will the market pay for it?
- Outcome – a few disease areas and a number of high pay-off drug targets with budgets and timelines

Technology development process is tightly managed

- Data driven milestones and metrics
- Rigorous reviews at each milestone – continue, double-down, or kill
- Hold researchers accountable for success but reward intelligent failure
- Collaborate with academia and small genetic medical companies

R&D Pipeline is Closely Managed

- Management done by senior leadership team – use outsiders and devil’s advocates
- Product teams must be willing to take risks yet have a culture of “truth seeking”
- Create environment for teams to work productively, attract talent
- Compensation system rewards progress with bonuses

Note: two other private sector case studies are in the appendix



Findings- Overview

II. DoD faces a number of S&T challenges

- DoD strategy is policy driven; not specific enough to be used as a basis for S&T priorities
- There is no DoD wide or Service S&T strategy or clear, enforceable priorities
- Large, complex lab structure is loosely coordinated
- Aging, stove-piped workforce is inwardly focused
- Inflexible compensation systems make it difficult to reward (or incent) focus and success
- Industry's Independent R&D spending (\$4.5B) is loosely tied to DoD technology needs

III. DoD processes are poorly structured to attract cutting edge commercial technology

- Poor visibility of cutting edge technologies; limited interactions with the high tech sector
- Many innovative companies have little interest in working with DoD
- There are many impediments for companies trying to work with DoD
- Impediments are compounded by limited experience dealing with true commercial companies and a mindset based on interaction with the defense industrial base

IV. Recent DoD initiatives show promise to remedy some of these problems

- The Long Range Research and Development Plan initiative
- "Reliance 21" to coordinate 6-1 to 6-3 spending across DoD
- Defense Innovation Marketplace to facilitate outreach

Recommendations - Overview

- I. VCJS, USD(AT&L), and USD(P) should establish a structure and process to develop an S&T strategy, set S&T priorities, identify objectives and metrics, track progress and allocate funds
 - Senior leadership must drive the strategy and priorities
 - Supporting Service strategies would support the strategy
 - Senior OSD/JS officials manage implementation
 - Regular reviews are conducted that result in tough choices

- II. USD(AT&L) should take steps to more aggressively exploit commercial technology which is more advanced in most areas critical to military capabilities
 - This requires a broad effort to remove impediments, e.g., use FAR Part 12
 - Concerns over the impact of IP and ITAR must be addressed
 - Must reach out to the private sector to be aware of technology, e.g., conferences, one-on-one meetings, and locating S&T cells near technology hubs
 - The 2014 DBB Task Group on Innovation provides a detailed roadmap to address this challenge

- III. USD(AT&L) should ensure Defense Industry is provided a more in-depth understanding of DoD's prioritized technology needs
 - Access in detail to S&T priorities would be of great value
 - A role in the requirements process would also be valuable

Recommendations - Overview

- IV. The R&D establishment, led by ASD(R&E) should focus its internal S&T effort on military unique technologies and not replicate technology available in the private sector
 - Should be based on an assessment of areas where the private sector has limited capabilities
 - Service labs would manage defense unique S&T programs – combined in-house/contractor effort
 - Labs also need the ability to vet (not replicate) commercial technologies

- V. The S&T strategy should include requirements for the capabilities of the DoD workforce and facilities needed to execute the strategy
 - Assess the workforce to determine where added skills are needed
 - Greatly strengthen the rewards system for successful performance
 - Evaluate DoD's S&T infrastructure to drive future investment decisions (consolidate and upgrade)

Summary

- Commercial S&T best practices differ fundamentally from DoD's
- DoD should learn from these practices:
 - Develop a clear S&T strategy and priorities, driven by the senior civilian and military leadership, and allocate funding accordingly
 - Establish a rigorous management process to track progress, address issues, and make tough choices when programs get into trouble
 - Attack the impediments that frustrate DoD's efforts to exploit commercial technology and deter commercial companies from contributing
 - Revamp the compensation system to reward successes
- Despite budget pressures, DoD still has the resources to invest in the capabilities it needs for the future
- The commercial sector can, and should be a major provider of technology to meet DoD military capabilities

DEFENSE BUSINESS BOARD



Questions?

DEFENSE BUSINESS BOARD



Appendices

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 - COI Roadmap
- Defense Innovation Marketplace Background
- In-Q-Tel
 - Background
 - Process
- Centre for Defence Enterprise Background
- Crowdsourcing
- Company Case Studies
 - Large Petroleum Services
 - Large Pharmaceutical
 - Large Energy



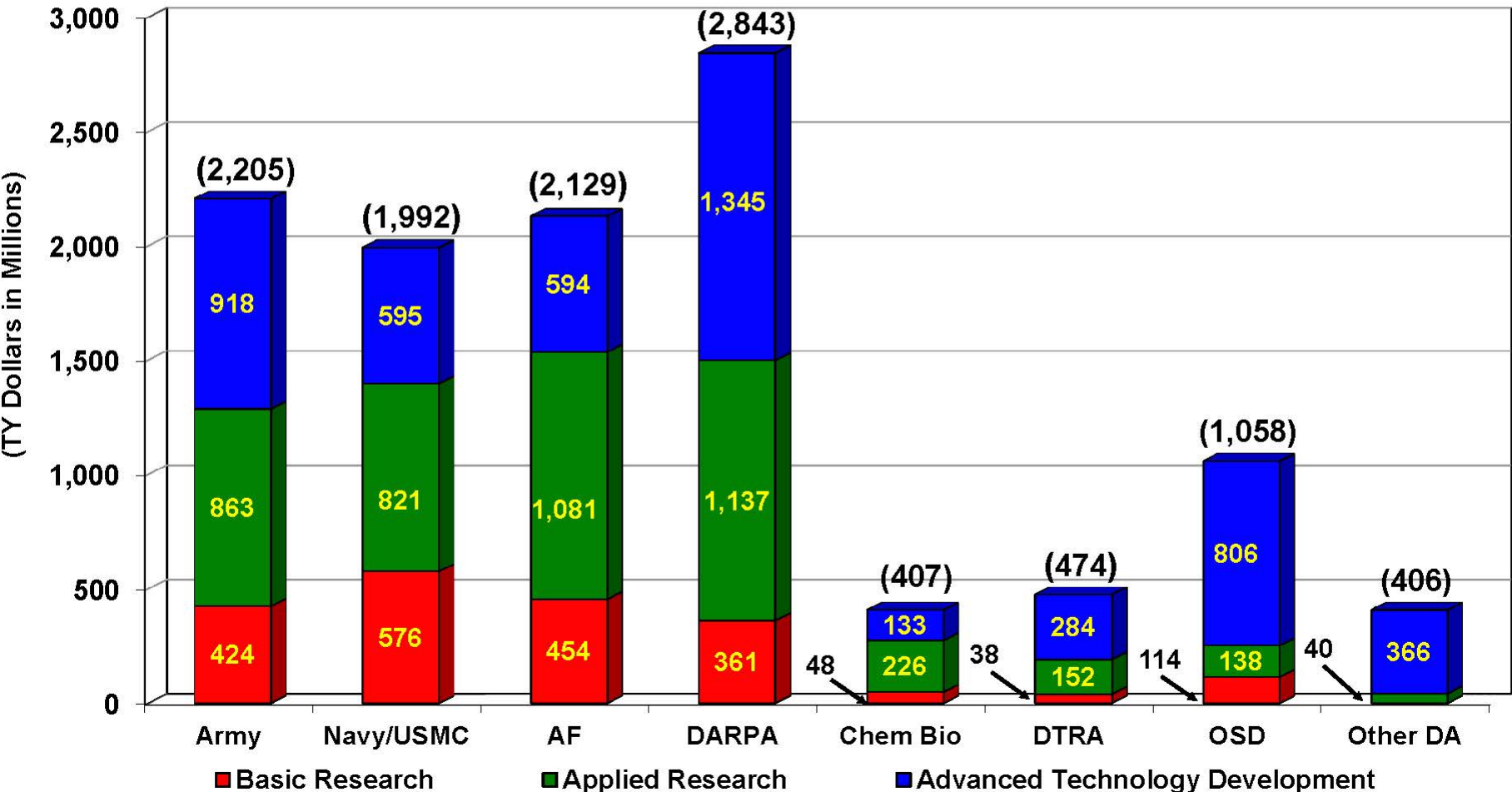


FY 2015 DoD S&T Budget Request

Total FY 2015 S&T request = \$11.51B

Total FY 2014 S&T Request = \$11.98B

Army = 2,205 Navy = 2,033 AF = 2,270 DARPA = 2,793 ChemBio = 449 DTRA = 495 OSD = 1,147 Other DA = 591



DoD Funding Classification System

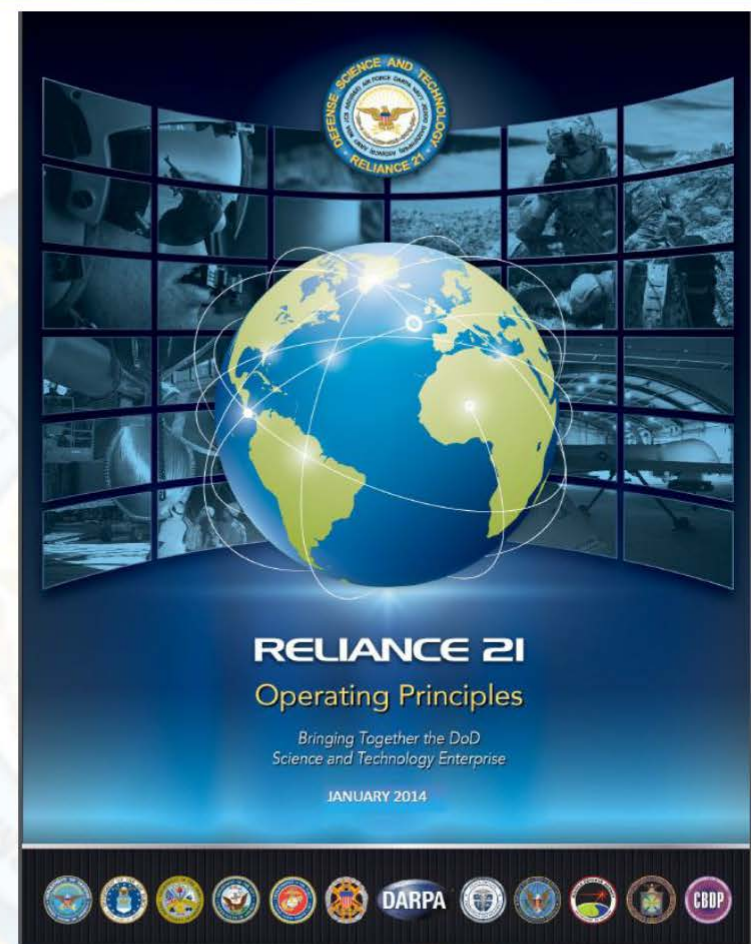
Classification	Description
<i>Science and Technology Activities</i>	
Basic research (6.1)	Scientific study for greater understanding of phenomena without specific applications in mind. Farsighted, high payoff research.
Applied research (6.2)	Expansion and application of knowledge to understand the means to meet a specific need. Development of useful materials, devices, systems or methods. Official RDT&E estimates of 6.2 do not include Defense Health Research, though this program is included in overall AAAS estimates of the total DOD science & technology budget.
Advanced Technology Development (6.3)	Development and integration of subsystems and components into model prototypes for field experiments and/or tests in a simulated environment. Proof-of-concept testing.
<i>Weapons Development Activities</i>	
Advanced Component Development and Prototypes (6.4)	Evaluation of integrated technologies or prototypes in realistic operating environments. Technology transitions from laboratory to operational use.
System Development and Demonstration (6.5)	Development of mature systems in preparation for actual production. Prototype performance established at or near planned operational system levels, including live fire testing.
RDT&E Management Support (6.6)	Funds to sustain or modernize installations or operations for the performance of general RDT&E, including test ranges, military construction, and maintenance for laboratories and test vehicles.
Operational System Development (6.7)	Efforts to upgrade systems that have been fielded or have received approval for full production in the near term.

