

June 2009 ISPA/SCEA Professional Development and Training Workshop

# Sourcing Strategy Best Practices – Bringing Spend Analysis to the DoD

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St. Louis, MO  
June 2009

## Agenda

- ▶ Purpose and Benefits
- ▶ History
- ▶ Frameworks
- ▶ Case Study: Commercial SATCOM Spend Analysis

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## **I know my organization is spending millions of dollars, but...**

- ▶ What goods or services are being purchased?
- ▶ Who are my suppliers?
- ▶ Who are my consumers?
- ▶ Are expenditures consistent with policy?
- ▶ Are expenditures cost effective?
- ▶ What trends are being experienced?
- ▶ How many different contracts are being utilized and to buy what goods or services?
- ▶ Are buying patterns leveraging or diluting buying power?



**These types of questions are faced by any organization procuring goods or services and developing acquisition and sourcing strategies**

## The solution is “**SPEND ANALYSIS**” – a tool providing knowledge of what is spent, with whom it is spent, and how it is spent

Spend analysis provides benefits in three major areas:

### Identify Cost Savings Opportunities

- ▶ Aggregating demand across an organization
- ▶ Optimizing number of suppliers
- ▶ Consolidating contracts
- ▶ Identify high-cost procurements by comparing against industry benchmarks
- ▶ Reveal strategic contracting opportunities (e.g., multiyear contracting)

### Identify Potential Risks

- ▶ Limited competition among suppliers
- ▶ Low/variable demand
- ▶ No contract in place
- ▶ Maverick spending
- ▶ Poor inventory management
- ▶ Budget non-compliance
- ▶ Policy non-compliance

### Support Regulatory Compliance and Planning

- ▶ Auditable record of expenditures
- ▶ Sarbanes-Oxley (SOX) compliance
- ▶ Small Business Administration interests
- ▶ Budgetary and planning assistance

## Agenda










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## Many Fortune 500 companies have realized tremendous benefits through effective spend analysis

<u><i>Benefit</i></u>	<u><i>Anecdote</i></u>	<u><i>Impact</i></u>
 <b>Identify Cost Savings Opportunities</b>	 <p>Hasbro consolidated to a single supplier of temporary personnel after spend analysis revealed 17 suppliers for 7 locations</p>	 <ul style="list-style-type: none"><li>▶ Hasbro negotiated an overhead rate 45% lower than previously obtained</li><li>▶ Reduced temporary labor spending from \$5M to \$4.3M</li></ul>
 <b>Identify Potential Risks</b>	 <p>British Airways employed spend analysis to identify savings opportunities through preferred suppliers</p>	 <ul style="list-style-type: none"><li>▶ Maverick spending reduced</li><li>▶ Solution ensured orders were sent to the proper supplier for the right goods, at the negotiated price</li></ul>
 <b>Regulatory Compliance and Planning</b>	 <p>Chevron, using a COTS spend management tool, was able to correct deficiencies in its financial data management</p>	 <ul style="list-style-type: none"><li>▶ Chevron developed custom solutions to meet SOX requirements</li><li>▶ Solution provided the ability to report and manage, proving compliance</li></ul>

## Various Government Accountability Office (GAO) studies advocate spend analysis as a best practice for Government

Report: ***Taking a Strategic Approach Could Improve DOD's Acquisition of Services***  
Conclusion: Leading companies reengineered their approach to buying services with great success by taking a strategic approach to spending

Report: ***High-Level Attention Needed to Transform DOD Services Acquisition***  
Conclusion: DOD should promote use of best practices such as centralizing key functions, conducting spend analyses, reducing purchasing costs, and improving performance

2002

2003

2004

2005

Report: ***Improved Knowledge of DOD Service Contracts Could Reveal Significant Savings***  
Conclusion: Leading companies have saved billions of dollars by developing companywide spend analysis programs and service contracting strategies; DOD could benefit from such practices

Report: ***Using Spend Analysis to Help Agencies Take a More Strategic Approach to Procurement***  
Conclusion: Having adopted spend analysis, some agencies have made good progress obtaining knowledge and improving their spending for goods and services



## Recent DoD, OMB, and Congressional direction require continual data collection and spend analyses as part of the Government's strategic sourcing effort



ACQUISITION,  
TECHNOLOGY  
AND LOGISTICS

### THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

"[Senior Officials shall] monitor required data collection and conduct periodic **spend analyses**."

*January 6, 2006 – Congress directs DoD to perform a complete spend analysis of its commercial SATCOM procurement*

*October 2, 2006 – DoD provides revised services acquisition policy – including spend analysis language – to be included in the next revision to the DoD Instruction 5000.2*

### NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2006

"The Secretary of Defense shall, as part of the effort of the DoD to develop a revised strategy...perform a complete **spend analysis** of the acquisitions of the Department..."



