



NAVAL
POSTGRADUATE
SCHOOL

**Mining for Gold:
Developing and Implementing a
Strategic Sourcing Prioritization Model
for the United States Air Force**

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An AFICA-NPS Collaboration

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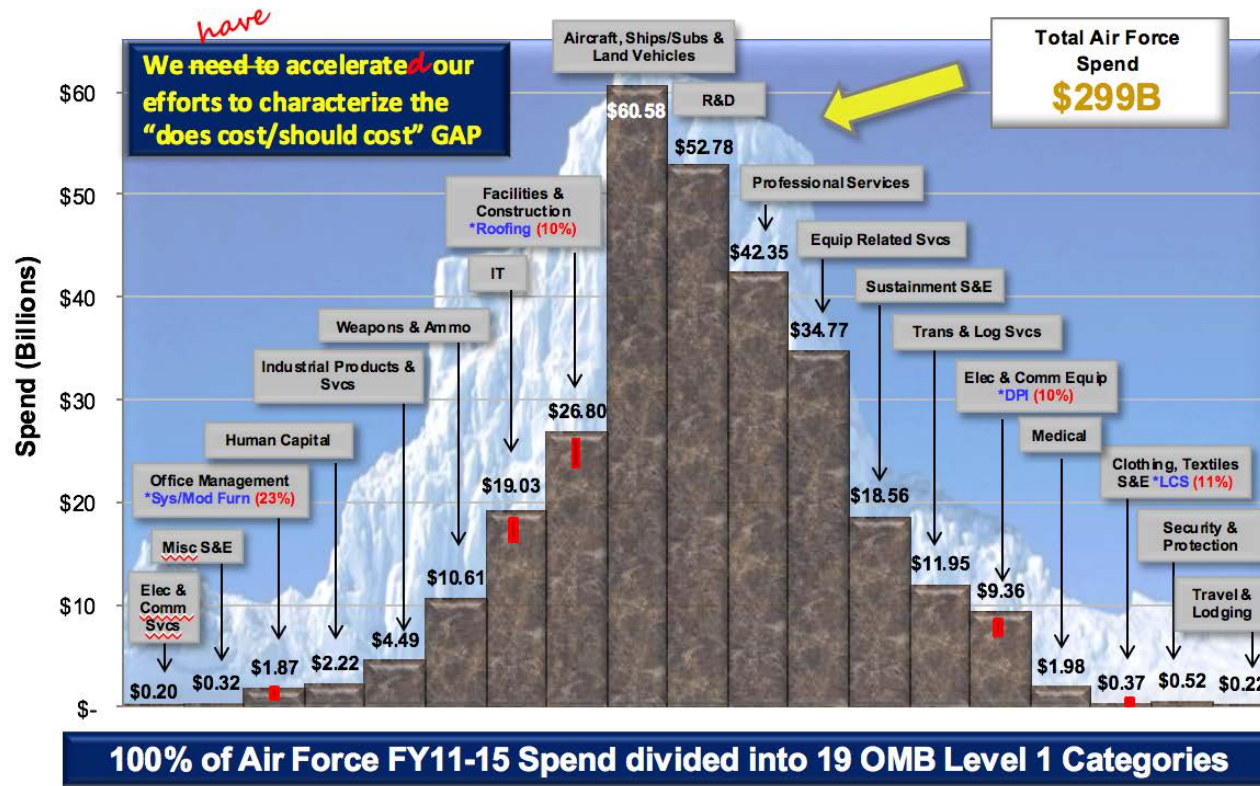
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- Private Sector – 1990s
 - Strategic approach to managing costs & suppliers
 - Enterprise-view: SCM, processes, demand
- Public Sector – 2000s
 - Increase value through purchasing
 - Leverage buying power of the enterprise
 - Air Force *Installation* Contracting Agency (AFICA)