ADAPTED FROM DOD FINANCIAL MANAGEMENT REGULATION 7000.14-R, VOLUME 2B, AVAILABLE AT [HTTP://COMPTRROLLER.DEFENSE.GOV/FMR/02B/](http://COMPTRROLLER.DEFENSE.GOV/FMR/02B/)



What is Reliance 21?

- **Reliance 21 is the overarching framework of the DoD's S&T joint planning and coordination process**
 - **Reliance 21 has roots that go back several decades, and has been continually renewed and refreshed**
- **An ecosystem of cross-cutting collaborative teams that enable information sharing, alignment of effort, coordination of priorities and support for the scientists and engineers across the Department**
- **Strengthens coordination and efficiency to ensure the utmost value from investments in science and technology**



Found at
www.DefenseInnovationMarketplace.mil and
www.acq.osd.mil/chieftechologist/index.html



What are COIs?

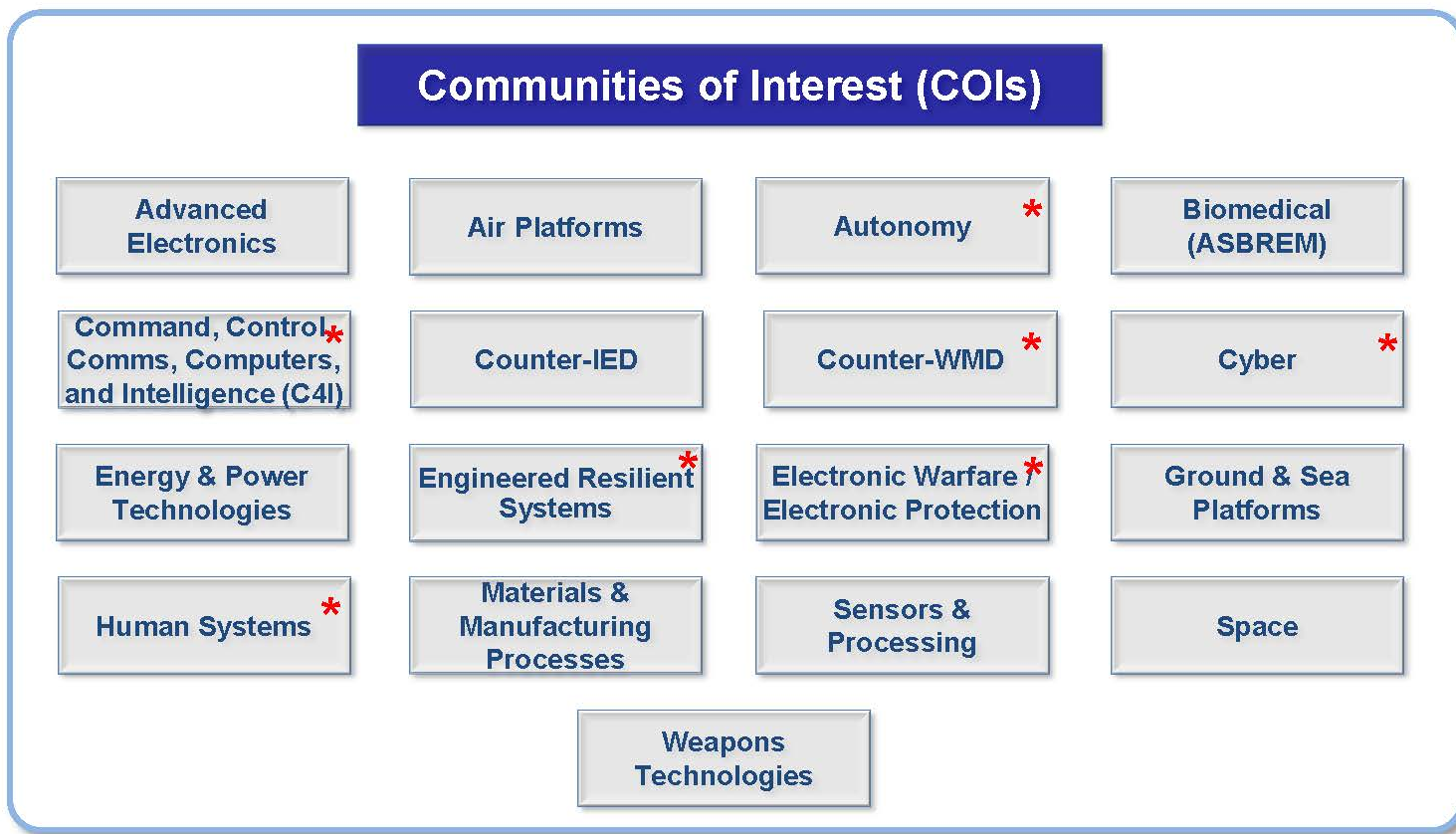
- 1) COIs (Communities of Interest) are groups of scientists and engineers who are subject matter experts in specific cross-cutting technology areas where there is substantial investment across multiple Components**
- 2) COIs were established in 2009 as a mechanism to encourage multi-agency coordination and collaboration in cross-cutting technology areas with broad multiple-Component investment.**
- 3) COIs provide a forum for coordinating S&T strategies across the DoD, sharing new ideas, technical directions and technical opportunities, jointly planning programs, measuring technical progress, and reporting on the general state of health for specific technology areas**
- 4) COIs are led by Steering Groups of senior technical leaders who take on a leadership role for their area**
 - Build and implement strategic roadmaps**
 - Empowered to identify gaps and issues, and make recommendations to the S&T ExCom**
 - Identify lead / co-lead / follow relationships across the Components**
 - Identify opportunities to leverage external investment and expertise**



Communities of Interest



There are 17 COIs up and running, with many new Steering Group members, and significant participation from the Services



* Denotes COIs that cover the DoD cross-cutting S&T Priorities (Data-to Decisions is found in C4I)



Building COI Roadmaps

Strategic outlook, 10 to 15 years



- **What are technology opportunities / goals / objectives?**
- **What is military impact of meeting those technical targets?**
 - Technical opportunities that will enable new missions or capability, or achieve some game changing level of performance
- **What technical plans are in place, and where are the gaps?**
 - When does it need to happen to make a difference?
 - What are recommended approaches to close gaps / deliver opportunities?
- **What are the opportunities to leverage external investment / expertise?**
 - Cross-Govt, Industry, Academia, and International

Defense Innovation Marketplace

CONNECTING INDUSTRY & DoD

- Established in 2010 as part of Better Buying Power 1.0 initiative. Goal is to enable communication between DoD and Industry on IR&D projects and investments
- The Defense Innovation Marketplace is a centralized resource for market research:
 - For Industry to learn about Department of Defense (DoD) S&T/R&D investment priorities, capability needs and technology interchanges
 - For Government to access search tools to assess and then leverage industry IR&D projects for current and future programs

- From <http://www.defenseinnovationmarketplace.mil/index.html>

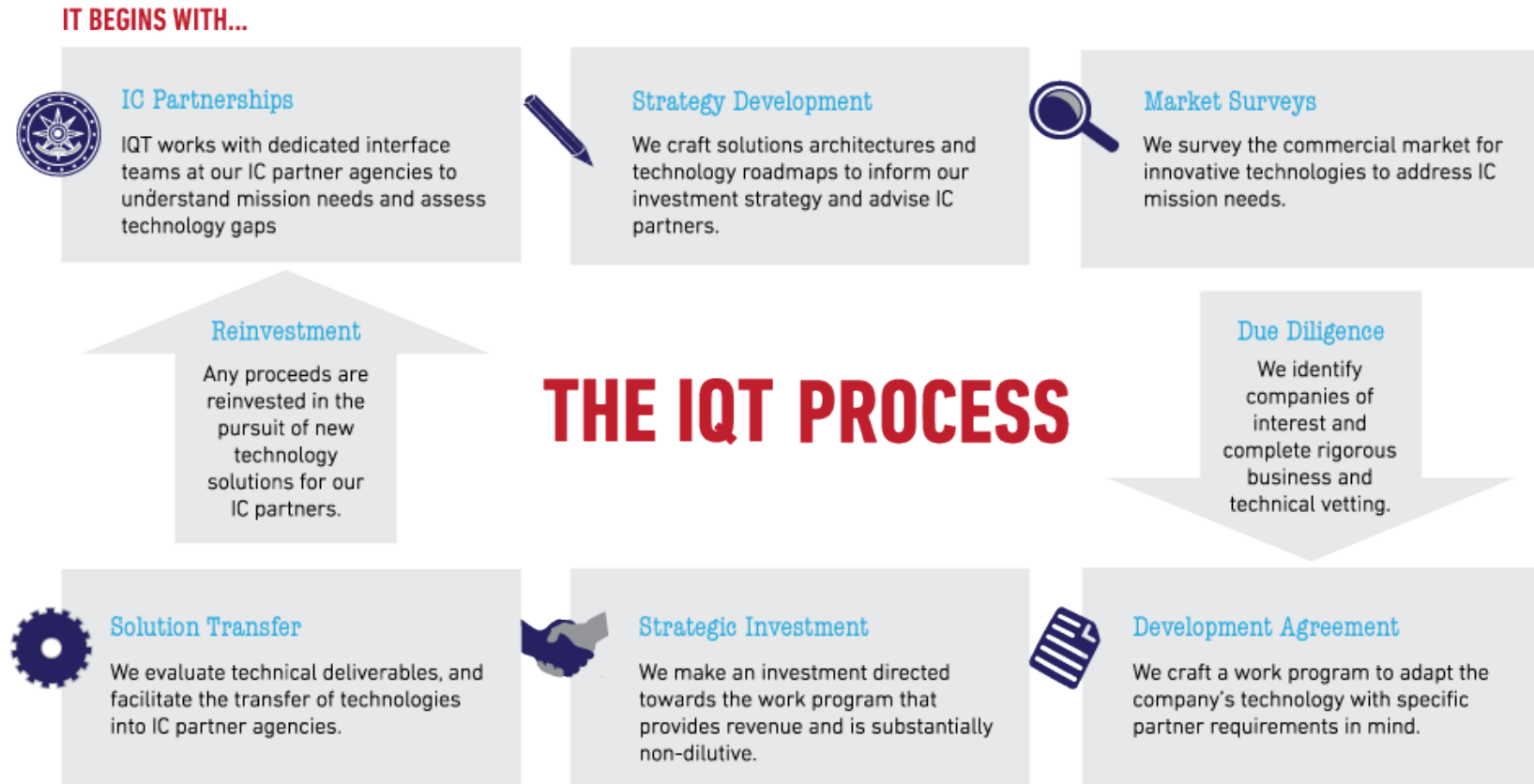
In-Q-Tel Background

- Launched in 1999 as an independent, not-for-profit organization, In-Q-Tel (IQT) was created to bridge the gap between the technology needs of the U.S. Intelligence Community (IC) and emerging commercial innovation. We identify and invest in venture-backed startups developing technologies that will provide “ready-soon innovation” (within 36 months) vital to the IC mission. These technology startups are traditionally outside the reach of the IC; in fact, more than 70 percent of the companies that IQT invests in have never before done business with the government.
- As a strategic investor, the IQT model is unique. IQT Investments accelerate product development and add mission-critical capabilities with the sole purpose of delivering these cutting-edge technologies to IC end users quickly and efficiently. By focusing on commercial technologies and investing side-by-side with venture firms, IQT leverages outside funding to help develop sustainable technologies using off-the-shelf products instead of custom-built solutions. On average, for each dollar that IQT invests in a company, the venture capital community invests more than nine dollars.