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

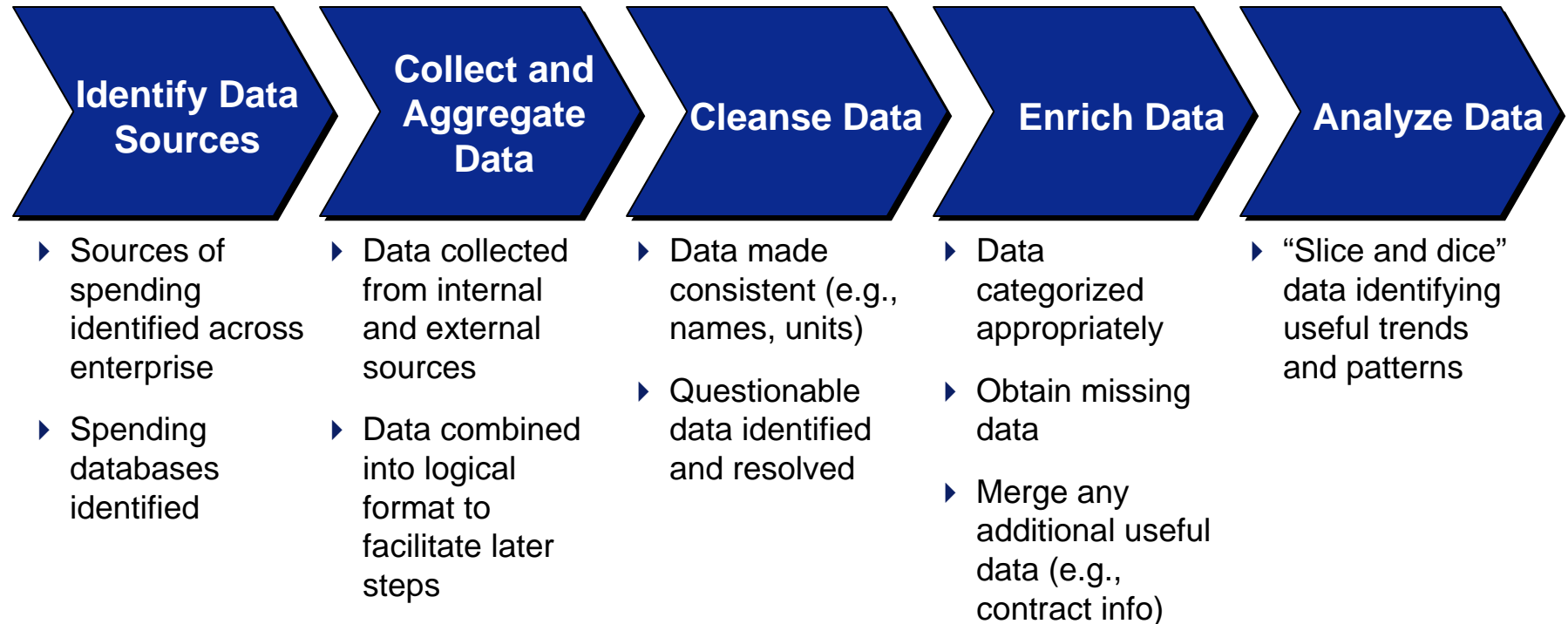
"Each agency's CAO, CFO, and CIO are responsible for the overall development and implementation of the agency strategic sourcing effort, which begins with a **spend analysis** and identification of commodities for which strategic sourcing should be implemented."

*May 20, 2005 – Office of Management and Budget (OMB) releases memo outlining strategic sourcing efforts and the role of spend analysis in support of these efforts*

## Agenda

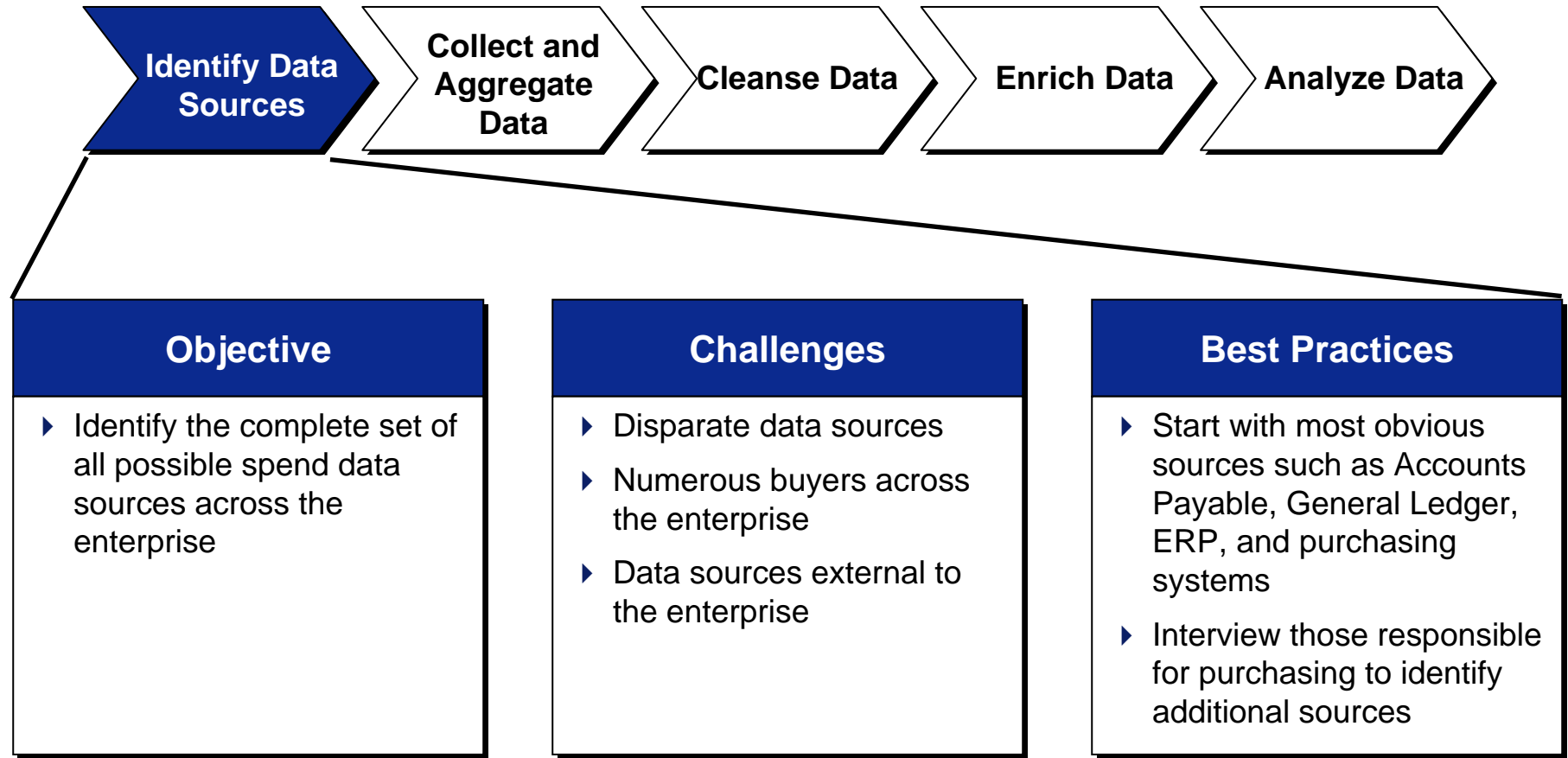
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## The basic spend analysis framework consists of five steps