Air Force (FY11-15) A Mountain of Spend



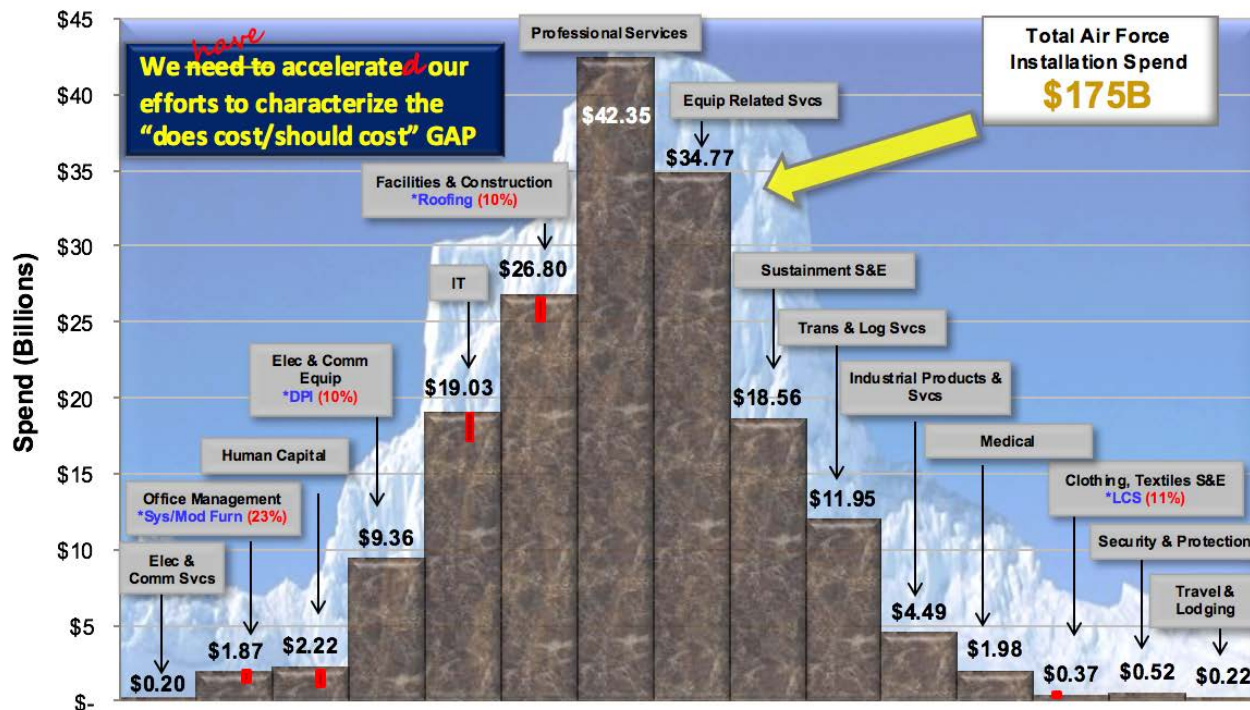
Slide from BICC (2015), "AFICA Mining Company Strategic Plan"



Air Force "Installation" Spend



Air Force "Installation" Support (FY11-15) A Mountain of Spend



\$175B of the AF's \$299B FY11-15 Total Spend divided into 15 OMB Level 1 Categories

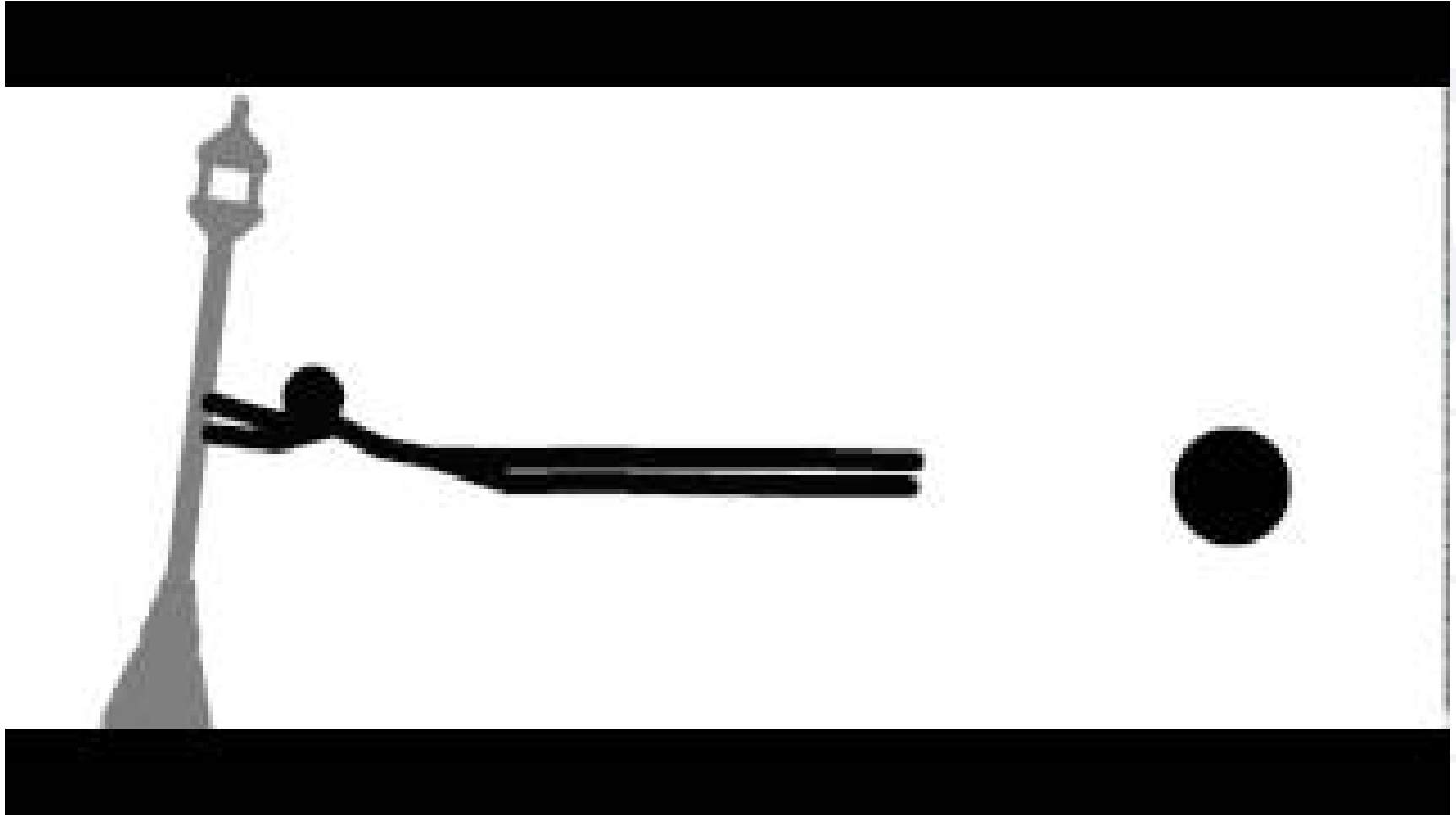
Slide from BICC (2015), "AFICA Mining Company Strategic Plan"