- From IQT website
- <https://www.iqt.org/about-iqt/>

In-Q-Tel Process

- The advantages of the IQT model are significant: lower initial and long-term costs, faster development, and ongoing product enhancements to meet IC mission requirements.



- From IQT website
<https://www.iqt.org/about-iqt/>



Centre for Defence Enterprise

- The Centre was established by the United Kingdom Ministry of Defence (MOD) in 2008 to find technology solutions especially from small and medium sized businesses
 - About £25M have been disbursed in over 500 contracts
 - Most concepts are early technology needs (TRL 2-4)
 - Roughly half has gone to small and medium sized businesses
 - The current annual budget is £3M
 - Other agencies use the Centre on occasion
- Companies respond on-line to one of the Enduring Challenge Competitions or periodic Themed Competitions
 - A brief proposal is submitted using a prescribed format and the Centre responds in about 45 days
 - If found interesting, contracts ranging from £40K to £80K are given for the company to do proof of concept research for the proposed solution
 - This process lasts 3 to 9 months
 - At that point, if promising, follow on contracts are awarded, usually in 2 to 3 months

- <https://www.gov.uk/government/organisations/centre-for-defence-enterprise>

Centre for Defence Enterprise cont'd

- Enduring Challenge Competition Areas* are:
 - Protection
 - Power
 - Lethality
 - Mobility
 - Lower Ownership cost
 - Situational Awareness
 - Communications
 - Data
 - Human Performance
- *each challenge area has subsidiary areas.
- A recent Themed Competition was for highly robust ground platforms with contract awards up to £500K
- CDE also holds webinars to outline technology needs in specific areas. A recent example is “Detection of Airborne Chemical Hazards”
- The MOD has reported a number of successful developments flowing from the Centre process. Example:
 - An imagery based system to locate hostile forces from the air, combining a new vision based tracking system with GPS
 - E-textiles which allow electronic power and data to pass through material
- Recent MOD White Paper states the process will be expanded

- <https://www.gov.uk/government/organisations/centre-for-defence-enterprise>

What is Crowdsourcing?

- Crowdsourcing is the process of getting work or funding, usually online, from a crowd of people. The word is a combination of the words 'crowd' and 'outsourcing'. The idea is to take work and outsource it to a crowd of workers
- Famous Example: Wikipedia. Instead of Wikipedia creating an encyclopedia on their own, hiring writers and editors, they gave a crowd the ability to create the information on their own. The result? The most comprehensive encyclopedia this world has ever seen
- Crowdsourcing & Quality: The principle of crowdsourcing is that more heads are better than one. By canvassing a large crowd of people for ideas, skills, or participation, the quality of content and idea generation will be superior

- From Daily Crowdsourcing

<http://dailycrowdsourcing.com/training/crowdsourcing/what-is-crowdsourcing>



Case Study 1 – Large Petroleum Services Company

I. Approach

- R&D driven by company's top-down corporate strategy coupled with an "outside-in" process requiring business units to identify and prioritize customer needs, based on the strategy. Well conceived needs, not "blue sky." Believe collaboration between R&D staff and line staff is the best way to innovate
- Disruptive technologies only get a small part of the R&D investment. Can only take so much risk. Need to adequately fund the core business. Need metrics for both core and disruptive R&D efforts

II. Corporate research must be mission oriented

- No science for sake of science – let universities do that (though may partner sometimes)
- If critical to mission, they do some basic research (e.g., on materials)
- Research effort is organized by mission. This keeps R&D relevant to the corporate strategy. Most R&D done by mission teams, only a little done centrally
- Scientists and engineers in mission-oriented R&D units report to the mission line leader, but are considered part of the corporate R&D structure
- Teams are cross-disciplinary and often include ultimate users of S&T
- Rotate field engineers into corporate R&D organization. Improves connectivity and makes central R&D more reliable
- Manufacturing and development must be integrated. Computer-aided design systems help make this happen
- If the prize is big enough, consider establishing parallel work efforts but with rigorous stage-gate management

Case Study 1 – Large Petroleum Services Company (cont'd)

II. Corporate research must be mission oriented cont'd

- Sharing across mission focused R&D teams is challenging. Have an annual meeting to cross-fertilize, which helps but does not solve the problem
- Central S&T budget funds projects relevant to multiple business units
- Project management based on stage gate reviews that assess the spending risks and timelines at every decision point/milestone

III. Innovation Workshops are important part of process

- Set forth the problems and challenges for the top 5 issues. Very open, no dumb ideas
- Sometime decide to outsource the development if company lacks the needed core competence



Case Study 2 – Large Pharmaceutical Company

I. R&D is central to corporate management

- New products are the lifeblood of the company. Strategy is driven by an assessment of the disease areas in order to set priorities. Look at unmet medical needs, 10 years in the future.
- Where is the science evolving? Which transformational products will be possible? What innovations are possible and will people pay for them? Use external experts to challenge in-house thinking
- Clarity of focus is critical
- High failure rates (90%) at very high cost. Working to improve success rates. Use right talent with clear missions and right time frame. Hold them accountable but reward intelligent failure
- Use data-driven milestones. Rigorous reviews at each stage gate. Often kill or double down.
- Cannot do all R&D internally. Assess own core competence, and if additional capability needed, can it be acquired? Often work with Venture Capitalists and co-invest in cutting edge companies to get access to best people and products

II. Management of the pipeline

- Done by senior leadership team. Key elements of the process:
 - Have two forums, early and late experiments
 - Do the product teams have a culture of “truth seeking”?
 - Do the product teams bring forward the best solution?
 - Use rigorous external reviewers and devil’s advocates
 - Reward (bonuses) progress and recognize the right process/experiments and move to next stage. Are considering rewards for intelligent failure if they failed for the right reason. Want people to be willing to take more risk
 - Collaborate with academia and small, genetic medical companies. Partnership is a big part of their strategy
 - Increasingly focused on making choices in their product lines, divest low priority units
 - Talent is key; attract needed talent, create environment for teams to work productively

Case Study 3 – Large Energy Company

I. Strategy

- R&D must be aligned with strategy of company. Not how much you spend, but how you spend it that creates value
- R&D must meet business needs. Target specific technologies and time frames. Do not do “blue sky” research
- Governance by Technology Advisory Board made up of senior corporate leadership (except Chairman). Includes business unit leaders
- Goal: get good technology into the businesses and deployed

II. Process: The Technology Advisory Board assesses:

- How company compares to competitors. The outside world is the technology landscape
- Where do we stand in various categories of technology? Should we build or buy? When is technology required? How can long timelines be cut in half?
- Look for ways to try technology early – learn from failure
- Assess technology readiness using NASA scale TRL 1-8
- Keep competitive technology world in view: universities, competitors, where dollars are spent

Case Study 3 – Large Energy Company (cont'd)

III. Management

- Efficiency and alignment only works if governance and networking also work. The company is decentralized but cannot let each unit do their own thing. Each business unit has a technology plan
- Business units must be involved in the technology plan – they must buy in
- Sharing current information on S&T across business units prevents reinvention of the wheel
- Crown jewel technologies get the resources and are done in-house. Reach out to others, leverage them for lower priority technology. Work with other companies, sometimes competitors, for pre-commercial technology
- Have 16 to 18 strategic university partners (MIT, Texas, Texas A&M, CO School of Mines, etc.). Another 20 to 30 are used in particular areas of technology. Have an executive sponsor for each university. Also oversees hiring against a strategic workforce plan
- Work with DOE labs. Work on fracking, CO² sequestration technologies. Set up “Skunk Works”-type collaboration with Los Alamos
- Work with VCs to find new technology startups; acquire 20% participation and get Board seat
- Identify quick wins and communicate them in context of big picture – visibility of the data helps people make better decisions



DEPUTY SECRETARY OF DEFENSE
1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

OCT 15 2014

MEMORANDUM FOR CHAIRMAN, DEFENSE BUSINESS BOARD

SUBJECT: Terms of Reference – “Transforming Department of Defense Core Business Processes for Revolutionary Change”

The Department of Defense (DoD) spends about \$100B annually on core business processes (i.e., human resource management, healthcare management, financial management, acquisition and procurement, logistics and supply, and real property management) that support our mission. Private sector businesses, particularly large global corporations with business process challenges analogous to those of DoD, have experienced significant cost savings through the implementation of process redesigns and agile reference architectures. While DoD has improved its core processes and the supporting information technology (IT) hardware and software over the last decade, the Department still lags behind the commercial sector. The application of commercial sector lessons learned, combined with modern, commercially-derived IT approaches, may enable the Department to save money and resources while improving mission performance.

My goal is to modernize our business processes and supporting systems and create an agile enterprise shared services organization in order to reduce costs, maximize return on investment, and improve performance while ensuring we maintain system security. To ensure our efforts leverage best practices, I am establishing a Task Group under the Defense Business Board (DBB) to review and recommend changes to the Department’s current plans for enterprise modernization. The task group’s recommendations should be specific and actionable in order to enable the creation of an agile enterprise shared services organization. The Task Group should:

- Identify how private sector enterprises create a cost conscious culture and propose how DoD might do the same. Your analysis should include how private sector enterprises consolidate IT “utilities” to create efficient and agile organizational performance. Consider the use of third parties to evaluate and recommend ways to best reconfigure all or part of DoD’s supporting business processes and their associated IT. Consider ways a vendor analysis work product might be used to derive needed financial and transaction data for application to DoD.
- Consider a conceptual roadmap that will support a staged modernization of an OSD Principal Staff Assistant organization. Recommend how best to enable the construction and operation of the new technology “stack” to support redesigned business processes.
- Recommend an approach for the Department to establish a means (such as a cash flow model) to identify and quantify the economic value of modernization on a productivity basis. Propose how enterprise modernization can best be structured to bring innovation and agility to the “end user” community to gain additional efficiencies.




OSD011861-14

- Make recommendations to the DoD Enterprise Roadmap to address shared approaches to IT services and all of the above.
- Consider utilizing the results and analyses of previous studies relevant to this analysis.

The DBB will provide its findings and recommendations to the Secretary of Defense or the Deputy Secretary of Defense, informed by the Task Group's work, no later than its January 2015 quarterly meeting. The Offices of the Deputy Chief Management Officer; Chief Information Officer; and Under Secretary of Defense for Acquisition, Technology and Logistics will serve as DoD liaisons for this project and provide technical assistance as needed. The Joint Chiefs of Staff will also support, as required.

In accordance with DoD policy, Ms. Roxanne Decyk and Messrs. Kenny Klepper, Philip Odeen, and Emil Michael are appointed as members of the Task Group, pursuant to 5 U.S.C. § 3109, to serve as special and government employee members for the life of this study. Ms. Decyk is also designated as the chair of the Task Group. These four individuals are also currently appointed as members of the DBB.