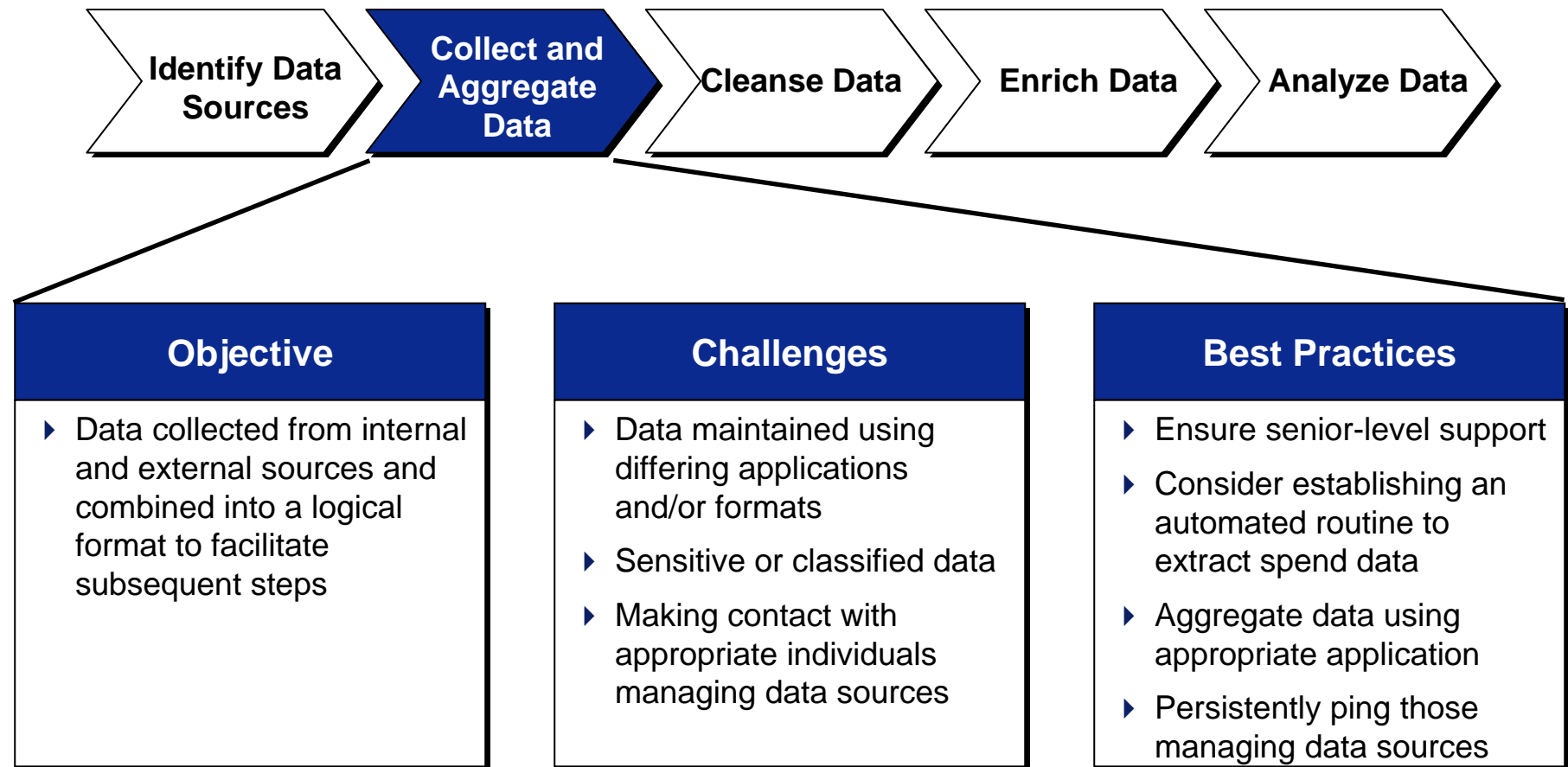


**Different permutations of this basic framework exist, but at the core, essentially the same tasks are executed**

## Identifying a complete set of spend data sources is critical to producing useful results



## Data collection can be the most time consuming step in the spend analysis process



## Cleansing data is necessary – data integrity directly impacts the quality and effectiveness of spend analysis



### Objective

- ▶ Ensure consistency across all data and identify and resolve questionable data

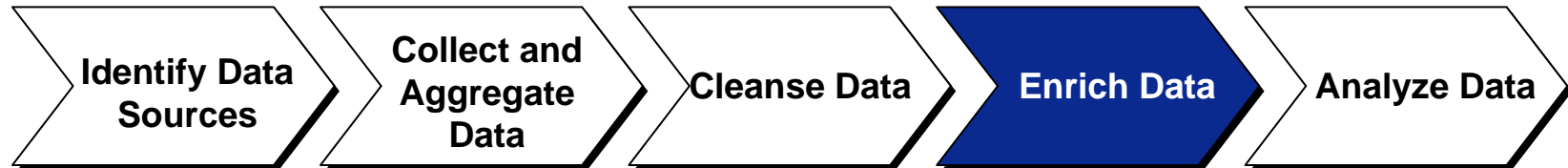
### Challenges

- ▶ Inconsistent data
- ▶ Duplicative data
- ▶ Inaccurate data
- ▶ Incomplete/missing data
- ▶ Miscategorized data

### Best Practices

- ▶ Employ tools that can help identify missing or “dirty data”
- ▶ Employ subject matter experts when cleansing data
- ▶ Establish repeatable cleansing process