- Determine which products/services present the best opportunities for strategic sourcing
 - Proactive approach
 - Data-driven
 - Repeatable
 - Uses *internal AF & external market data*
 - PSC-/FSC-level and Category-level
- It's about ROI!



Doing a Spend Analysis is Hard





Doing a Spend Analysis is Hard

CHALLENGE ACCEPTED





Doing a Spend Analysis is Critical

“Although such an analysis can be time-consuming and labor-intensive, private enterprises have found that without a spend analysis it is **difficult to identify prospective targets** for applying better [purchasing and supply management] practices, develop **supply strategies** for specific commodities, select the **best suppliers**, manage suppliers in a way to **maximize rewards and minimize risks**, and convince all senior leadership of the need to **shift to best [purchasing and supply management] practices** and of the need for **resources** for the shift” (RAND, 2004, p. 7).



- ~~Simple~~ *Elegant*
- Internal data only
- Uses installation-level* data from FPDS-NG (2010-2014)
- Performed at PSC-/FSC-level
- Weights based on SME judgment

$$\begin{aligned} \text{PSC/FSC Score} = & .20(\#Contracts) + .20(\#Suppliers) + \\ & .20(\#PurchOffices) + .15(\#Offers) + \\ & .12(\$Obligated) + .08(Trend) + \\ & .05(\#MAJCOM) \end{aligned}$$

*Kinda



- Chose to work with Top 67 PSCs/FSCs
Why? 80% of total spend
- Rack/Stack*
 - Top 67 PSCs/FSCs by **Algorithm Score**
 - Top 67 PSCs/FSCs by **Variable**
 - Color Coded

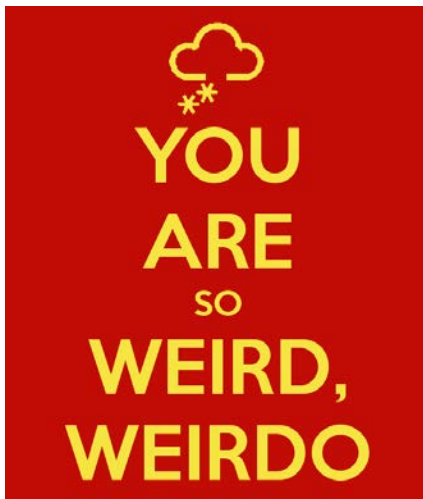
**116 Unique Installation
PSCs/FSCs**



*Some Assembly Required.
Trend & MAJCOM Not Included.