As a subcommittee of the DBB, and pursuant to the Federal Advisory Committee Act of 1972, the Government in the Sunshine Act of 1976, and other appropriate federal statutes and regulations, this Task Group shall not work independently of the Board's charter and shall report its recommendations to the full DBB for public deliberation and approval. The Task Group does not have the authority to make decisions on behalf of the Board, nor can it report directly to any federal representative. The members of the Task Group are subject to 18 U.S.C § 208, which governs conflicts of interest.



cc:
Chairman of the Joint Chiefs of Staff
Under Secretary of Defense for Acquisition, Technology
and Logistics
Deputy Chief Management Officer
Department of Defense Chief Information Officer

DEFENSE BUSINESS BOARD



Executive Summary

Transforming DoD's Core Business Processes for Revolutionary Change

January 22, 2015

The Bottom Line

- We are spending a lot more money than we thought
- We can see a clear path to saving over **\$125 billion** in the next five years
- The greatest contributors to the savings are early retirements and reducing services from contractors
- Early mobilization is the single biggest lever . . . Every billion saved in 2016 is worth 5 billion FY16-FY20 due to the compounding effect
- Retaining institutional knowledge (keeping the “masters”) within the organization is important. We propose granting “retention bonuses” in 2016 and 2017 to these key players as a powerful enabler
- Significant legacy technology obsolescence must be addressed to achieve agility and innovation going forward



6 Core Business Processes (CBP)

Admin costs ~\$670 billion FY 16-20

INNOVATION AND AGILITY COMMAND CENTER

Business functions	INNOVATION AND AGILITY COMMAND CENTER				Totals (workforce / cost)
	Army	Air Force	DoN	4 th Estate	
HR Management	\$4.9B	\$2.1B	\$3.1B	\$1.3B	84k workforce \$11.4B
Health Care Management	\$1.6B	\$0.5B	\$0.7B	\$1.3B	30k workforce \$4.1B
Financial Flow Management	\$1.1B	\$1.4B	\$1.1B	\$1.8B	41k workforce \$5.4B
Supply Chain & Logistics	\$14.8B	\$10.1B	\$16.9B	\$10.2B	457k workforce \$52.1B
Acquisition & Procurement	\$12.2B	\$8.5B	\$12.9B	\$4.2B	207k workforce \$37.5B
Real Property Management	\$8.8B	\$4.2B	\$8.3B	\$1.9B	192k workforce \$22.6B
Totals (workforce / cost)	337k \$43.4B	216k \$26.8B	345k \$43.2B	116k \$20.6B	1,013k baseline workforce \$134B baseline cost

Innovation and agility support services

Note: Fully burdened rate for CIVPERS and MILPERS based on CIVPERS Fringe Benefits Rates & Service Composite Rates. Includes active military personnel only. Numbers may not add due to rounding



Over 1 million people work in these six processes



The workforce equivalent of **40 Pentagons** are involved in the six processes

HR Management



x 3 1/2

Health Care Management



x 1

Financial Flow Management



x 1 1/2

Supply Chain & Logistics



x 18

Acquisition & Procurement



x 8 1/2

Real Property Management



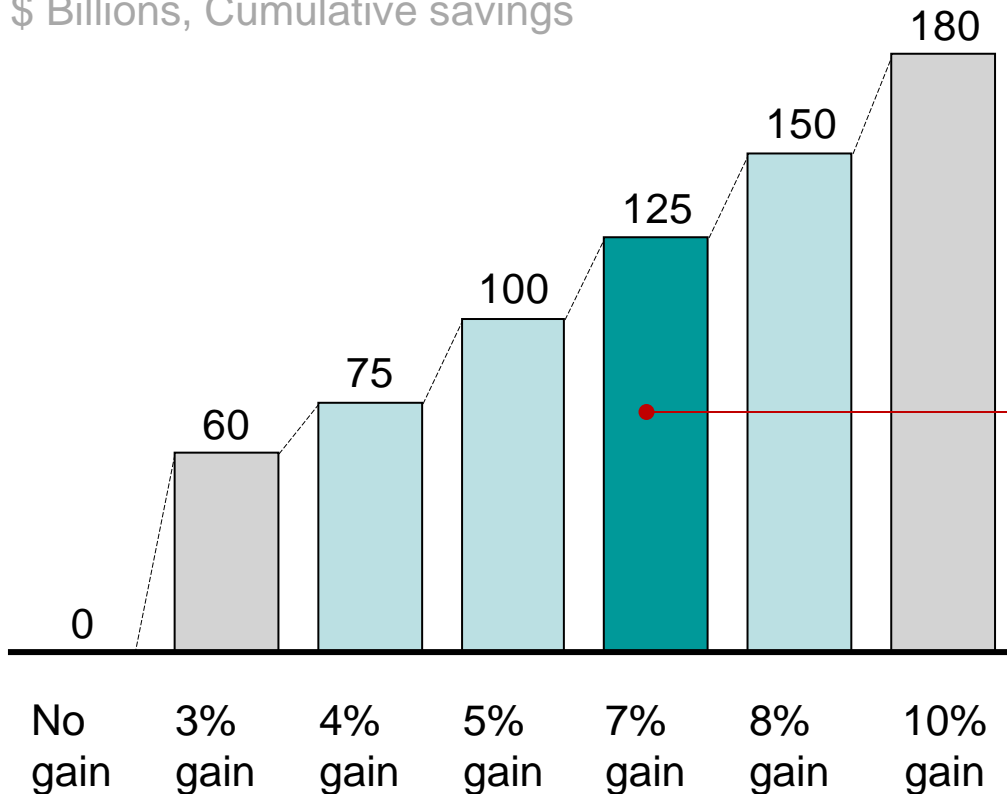
x 7 1/2



4-8% annual productivity gain for DoD is a realistic goal

Cumulative savings over FY16-20

\$ Billions, Cumulative savings



Annual productivity gain from FY16-20

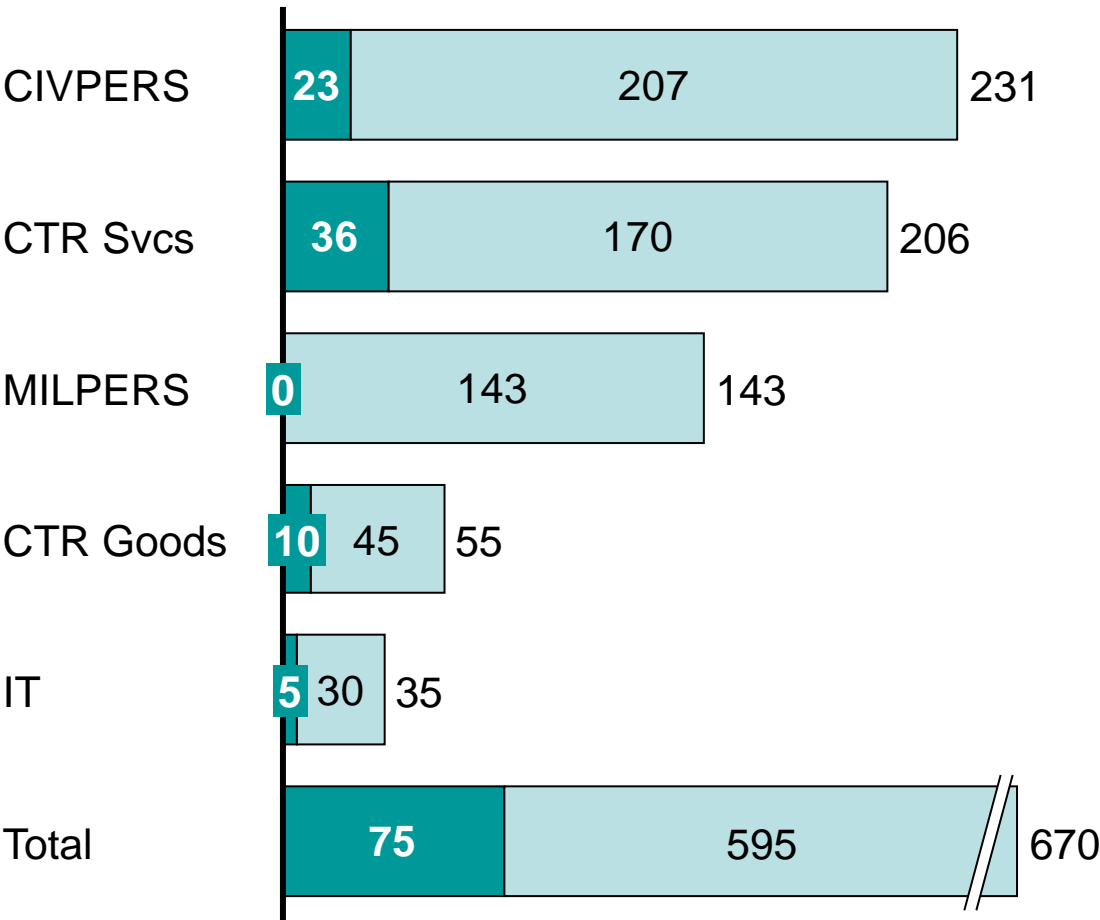
- The potential savings implies a productivity gain of 4-8% per year over FY16-20
- Private sector industries commonly show similar gains as part of 'business as usual'
- A portion (<10%) of the gains can be **reinvested** to modernize the department and fund warfighter needs



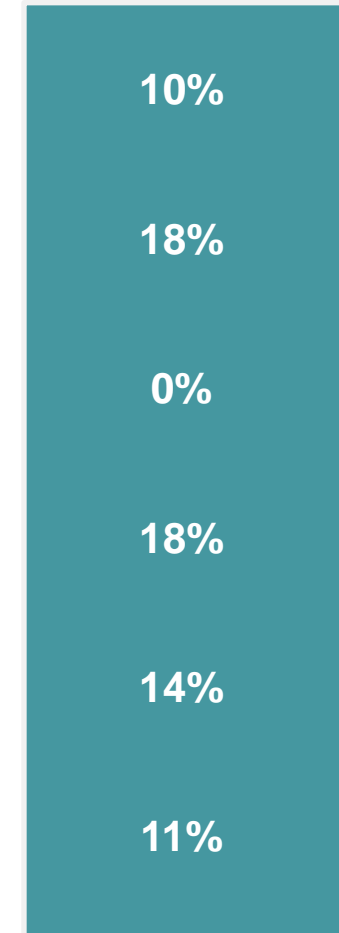
Where the Base Case Savings Are

FY16-20 Expenditures/Workforce & Savings by Category

\$ Billions



% Total \$ & FTE Savings



Savings Scenarios

Savings by Lever - Base Case

	Estimated Annual Savings (\$B)					Total % savings	
	2016	2017	2018	2019	2020		
Contracts	3	7	10	13	13	46	18%
Retirement	1	2	3	4	4	14	6%
Attrition	1	1	2	2	3	9	4%
IT	0	0	1	1	1	5	14%
Total	5	11	17	21	22	75	11%
% savings from FY14	3%	8%	12%	15%	16%		
% productivity gain	-	5%	4%	3%	1%		

- Implies an initial 3% Year 1 savings and annual productivity gain ranging from 1%-5% over time
 - Modest 5% savings in contracted spend
 - 100% backfilled personnel at lower GS levels