## Data must be enriched to facilitate insightful analysis



### Objective

- ▶ Ensure accurate spend categorization and augment data by filling in missing data, importing additional useful data, and adding reformatted or manipulated data to facilitate analysis

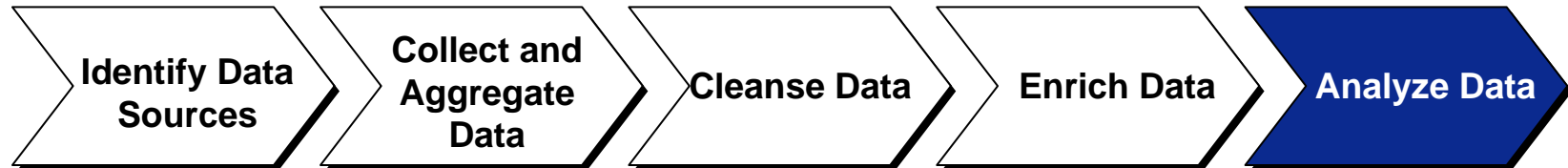
### Challenges

- ▶ Properly categorizing spend
- ▶ Obtaining missing data
- ▶ Identifying data manipulation required to execute analysis

### Best Practices

- ▶ Employ subject matter experts when enriching data
- ▶ Understand that data will never be 100% complete – do not “force” incorrect or inaccurate data

## Analyzing the data provides an understanding of spending patterns that can be acted upon



### Objective

- ▶ Analyze the data to determine spend across various metrics, as well as trends in the data

### Challenges

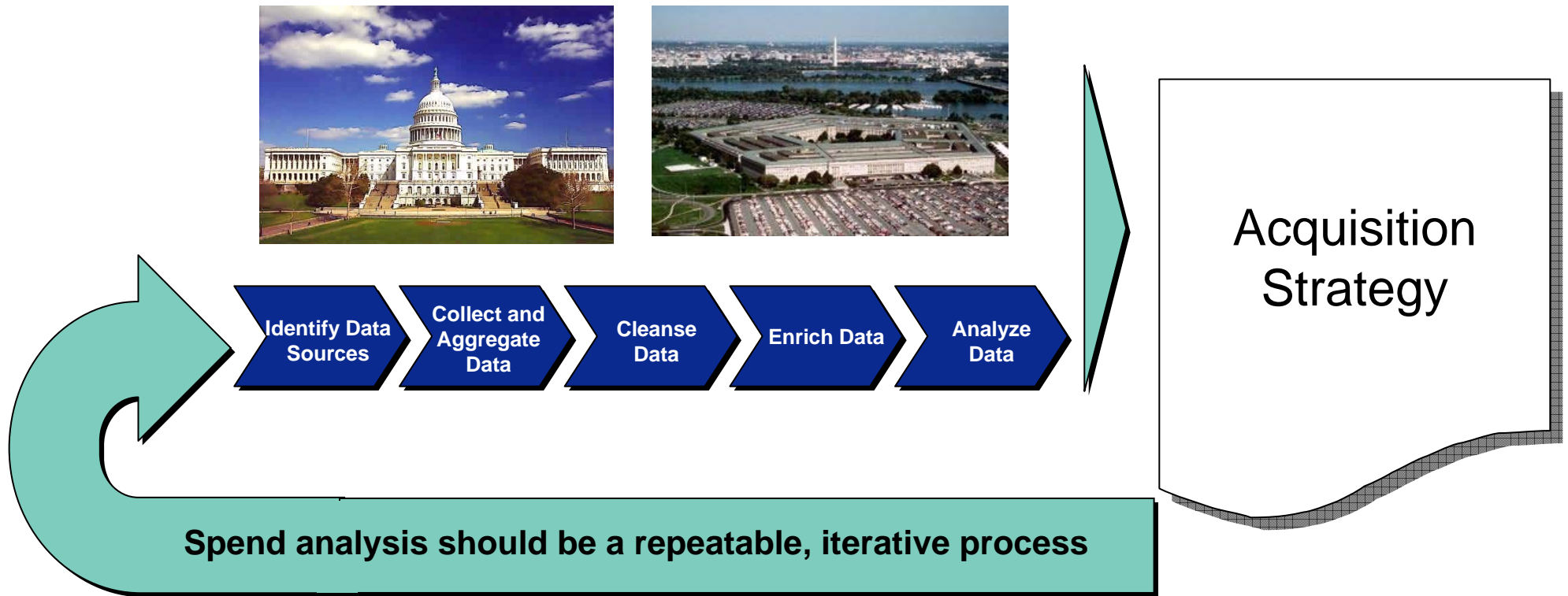
- ▶ Identifying pertinent analyses and results
- ▶ Abundance of data can be overwhelming

