It’s Not About Technology... It’s About Capability

TRANSFORMATIONAL TIMES
“Driving Operational Solutions”

Business Testing = BT
Test and Evaluation
Methodology for Business Systems

12 May 2010

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Acting Director, BTA Component Acquisition Executive

It’s Not About Technology... It’s About Capability
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Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18
It is imperative that business operations run flexibly, adaptively, and with greater velocity than ever before to support warfighters with the information and resources they need, when they need them.

DEPUTY SECRETARY OF DEFENSE

Gordon R. England
DBSAE Mission and Vision
Deliver Business Capability to Warfighters

Develop, operate, and drive successful implementation of Combat Support Business Enterprise Solutions for the Warfighter that deliver a solid Foundation for Sovereign Operations for the United States of America

Accomplished through:

- Transformation and Innovation
- Transitioning proven systems to sustainment
- A Trained, Agile and Ready Workforce;
  - Skilled
  - Motivated
  - Ethical
  - Diverse

Rapid Acquisition
On Schedule & On Cost

FY10 National Defense Authorization Act directs a “New Acquisition Process” based on DSB… must be designed to include:

- Early and continued user involvement
- Multiple, rapidly executed increments or releases of capability
- Early, successive prototyping to support evolutionary approaches
- Congressional report in 270-days
- Modular open-system approach
DBSAE Transformational Vision
Deliver Business Capability to Warfighters

Changing Requirements
- Not Intuitive
- Component Centric
- Undisciplined
- Confusing

Extensive Contractor Tail
- Manpower Intensive
- Hard to Use
- Stovepiped

Excess costs
- Inefficient Processes
- Complex

Responsive to Change
- Intuitive
- Simple Input

Collaborative Schedule
- Audit Trail
- Synchronized Complexity

Cost Savings
- Operator Focused
- Simple - Faster Execution

Integrated Operational Environment

Rapid Acquisition – Of Enterprise Solutions: The “Why”

Warfighting Capabilities
- Titanium Cylinders of Excellence
- Self-propelled Semi Submersibles

IT
Sonar
C2
Sonar

Is the Tail impacting Warfighting Capabilities?

Is our Enemy inside our Acquisition DO Loop?
The push to be more agile, flexible, transformational & cost effective
It's Not About Technology… It's About Capability

Business Systems ≠ Weapon Systems

"IT"-360

Business “IT” Acquisition Speed bumps
It's Not About Technology… It's About Capability

Spheres of Influence

- Developmental Testing
- Operational Testing
- Interoperability Testing
- Information Assurance
- Configuration Management
- System Engineering
- Functional Proponent/Sponsor

System Engineering

- Developmental Testing
- Information Assurance
- Configuration Management
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- Functional Proponent/Sponsor
**Transforming Testing!!!**

*Improve Product Quality and Predictability*

- Focus on Single Programs (not Enterprise)
- Test Activities Often Duplicated
- Lack of Common Test Tools
- Lack of Focus Early in the Program
- Business IT Tested Like Weapon Systems
- Decision Makers Lack Early Indicators

- Establish Centralized Testing Environments
- Merge Development & Ops Testing
- Reuse of Tools and Test Events
- Integrate Teams Prior to Development
- Create Business IT Testing Processes
- Early Visibility Improves ROI

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**Goal: Greater insight throughout the program lifecycle!**
Opportunity for Acquisition Transformation: Business “IT” Acquisition

Current Business IT acquisition is contrary to industry best practices

- **Execution Timelines**: Lengthy and delay critical capabilities
- **System Acquisition**: Acquired using DoD process for major weapons systems
- **Delivery**: Average 91 months to deliver an initial program capability
- **DoD Testing**: Traditionally split into four distinct disciplines

- Test and Evaluation processes provide an opportunity to:
  - Improve overall quality of delivered systems
  - Reduce delivery time
  - Enhance acceptability by end users
  - Effectively use limited funding

Gen James E. Cartwright (VCJCS): “We are building software code and tools based on the aircraft carrier development cycle”
It's Not About Technology… It's About Capability