Savings by Lever - Moderate

	Estimated Annual Savings (\$B)					Total % savings	
	2016	2017	2018	2019	2020		
Contracts	5	10	16	18	21	71	27%
Retirement	3	4	4	5	6	23	10%
Attrition	2	3	5	6	7	23	10%
IT	2	2	2	2	2	9	25%
Total	12	20	27	31	36	125	19%
% savings from FY14	9%	15%	20%	23%	27%		
% productivity gain	-	5%	5%	3%	3%		

- Implies an initial 9% Year 1 savings and annual productivity gain ranging from 3%-5% over time
 - 10% Year 1 savings in contracted spend
 - Modest early retirement adoption
 - Limited backfill of retirements and attrition

Savings by Lever - Aggressive

	Estimated Annual Savings (\$B)					Total % savings	
	2016	2017	2018	2019	2020		
Contracts	13	13	16	21	26	89	34%
Retirement	5	5	6	6	7	29	19%
Attrition	2	3	5	6	7	23	4%
IT	2	2	2	2	2	9	25%
Total	21	23	28	35	42	150	22%
% savings from FY14	16%	17%	21%	26%	31%		
% productivity gain	-	2%	3%	5%	5%		

- Implies an initial 16% Year 1 savings and annual productivity gain ranging from 2%-5% over time
 - Aspirational 25% Year 1 savings in contracted spend
 - Greater adoption of early retirement
 - Limited backfill at lower GS levels

“Warfighter Currency”

Moderate savings scenario of \$125 billion over 5 years could fund the below activities for 5 full years

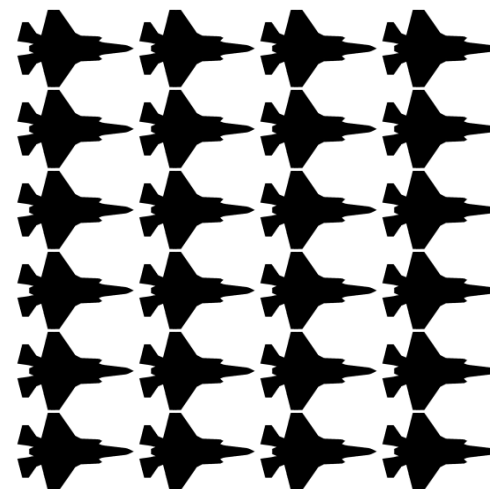
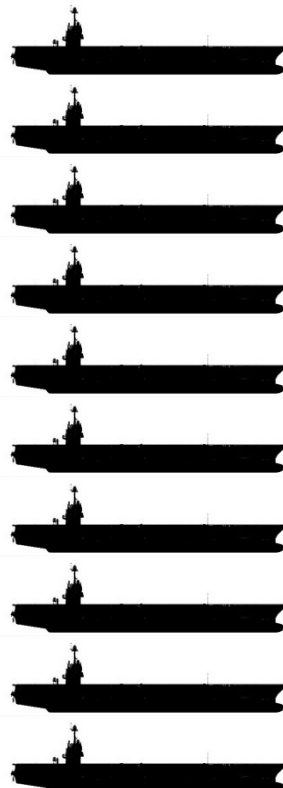
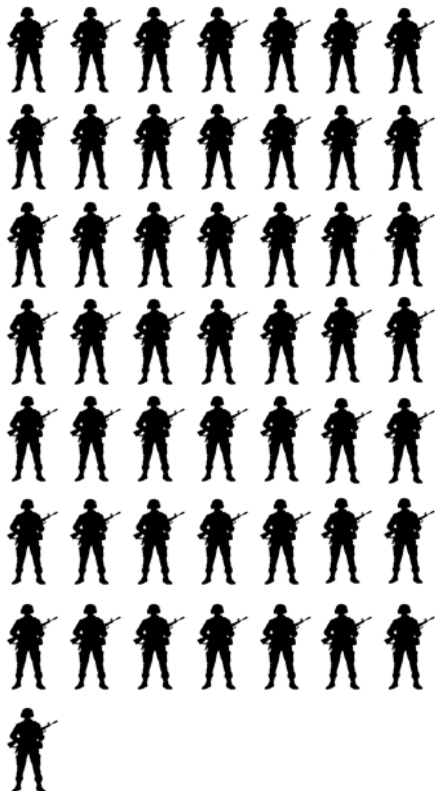
50 Army
Brigades

OR




10 Navy Carrier
Strike Group
Deployments

OR

83 Air Force
F-35 Fighter Wings



x4

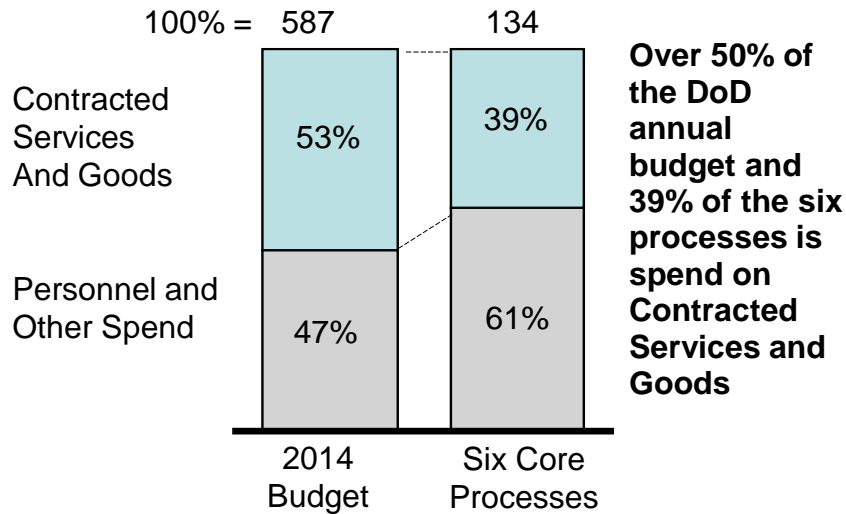
 = 1 Army Brigade Combat Team (~4,325 soldiers)
 = 1 Air Force Wing (Ops Group only) (~36 aircraft)
 = 1 Carrier Strike Group (1 carrier + air wing, 1 attack sub, 5 surface combatants)

Sources: CAPT Henry J. Hendrix, USN, “At What Cost a Carrier?,” CNAS, March 2013; Army Force Management Division; and Selected Acquisition Report 2013



Potential \$46-89 billion in productivity gains from Contract Spend Optimization FY16-20

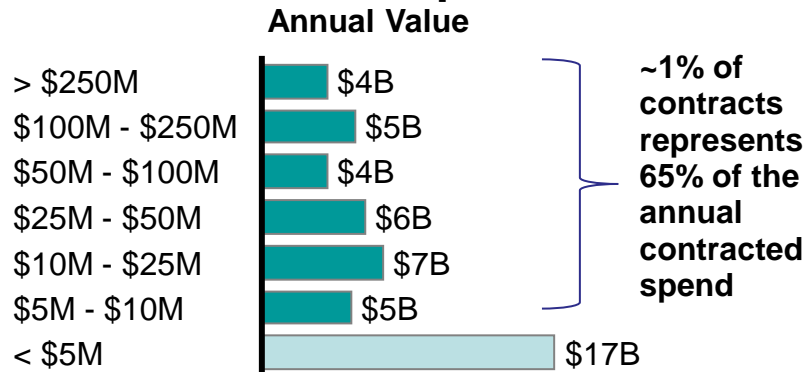
Baseline Findings



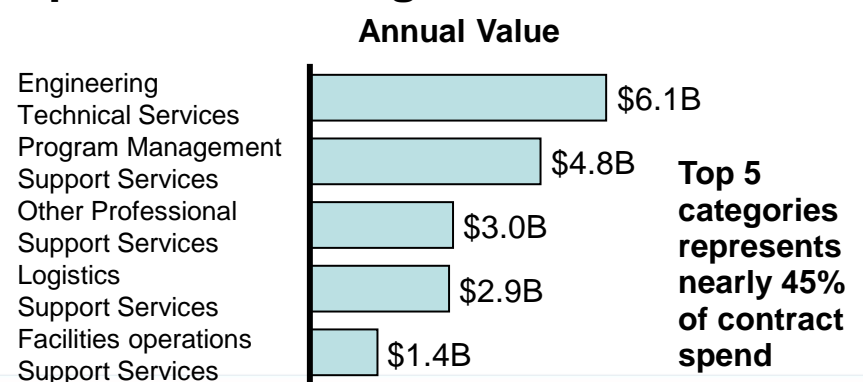
Best practices and recommendations

- **10-25% savings on contract spend from Contracts Optimization of targeted categories spend to capture value. Levers include:**
 - More rigorous vendor negotiations
 - Aggregating spend to gain economies of scale
 - Reducing contract fragmentation
 - Increase productivity from labor contracts
 - Rationalize demand (eliminate unneeded spend)
 - Modified requirements (e.g., eliminate “gold plating”)

Baseline contract spend breakdown

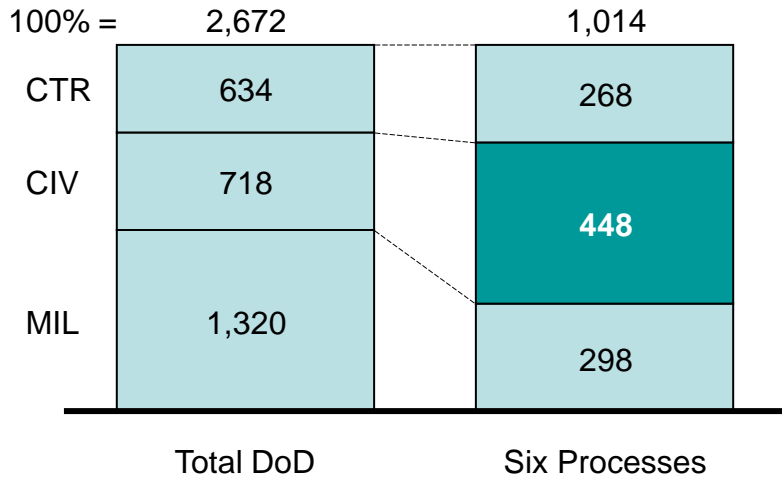


Top contract categories



\$23-53 billion in productivity gains can be absorbed through retirement & attrition FY16-20

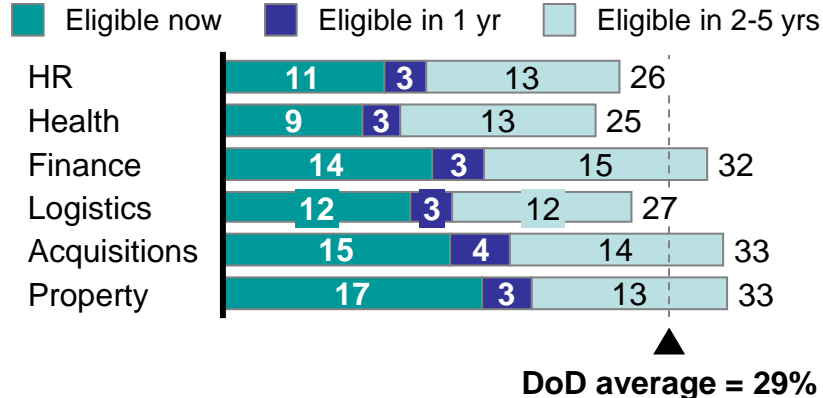
Baseline Findings (# people in thousands)