### Best Practices

- ▶ Leverage industry benchmarks
- ▶ Employ reporting and analysis decision support tools
- ▶ Understand when a custom solution is required vice a COTS solution



## Information gleaned from continual spend analysis, along with statutory and regulatory realities, may shape acquisition strategy



Over time, the spend analysis process should become more refined and more efficient

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## **In Section 818 of the National Defense Authorization Act (NDAA) for Fiscal Year 2006 DoD was tasked by Congress to perform a spend analysis of commercial SATCOM acquisitions**

- ▶ Perform a complete spend analysis of all commercial SATCOM services by the DoD from fiscal year 2000 through fiscal year 2005 and report on an acquisition strategy
  - Based on the spend analysis
  - Considers aggregating purchases and leveraging purchasing power
  - Includes multiyear contracting, or a statement of rationale why multiyear is not used
  - Proposes any required legislative action
  
- ▶ Report due to Congress within five months of enactment of NDAA
  - Fifty percent of DISA's Fiscal Year 2007 budget to be withheld until report submitted to Congress

## Several misconceptions existed among various DoD and commercial stakeholders regarding DISA's procurement of commercial SATCOM

### Misconception

▶ DISA's fixed satellite services contract vehicle, the DISN Satellite Transmission Services – Global (DSTS-G), with an intermediary procuring bandwidth on behalf of DoD is more expensive than other contracting alternatives

▶ DSTS-G contract vehicle is inflexible – multiyear contracting options could offer additional cost savings

▶ DISA's excessive fees make it more expensive than other contracting alternatives

### Spend Analysis Objectives

▶ Compare DSTS-G costs to other contract vehicles, as well as market averages

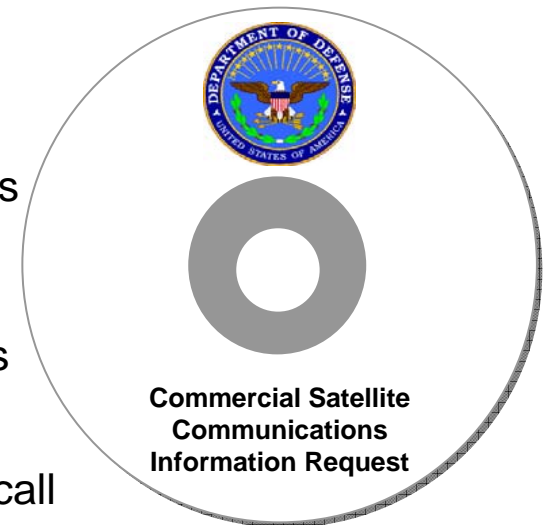
▶ Identify drivers and prevalence of cost discrepancies