Fighting the Storm

Developmental Testing
Operational Testing
Information Assurance
Interoperability Testing

PMS driven by testing… not driving testing!
Navigating Calmer Waters

Integrated Business Testing

PMs navigating through testing with purpose!
It’s Not About Technology... It’s About Capability

Test and Evaluation

Think like Sun Tzu... have a heart like Clausewitz
Testing for Business Systems

Early Planning -- The way ahead to establishing integrated T&E

- Design Integrated T&E Models based on Risk
  - Account for risk in an applied framework
  - System maturity influences testing activities
  - Risk leadership requires accepting appropriate risk

- Develop an inclusiveness across the four disciplines of T&E
  - Developmental Testing, Information Assurance, Interoperability, Operational Testing working cooperatively vice independently

- Establish an Integrated Test Team (ITT) early
  - Membership extends beyond testing disciplines
  - Includes functional proponent and the program office

It’s Not About Technology... It’s About Capability
**Enterprise Resource Planning Challenge**

**Ideal Corporate American End State**

**PURCHASE TO PAY PROCESS**

- **Purchase Requisition**
- **Purchase Order**
- **Goods Receipt**
- **Invoice Receipt**
- **Expenditure**

- The Purchase Order can be created from PR Line Number Funding ID
- A Goods Receipt needs this Reference info: PO Line Number Funding ID
- An Invoice Receipt needs this Reference info: PO Line Number Funding ID
- An Expenditure needs this Reference info: PO Line Number Funding ID
- This Ready to Pay File Document Number

**Four Aspects Fundamental to ERPs**

- **Acknowledge** current IT solutions are not adequate – corporate solutions are available
- **Determine** operational processes must change to align
- **Commit** Senior Leadership to new methodology
- **Enforce** change discipline from top to bottom echelons

Implementing an ERP takes commitment and 180° change. When you point a finger to blame… NOTE: there are 3 more pointed back at you…

**Major Events**

Traditional Consultant Staffing Model

- **Strategy**
- **Process Analysis**
- **Package Configuration**

High-End Consultant Staffing Model
Testing Challenges

- **Tools**
  - Effectively Manage Data
  - Automate Test Tools
  - Use Checklists and Templates

- **Time**
  - Conduct event (not time) based T&E
  - Integrate Testing and Development

- **Talent**
  - Address risk with “Risk Leadership”
  - Adjust strategies based on COTS and custom development

- **Transition**
  - *Deliver* capability to the warfighter

- **Tradition**
  - Overcome rigid and inflexible approaches to testing

*Integrated Business Testing Requires Transformation!*
Parting Quote

Any intelligent fool can make things bigger and more complex... It takes a touch of genius - and a lot of courage to move in the opposite direction. “Insanity: Doing the same thing over and over again and expecting different results”

Albert Einstein
Questions?
Back Up Slides
Integrate T&E at On-Boarding

- DBSAE gains programs at various stages of system development

- T&E strategies are assessed & tailored
- Apply Integrated testing framework as programs enter portfolio

- Business systems don’t fit current T&E mold
Starting Integrated Testing (by Program)

- Form the ITT
  - Establish a Charter (ACE Template)

- ITT planning
  - Define the T&E Strategy that addresses a Business System Model
  - Participate in the Design Process to ensure a Testable Outcome
  - Participate in the RFI/RFQ and follow-on competitive planning processes to ensure testing considerations are included
  - Identify and communicate Risks to the Risk Management Team
  - Participate in drafting the Tailored Information Support Plan
Success is based on:

- A focus on the difference between Business Systems (COTS) and Software Intensive (Custom) Systems
- All participating agencies actively supporting the integrated test model for Business Systems
- Changes to IT (Business IT) T&E
  - Responsive to rapid, iterative development
  - Requirements priorities evolve
  - Testing must be risk and capabilities based
  - Automated Test Tools are essential
  - Early user identification/participation critical
- Teamwork!