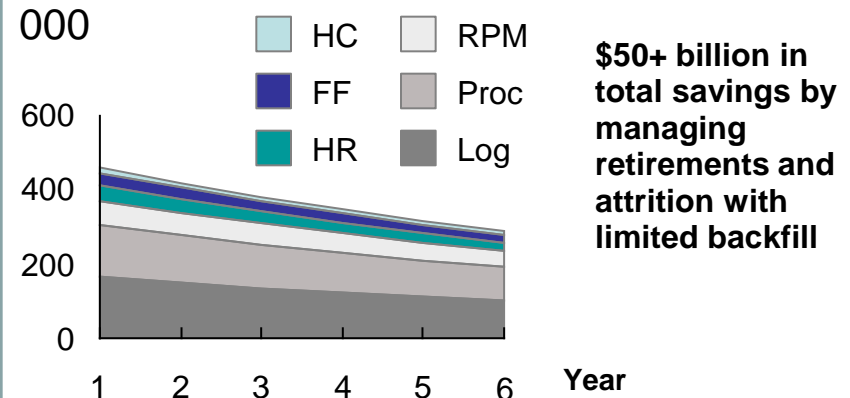
Best practices and recommendations:

- **8-13% annual savings from Optimizing the Government Labor Footprint. Levers include:**
 - Optimize the labor pyramid for each process
 - Evaluate organizational structures and remove unnecessary or excessive layers and increase spans*
 - Review organizational structures to identify and reduce areas of complexity and redundancy
 - Review and optimize civilian-contractor mix (e.g., could be increasing USG staffing and reducing CTR staff)
 - As core processes redesigned, military personnel freed up for other purposes

% Retirement eligible over next 5 years



Impact of managed attrition



* See DBB Report FY14-01, "Implementing Best Practices for Major Business Processes in the DOD," pp. 61-69 for 'Human Capital Management – Staffing, Layers, and Spans of Control'



Rapid mobilization in FY15 required to achieve the FY16 moderate scenario

Contract Optimization: ~ \$5B Value in FY16

Feb-Mar '15

Stand up and train teams

Establish cross-DoD teams for each process and build the playbooks for the methodology

Prioritize high-value contracts

Identify shortlist of contracts for optimization effort and define high-priority categories

Apr-Dec '15

Deploy Optimization toolkit

Optimize large contracts in each major category

- Bottom-up cost model
- Modify requirements
- Price vs. benchmarks

Renegotiate contracts and track savings

Renegotiate contracts, track savings, and scale methodology to smaller contracts

Workforce Productivity: ~ \$5B Value in FY16

Feb-Mar '15

Stand up and train team

Establish cross-DoD teams for productivity improvement initiatives

Design initiatives

Develop targeted productivity initiatives (e.g., workload rationalization, spans and layers)

Apr-Dec '15

Rapidly deploy productivity initiatives

Deploy productivity initiatives in high-priority processes, activities, and organizations

Align workforce planning and track savings

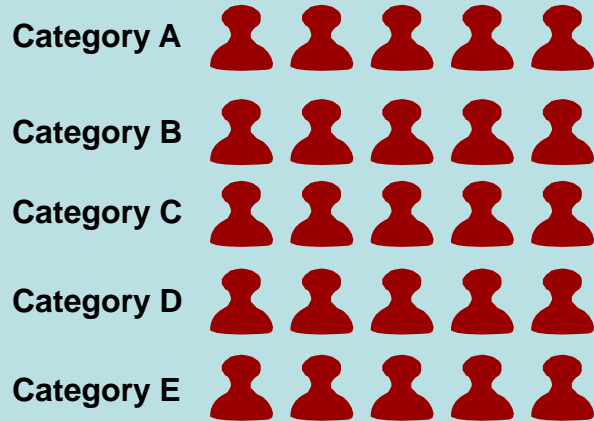
Create workforce optimization strategy aligned to changes in productivity (e.g., early retirements)



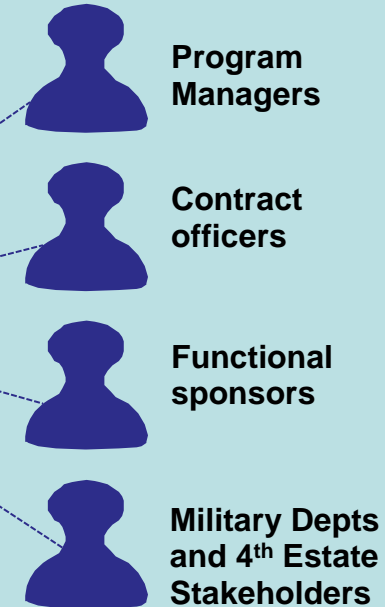
Contract Optimization – Team Options

- HR Management
- Health Care Management
- Financial Flow Management
- Supply Chain & Logistics**
- Acquisition & Procurement
- Real Property Management

Full-time teams (example)



Part-time support



- Each process would have a full-time Contract Optimization team for the Top 5 contract categories
- Each team would analyze and renegotiate the top 20-50 contracts in each category over next 9 months
- Each team would have 4-5 people from Military Depts and 4th Estate
- Up to ~150 full time FTE involved and allocated based on size of category spend across six processes

- Teams would leverage part time experts (e.g., program managers, contract officers) across the DoD for expertise in each category



Contract Optimization FY15 Mobilization Timeline

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

Oct

Nov

Dec

Prioritize contracts

- Create prioritized set of contracts based on size, complexity and contract terms

Stand up teams

- Create full-time teams to implement effort
- Ensure resources span functions and cross-DoD organizations (e.g., Military Depts and 4th Estate)

Pilot Contract Optimization program and train teams

- Pilot the methodology in 3-5 contracts in each category
- Create playbooks, templates, tools, and models
- Conduct intensive training program for full-time teams

- Full-time teams would implement the methodology cross the high-priority contracts

Implement contract optimization program across Top 100+ contracts in each business process

- Begin to renegotiate or take other actions to capture value (e.g., cancel or re-baseline contracts)

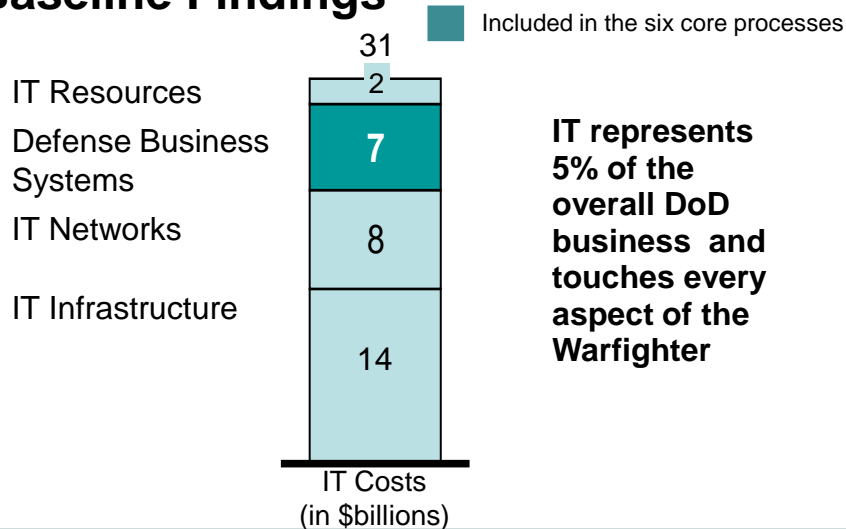
Validate savings and begin renegotiating contracts

Track savings in central database and measure value capture on ongoing basis



\$5-9 billion in potential productivity gains from IT Optimization FY16-20

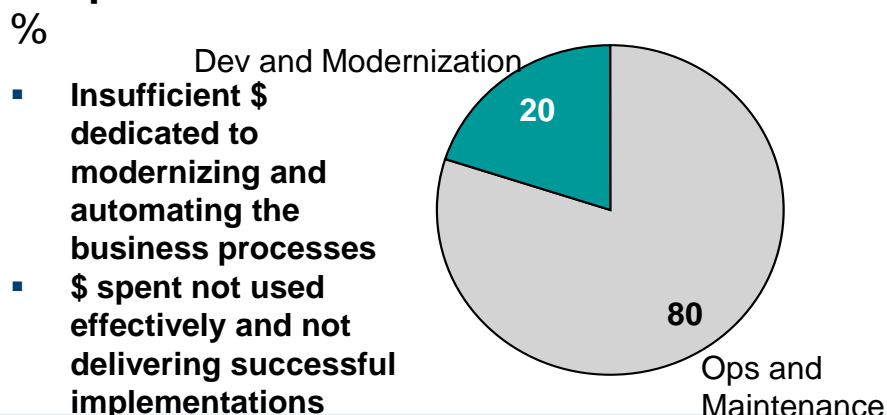
Baseline Findings



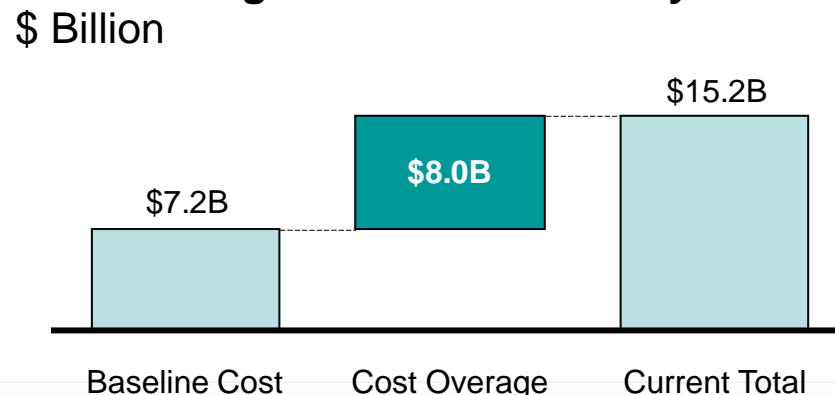
Best practices and recommendations:

- **15-40%+ improvement in IT productivity and effectiveness. Levers include:**
 - 15-25% savings from application rationalization and consolidation
 - 30%+ savings in strengthening investment cases, prioritizing requirements and eliminating low-ROI programs
 - 25-40% savings from increasing productivity of IT resources through lean and process redesign
 - 20-30% long-term savings through data center consolidation and cloud migration for targeted workloads

IT Spend in the Six Core Functions



Cost Overage from 8 DoD ERP systems



Accelerate IT Network and Data Center consolidation with Shared Services

Findings:

- Current organization separates IT and business staff into different reporting structures
- IT staff are independent entities spread across the agencies with inconsistent standards, quality, security and strategies, and often lack transparency
- Capital constraints often make basic improvements unachievable. Increasingly expensive to maintain and secure legacy systems*
- Industry resource pool to support legacy code is diminishing (new tech graduates don't want to be COBOL programmers)

Recommendations:

- Establish Information Technology Core Services as a shared-services organization
- Provide cloud provisioning and data pools to Innovation and Agility Support Services and Action Centers using self-service
- Manage large data pools, mastering key data records, and provide big data analytics and predictive insights across all enterprise business processes
- Use commercial business models to set targets and manage expectations
 - Establish and track metrics to ensure compliance with intended goals
 - Track savings and allow relocations to fund additional modernization efforts*

* See DBB Report FY12-01, "DoD Information Technology Modernization: A Recommended Approach to Data Center Consolidation and Cloud Computing"

Consolidate print services and eliminate/ automate forms

Findings:

- Unmanaged and costly office output environment (copy/fax/print)
 - Low device to employee ratios (1:1, 1:2)
- Decentralized/unmanaged print acquisition across many vendors
- Multiple sub-optimized internal mail and print facilities
- Inconsistent records management policies for retention/destruction compliance
- Reduce/eliminate massive manual forms use that are the result of poor systems and process automation