- 116 Installation PSCs/FSCs sorted by:

	Algorithm Score	Overall Spend Score	Top 67 # Variables	# PSCs/FSCs
Winners	Top 67	--	3+	45
Weirdos (All Others)	Top 67	--	<= 2	71
	Not Top 67	--	3+	
	Not Top 67	Top 67	--	



**DON'T
BE LIKE
THE REST
OF THEM
DARLING.**

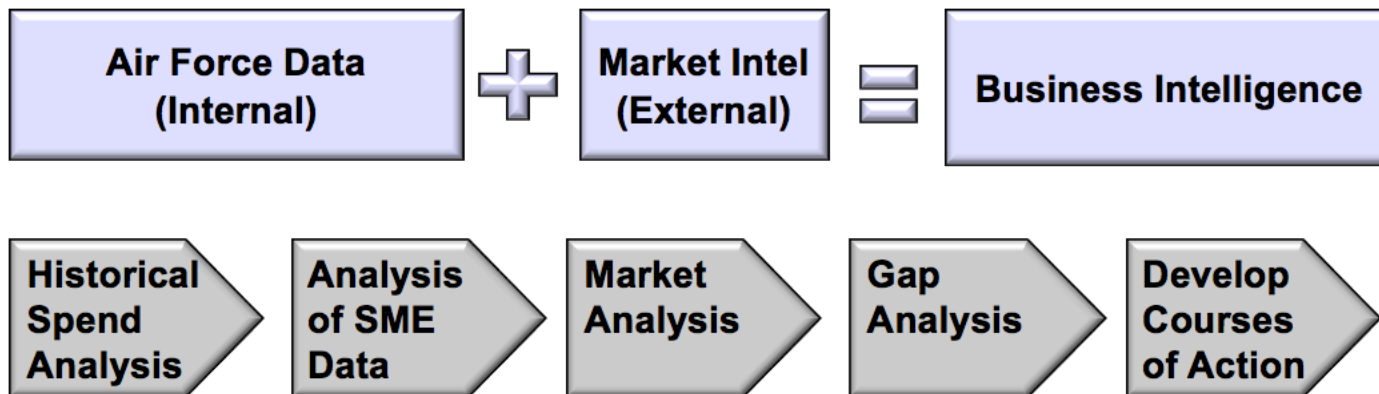


Results – External Market Data

- A
- E
- S
- T

Factor	Category	Dollar Obligation	Weight	Score
Recent Price	1 Logistics Support Services	\$5,572,885,855	2%	3
Neutral Forecast Price	2 IT Hardware	\$6,869,933,636	2%	3
Neutral Forecast Price	3 Business administration services	\$1,230,101,727	2%	3
Weighted Score	4 IT Security	\$594,464,283	2%	3.0
	5 IT Software	\$1,776,425,182	2%	
	6 IT Outsourcing	\$8,057,772,530	2%	
	7 Lodging	\$56,977,615	2%	
	8 Medical Equipment and Accessories and Supplies	\$176,523,865	2%	
	9 Public Relations and Professional Communications Services	\$969,616,073	2%	
Factor	10 Industrial Products Install / Maintenance / Repair	\$534,060,909	2%	
Availability of Growth	11 Office Management Products	\$1,591,701,290	2%	1
Low Market share concentration	12 Test & Measurement Supplies	\$524,692,762	2%	5
Low Product specialization	13 Management Advisory Services	\$20,559,852,901	2%	3
Medium Switching Score	14 Technical and Engineering Services (non-IT)	\$16,919,021,645	2%	3
Low Weighted Score	15 Furniture	\$454,106,706	2%	3
	16 Specialized educational services	\$1,112,202,148	2%	5
	17 Hardware & Tools	\$156,280,747	2%	5
	18 Fire/Rescue/Safety/Environmental Protection Equipment	\$120,148,013	2%	3.1
	19 Security Services	\$66,169,544	2%	
	20 Security Systems	\$195,729,063	2%	
	21 Healthcare Services	\$1,368,663,187	2%	
	22 Telecommunications	\$80,850,754	2%	
	23 Machinery & Components	\$851,912,712	2%	
Factor	24 Facility Related Services	\$18,152,037,809	2%	
Price Disinflation	25 Social Services	\$117,744,990	2%	3
Medium Vendor Financial Risk	26 Construction Related Materials	\$205,760,179	2%	5
Recent Price	27 Transportation of Things	\$3,745,176,128	2%	5
Low Vendor Financial Risk	28 Transportation Equipment	\$95,683,009	2%	5
Low Supply Chain Risk	29 Facility Related Materials	\$46,442,575	2%	5
	30 Vocational Training	\$474,637,860	2%	5
	31 Construction Related Services	\$2,246,979,919	2%	5
	32 Package Delivery & Packaging	\$29,719,859	2%	4.5
	33 Motor Vehicles	\$39,191,166	2%	

- Resources assigned to investigate the best opportunities
- Category Intelligence Report (CIR)



Object from Sharkey (2015) Slides, “Business Intelligence Competency Cell (BICC) Training Plan”





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