▶ Compare cost of multiyear versus multiple year versus single year

▶ Compare cost savings achieved using DSTS-G to fees imposed by DISA

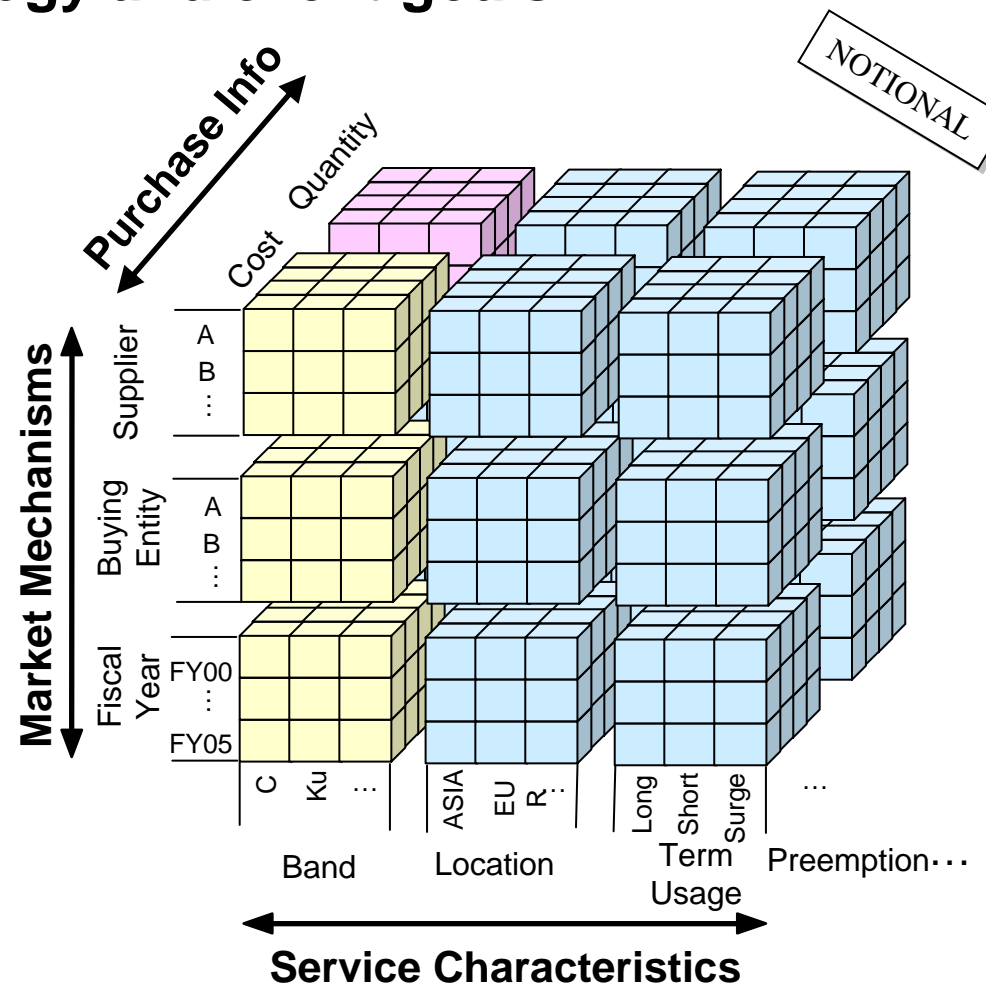
## A robust spend data call effort was executed to collect the requisite data

- ▶ Prepare data collection template
  - Identified 44 data elements vital to satisfying spend analysis objectives
- ▶ Broad data call
  - DD350 and INPUT databases leveraged to identify data call recipients
  - Direct data call sent to over 200 DoD contracting offices
  - ASD(NII) officially tasked the heads of the CC/S/As to distribute data call
  - Top contracting offices identified contacted directly to request response
- ▶ Data collection and consolidation
  - 73 responses were collected, representing over a billion dollars in spend over 6 fiscal years
- ▶ Comprehensive data cleansing/enriching
  - Validate to ensure relevancy, accuracy and completeness
  - Standardize nomenclature
  - Verify content with SMEs as needed



## Effective analytics required informed, market specific analyses dependent upon industry technology and client goals

- ▶ Appropriate spend/quantity segmentation
  - E.g., geography, buyer, supplier, technical specifications, product type
- ▶ Time phasing of services provisioned
  - E.g., spend vs. obligations
- ▶ Appropriate cost normalization
  - Provide a means for apples to apples comparison
- ▶ Rigorous analysis
  - Identify spend/usage profile, trends over time, cost-effective procurement avenues



*100,000's of possible combinations exist... and each combination may require hundreds of calculations*

*With regressions, cross-segmentations, and cross-correlations within a framework dimension, **billions of calculations are possible!***

# A systematic approach was needed to make sense of all possible analytic avenues and meet client objectives

### Spend & Usage Profile

- ▶ Determine broad expenditure and consumption profile
- ▶ Identify where primary spend is, for what, by whom

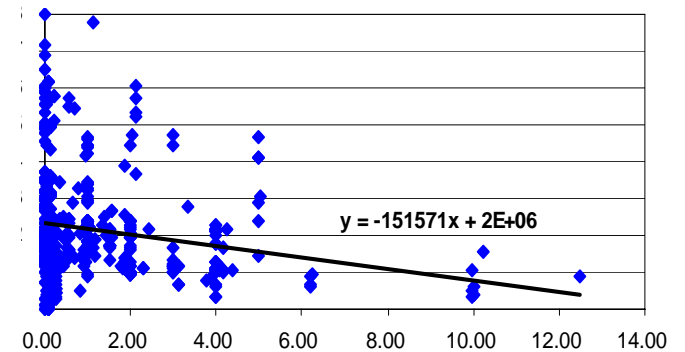
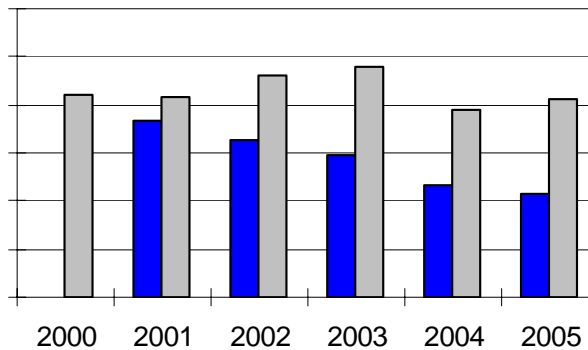
### Comparative Analytics