Recommendations:

- Move to Managed Print Services – 20-30% savings opportunity [1]
- Consolidate to print management center of excellence with savings guarantees (25-50%)
- Establish composition and document management center of excellence internally or outsource to trusted partner
- Exploit plummeting cost of digital storage:
 - Migrate from paper to digital archives
 - Scan to searchable pdf's
 - Update paper and electronic destruction policy and capabilities



Reduce risk – concentrate skills with Legacy Migration Shared Services

Findings:

- Considerable business process and application obsolescence
- Inconsistent performance metrics and reporting
- Poor operational, technical and financial transparency
- Substantial waste due to lack of standardization and territorial isolation
- Siloed data results in conflicting analytical views; no single-point-of-truth for data
- Pockets of excellence exist where new technologies have been successfully deployed
- Past implementation failures of large-scale technology projects is a resistance multiplier to major change projects

Recommendations:

- Establish legacy migration production lines as a shared service. Build competency centers and best practices to dramatically reduce risk and accelerate change
- Adopt a “coexistence” strategy of old with new data to enable a "run the business while you change the business" approach. Existing systems remain intact and gradually decommissioned as legacy data migrates to a new platform to be virtualized and enhanced
- Adopt a modern adaptive enterprise architecture to provide the tools for dramatically accelerated and lower cost business process modernization (see slide 21)
- Adopt a Multi-cloud architecture for ultra scale interfacing through a single, open source cloud foundry foundation, supported by a single DoD enterprise data architecture



Accelerate results – Concentrate skills with Process Redesign Factory

Findings:

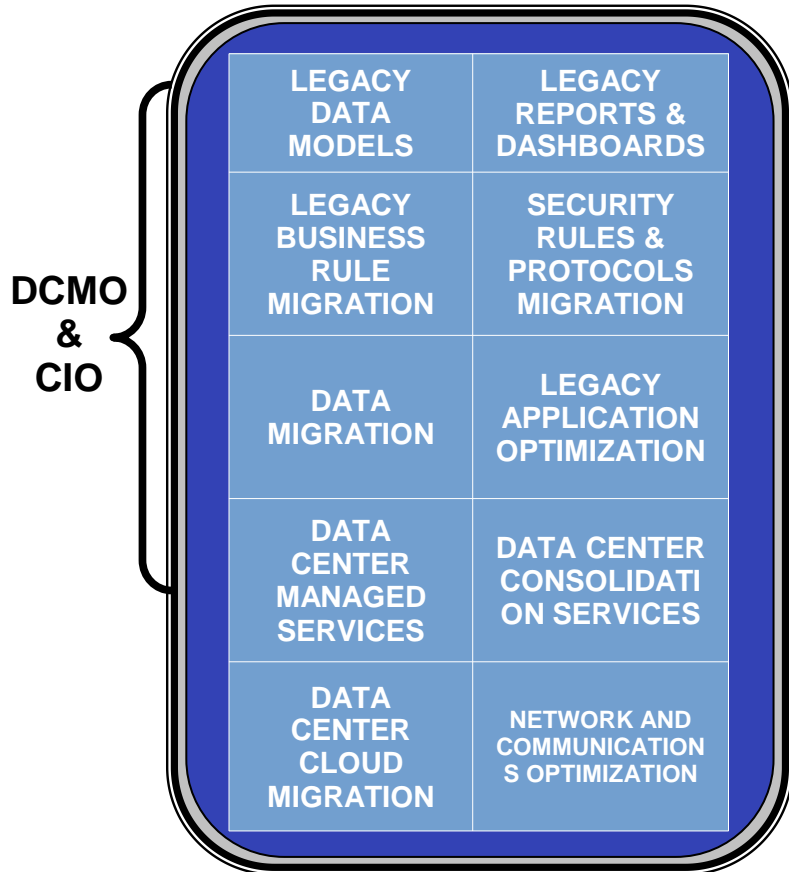
- Defense Agencies and military departments (Military Depts) have demonstrated “pockets of excellence” which need to be leveraged
- Few personnel are currently qualified for process redesign; have limited tools
 - Training programs need to be expanded and accelerated
- Historically, successful redesign has required more effort and longer than expected time frames and has been “tribal” in nature
- Substantial business process sub-optimization. Lack of inter-Service and Agency collaboration is a major obstacle to high performance modernization
- Capitol Hill constituency and regulations are critical design components

Recommendations:

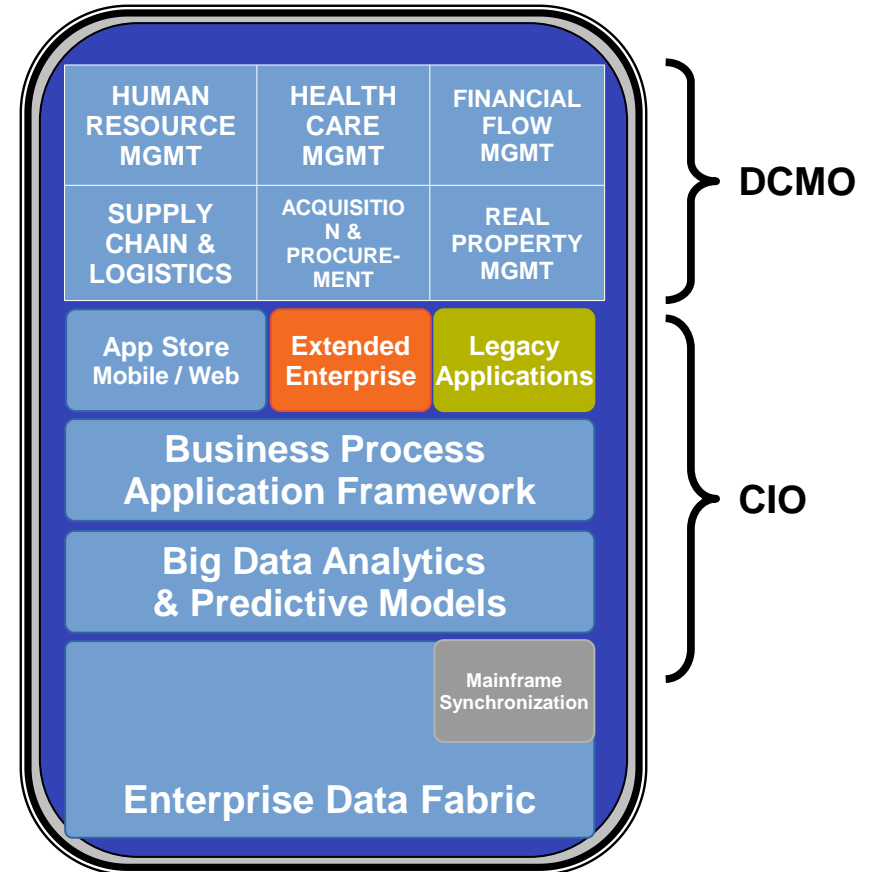
- Establish Business Process Application Factory as a shared service. Build competency centers and best practices to dramatically reduce risk and accelerate change
- Create business “Process Champions” for each enterprise business process with responsibility for end to end performance, prioritization and productivity
- Focus on the 80/20. Each enterprise business process is comprised of many sub processes. Prioritize these sub processes for redesign by opportunity
- Establish “bold goals,” i.e. 50% reduction in cycle time, 30% improvement in productivity, and multi year plans. Don’t think incrementally, adopt big ideas
- Create hybrid business process innovation and agility centers staffed with business and technology domain experts, with Defense Business Council (DBC) oversight
- Establish DBC Innovation and Agility “Academy” to accelerate business process redesign skills development
- Align what gets recognized, reinforced, and rewarded with the business process performance improvement goals

Dramatically reduce execution risk with Legacy Migration – App Factory shared services

Legacy Migration Production Lines

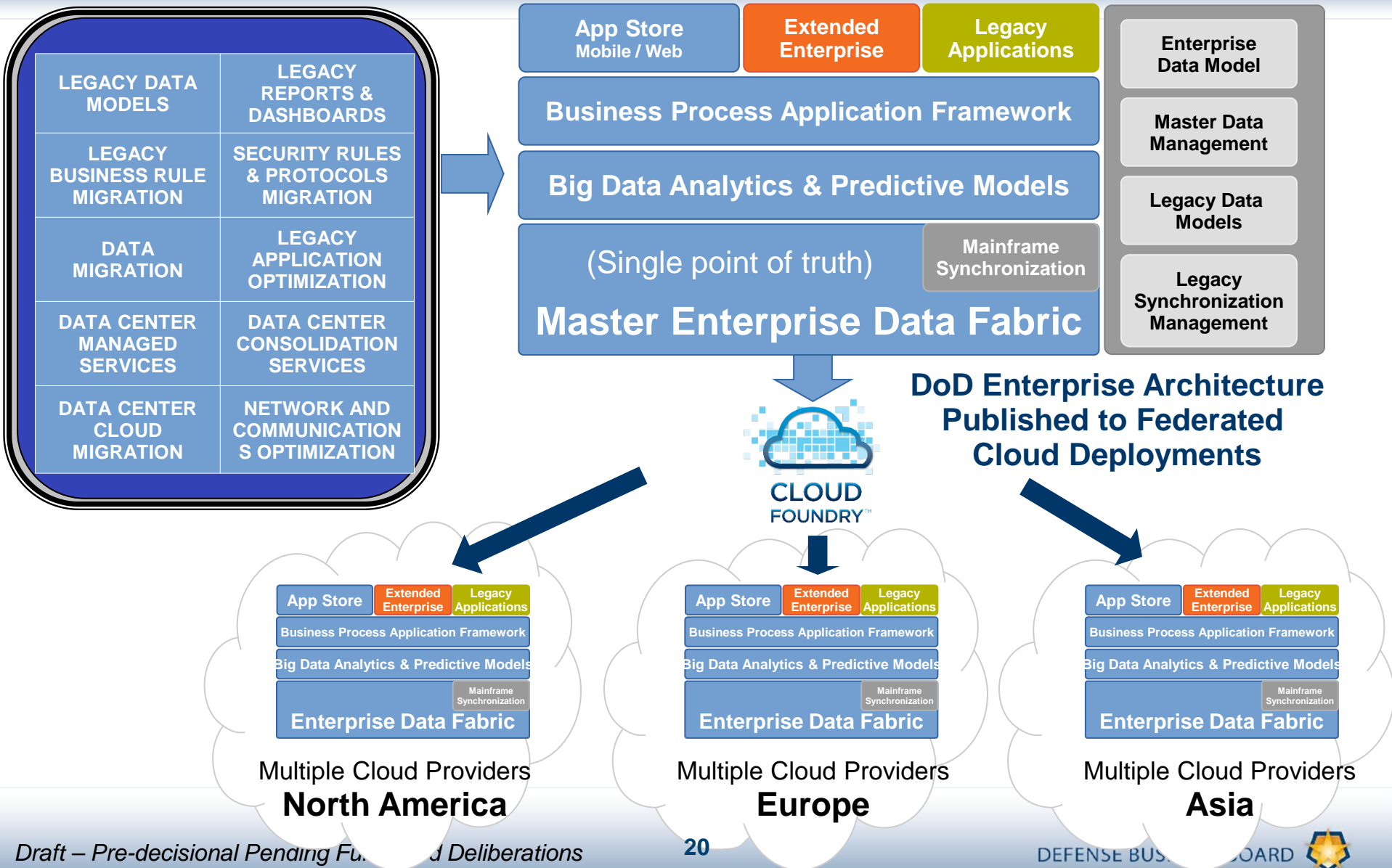


Business Process App Factory



Legacy Migration Production Lines

Business Process Application Factory



Innovation must be supported by culture change

- Technical solutions are an enabling tool for more efficient, effective and streamlined business processes but will not, by themselves, achieve the savings and process improvements envisioned
- Even in the private sector, only about 17% of fundamental change projects deliver their full potential [2]
- Large organization change experience over decades confirms that success is highly correlated to a few critical project dimensions:
 - Strong, consistent top leadership
 - Clear vision, aligned with strategy and widely communicated
 - Effective governance structure with clear decision-making authority
 - Defined accountability at all levels with reward and enforcement mechanisms
 - Engaged workforce and supportive stakeholders



Design and Implement a DoD Change Strategy to Support Core Business Process Transformation

Findings:

- Consistent, committed, visible leadership, the *sine qua non* for driving successful change is challenging in the DoD environment. Sustained leadership of change is very different from private sector given the short tenure of both civilian and military top leaders
- A trans-DoD strategy and vision for change is extremely difficult in an environment of subcultures among Military Depts and defense agencies
- Governance structures are diffused, clear decision-making authority is often fragmented or non-transparent
- Despite decades of change programs, including some notable success, DoD has no institutionalized agenda or process for change management

Recommendations:

- The DEPSECDEF and Service Under Secretaries commit to continued visible and powerful role leading transformation. Consider altering tenure policy for key project leaders
- The top governance structure is confirmed. Roles, authorities and accountabilities are established and widely communicated
- Business case is clearly articulated, and project scope, objectives, metrics and timetable are established, communicated and reinforced
- Leadership identifies and retains appropriate change management experts, internally and externally, to support organizational effectiveness, communications, external relations
- See DBB Report FY11-01, “A Culture of Savings: Implementing Behavioral Change in DoD”

Design and Implement a DoD Change Strategy to Support Core Business Process Transformation (cont.)

Findings:

- There are few performance measures and performance management practices in general use and they are inconsistent across civilian and military workforces
- Legacy of partially successful and unsuccessful programs, together with lack of wide recognition of successful projects, has created a cynical and change-resistant culture
- Experienced and trained experts in critical change components – organizational dynamics, communications, stakeholder mapping, strategic external relations – in short supply for major change efforts

Recommendations:

- Identify performance management policies least supportive of change objectives and develop strategies to improve them. Set goals and targets for affected populations and actively use existing incentive programs to reward success
- Defuse negative perceptions of change by focusing on user/employee experience.
- Establish two-way communications channels (horizontal and vertical) within DoD, commit to transparent and frequent communication
- Identify skills gaps and provide technical training
- Actively manage natural attrition trends to reduce workforce anxiety.
- Recruit change leaders at all levels of affected organizations and engage user community
- Consider strategies for early “quick wins” and publicize success, including celebrating change champions
- Build internal change management expertise

Design and Implement a DoD Change Strategy to Support Core Business Process Transformation (cont.)

Findings:

- Policies, regulations, protocols and politics, often controlled by external stakeholders and difficult to influence, can represent barriers to trans-DoD change efforts
- But – there are some examples of successful large-scale change programs in the public sector and the government – e.g., Internal Revenue Service, Business Systems Modernization

Recommendations:

- Revitalize training in LEAN/Six Sigma and other efficiency improvement techniques across core business processes
- Identify policies, practices and artificial constraints that handicap mission-critical improvements and develop influencing strategies to revise them
- Reset critical third-party relationships, including unions and suppliers, based on transparency, shared purpose, collaboration
- Create a detailed stakeholder map of external stakeholders and develop specific strategies for each to communicate, educate and influence as appropriate
- Identify DoD change management successes and use as case studies to describe critical success factors and integrate them into CBP Transformation plan

Critical Success Factors

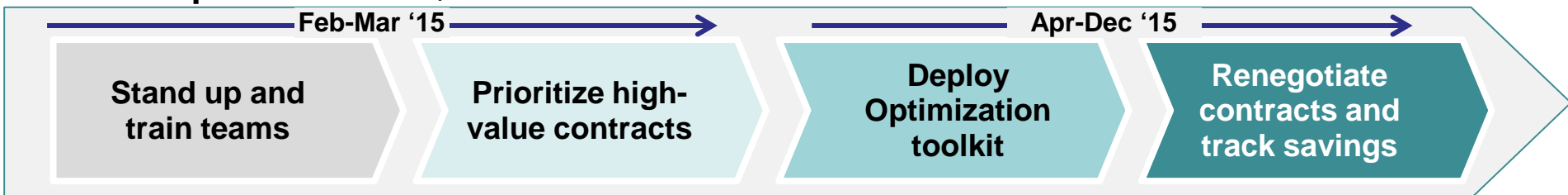
- Fundamental redesign of core business processes – what is the ideal future state?
- Committed and visible leadership
- Powerful vision statement
- Bold Core Business Process Transformation Change plan*
- Clear targets, objectives and metrics
- Dynamic two-way communication strategy with workforce and critical stakeholders
- Implementation of early retirement program*
- Incentives to retain critical talent during transition
- Focus on quick wins
- Acceleration of existing efficiency projects
- Organizational restructuring that creates permanent efficiencies*
- Strategies to break through internal and external obstacles

* See DBB Report FY14-01, “Implementing Best Practices for Major Business Processes in the DOD,” pp. 61-69 for ‘Human Capital Management’



Rapid mobilization grounded in change management strategy in FY15 required to achieve the FY16 moderate scenario

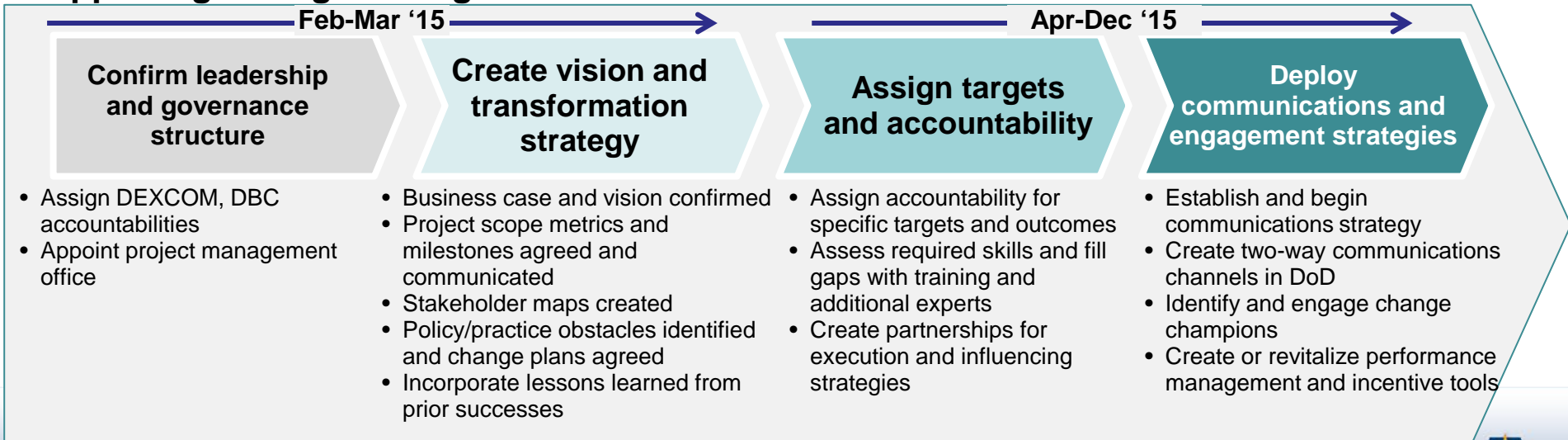
Contract Optimization: ~ \$5B Value in FY16



Workforce Productivity: ~ \$5B Value in FY16



Supporting Change Management Structure – critical to achieve



The Prize

Moderate savings scenario of \$125 billion over 5 years could fund the below activities for 5 full years

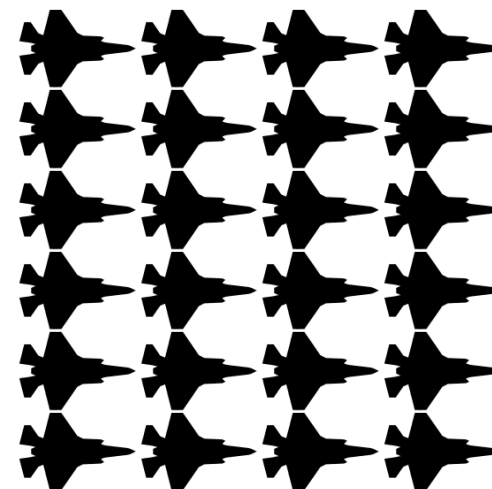
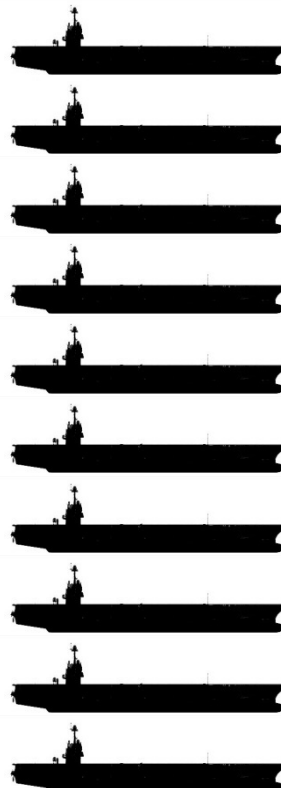
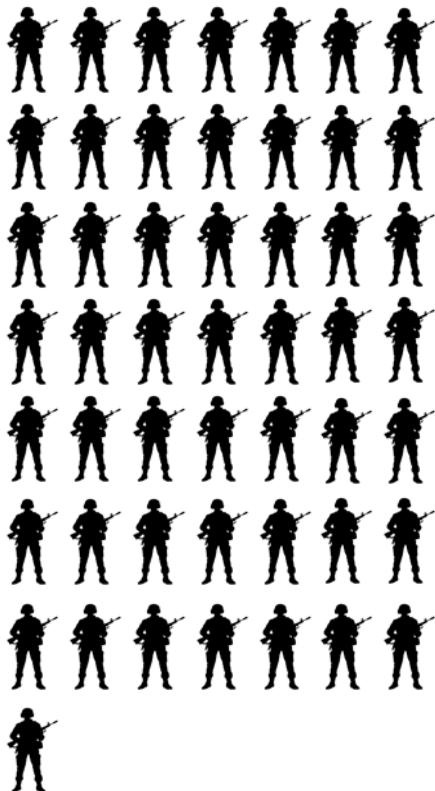
50 Army
Brigades

OR


10 Navy Carrier
Strike Group
Deployments


OR


83 Air Force
F-35 Fighter Wings



x4

 = 1 Army Brigade Combat Team (~4,325 soldiers)

 = 1 Air Force Wing (Ops Group only) (~36 aircraft)

 = 1 Carrier Strike Group (1 carrier + air wing, 1 attack sub, 5 surface combatants)

Sources: CAPT Henry J. Hendrix, USN, "At What Cost a Carrier?," CNAS, March 2013; Army Force Management Division; and Selected Acquisition Report 2013

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Questions?

Transforming DoD's Core Business Processes for Revolutionary Change