- ▶ Assess pricing across suppliers, programs, or contract vehicles
- ▶ Determine most cost effective procurement avenues

### Strategic Analyses

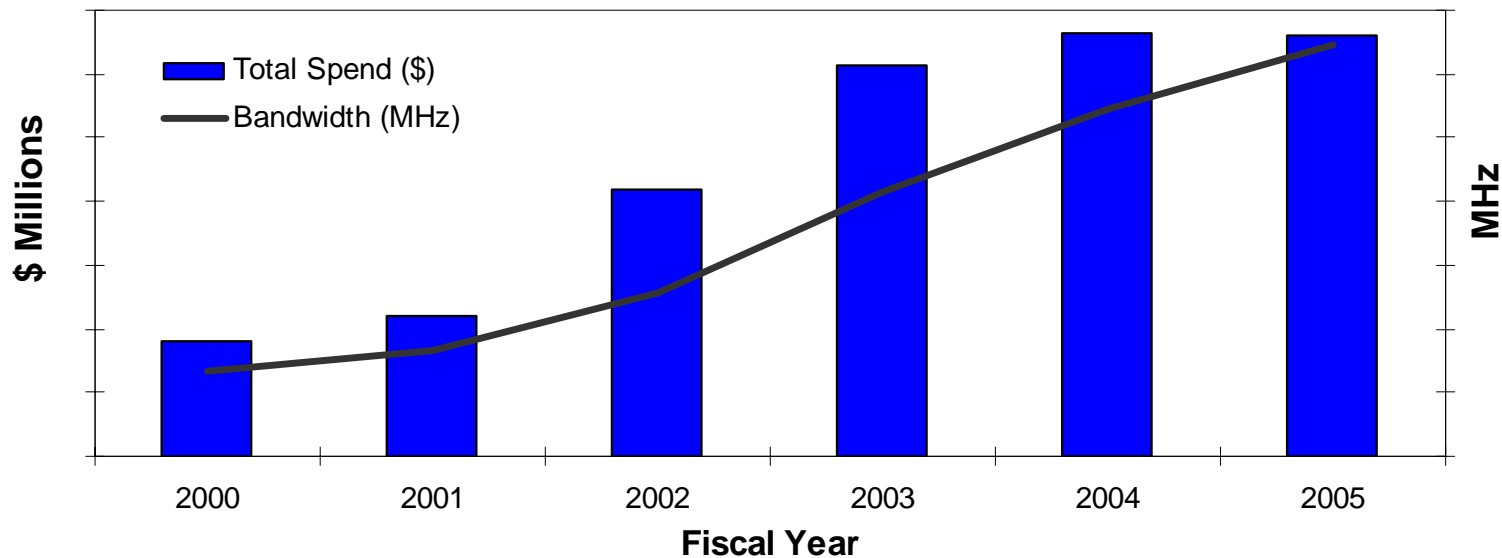
- ▶ Determine cost drivers and formulate cost estimating relationships
- ▶ Identify opportunities for consolidation and leveraging of buying power

Sum of Cost	satop	
CostType	Vendor 1	Vendor 2
HNA\$		\$ 1,411,29
LTerm\$		
M&C\$	\$ 18,728	\$ 1,057,845
Other\$	\$ 796,840	\$ 37,116
PEquip\$	\$ 33,150	\$ 60,37
Space\$	\$ 58,456,630	\$ 194,553,4
Total\$	\$ 104,521,496	\$ 200,21
TP\$	\$ 1,898,091	\$ 3,16
TPEyrs	\$ 45	\$
Grand Total	\$ 165,724,979	\$ 400



## Spend Analysis Findings: Bandwidth Increasing while Expenditures Level Off

*Total Expenditures and Bandwidth Usage by Fiscal Year*



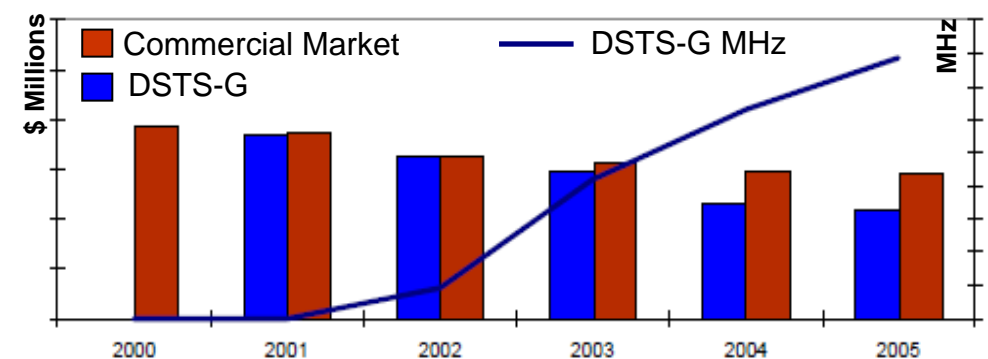
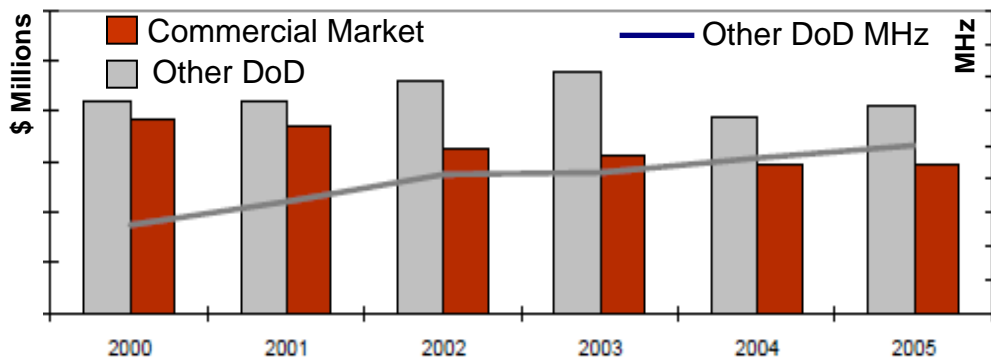
- ▶ Expenditures have begun to level off, yet bandwidth usage continues to grow
  - Per unit costs decreasing



## Spend Analysis Findings: DSTS-G is Effective, Realizing Prices Below Market Averages and Other Contract Vehicles

While average transponder equivalent (TPE) cost and bandwidth volume remained flat for non-DSTS-G procurements...

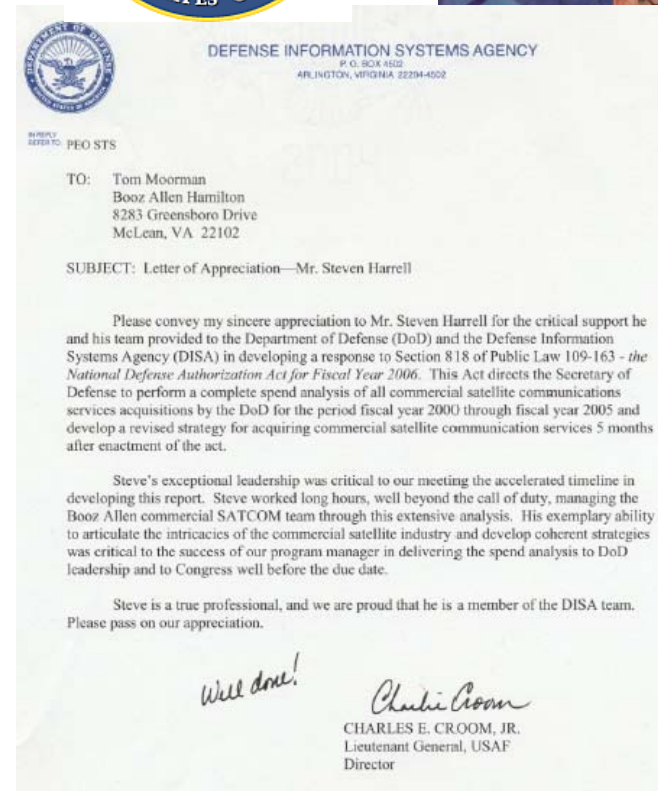
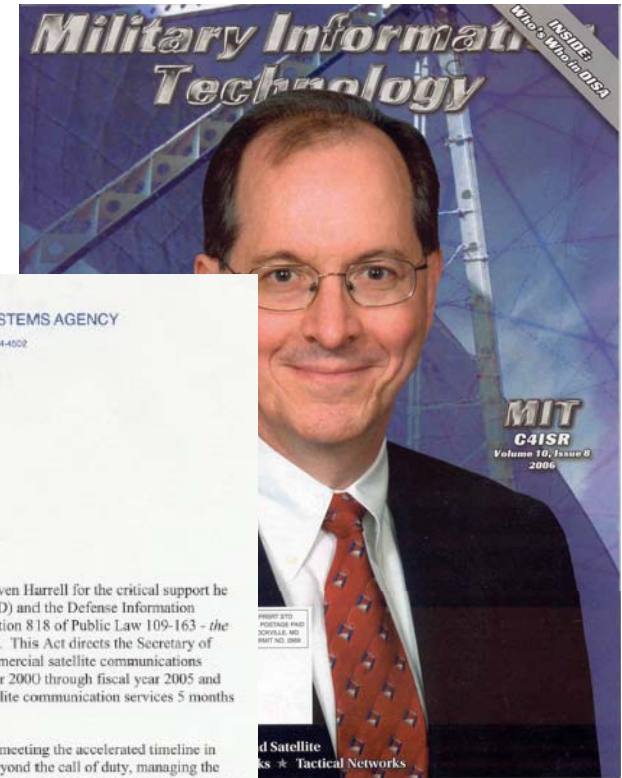
...the increase in DSTS-G bandwidth volume has correlated to a decrease in TPE cost



- ▶ DSTS-G contract vehicle has historically realized better pricing than other DoD vehicles and market averages
- ▶ DSTS-G leverages its competitive construct and DoD's buying power to achieve pricing efficiencies

## DISA and its Booz Allen team received significant accolades as a result of Section 818 efforts

- ▶ OSD(NII) GS15 feedback – “Best piece of work ever produced by DISA”
- ▶ Congress – Released remaining 50% of DISA’s FY07 budget
- ▶ Director of DISA – Personalized letters of appreciation for key Booz Allen staff
- ▶ Recognition from the Satellite Industry Association (SIA)
- ▶ Coverage in Military Information Technology Magazine



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