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# **CREATING A “SHOULD COST” CULTURE THROUGH OPPORTUNITY MANAGEMENT**

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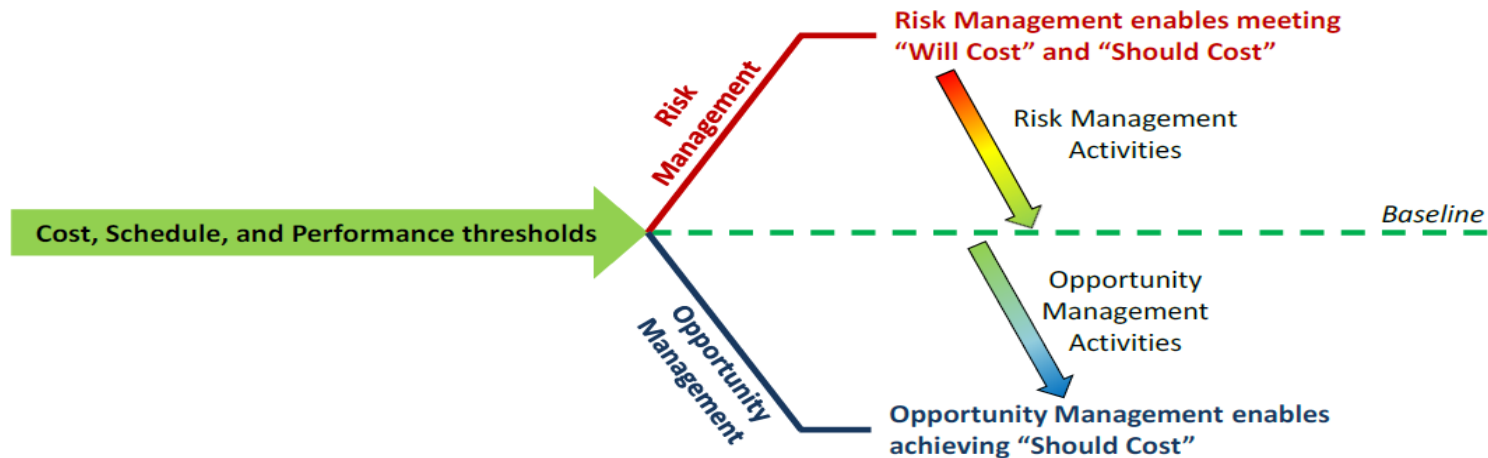
# The Call for Should Cost

“The institution of “should cost” management and its consistent emphasis over the last 6 years by the acquisition chain-of-command has been a success and should be a permanent feature of the DoD’s acquisition culture.”

-- 2016 Performance of the Defense Acquisition System Annual Report

Culture: the set of shared attitudes, values, goals, and practices that characterizes an institution or organization (Merriam-Webster)

- 2017 Department of Defense Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs
  - Opportunities are potential future benefits to the program’s cost, schedule, and/or performance baseline, usually achieved through proactive steps that include allocation of resources.



**Figure 4-1. Opportunities Help Deliver Should-Cost Objectives**

However, the question becomes, are opportunities as well understood and are they being as aggressively pursued and managed as risk and issues?



# Opportunity Management Resources

- Department of Defense Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs
  - Five pages dedicated to OM specifically versus 64 pages for RM
- Acquisition Workforce Education, i.e., Defense Acquisition University
  - One Terminal Learning Objective (TLO) dedicated to OM (ENG 301)
  - 22 TLOs on RM across ENG, PM, PQM
  - Continuous Learning Module for RM; none for OM



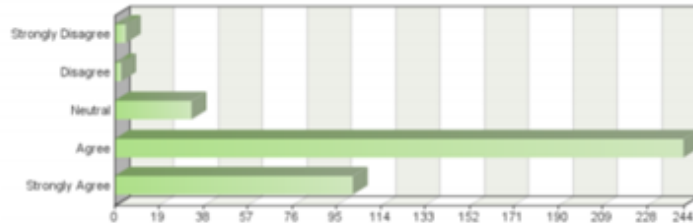
# **Risk and Opportunity Management Survey Results**



# Understanding Risk and Opportunity Management

## Question 1

I understand risk management



Frequency table

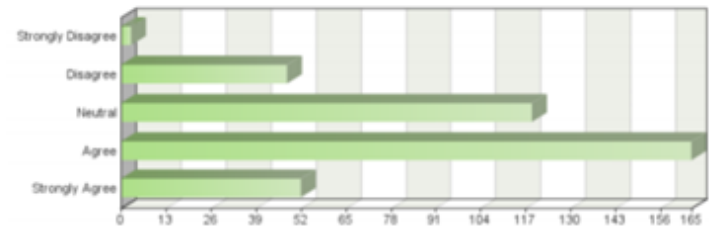
Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	5	1.29%	1.29%
Disagree	3	0.77%	0.78%
Neutral	33	8.51%	8.53%
Agree	244	62.89%	63.05%
Strongly Agree	102	26.29%	26.36%
Sum:	387	99.74%	100%
Not answered:	1	0.26%	-
<b>Total answered: 387</b>			

89.2% of the participants either agreed or strongly agreed that they understood RM

55.9% of the participants either agreed or strongly agreed that they understood OM

## Question 4

I understand opportunity management



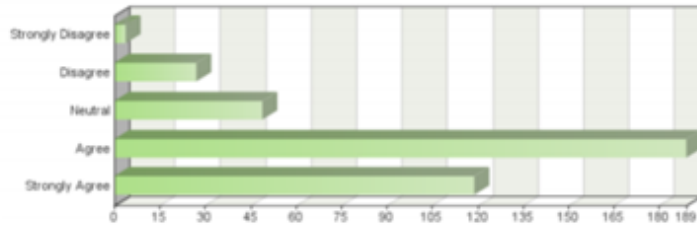
Frequency table

Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	3	0.77%	0.78%
Disagree	48	12.37%	12.4%
Neutral	119	30.67%	30.75%
Agree	165	42.53%	42.64%
Strongly Agree	52	13.4%	13.44%
Sum:	387	99.74%	100%
Not answered:	1	0.26%	-
<b>Total answered: 387</b>			

# Encouraged by Leadership

## Question 2

I am encouraged by my leadership to identify risks



Frequency table

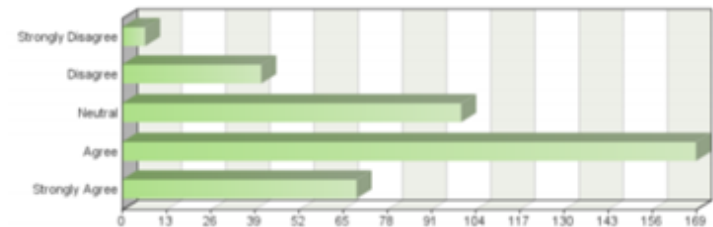
Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	4	1.03%	1.03%
Disagree	27	6.96%	6.96%
Neutral	49	12.63%	12.63%
Agree	189	48.71%	48.71%
Strongly Agree	119	30.67%	30.67%
Sum:	388	100%	100%
Not answered:	0	0%	-
<b>Total answered: 388</b>			

**79.4% of the participants either agreed or strongly agreed that leadership encouraged them to identify risks**

**61.3% of the participants either agreed or strongly agreed that leadership encouraged them to identify opportunities**

## Question 5

I am encouraged by my leadership to identify opportunities

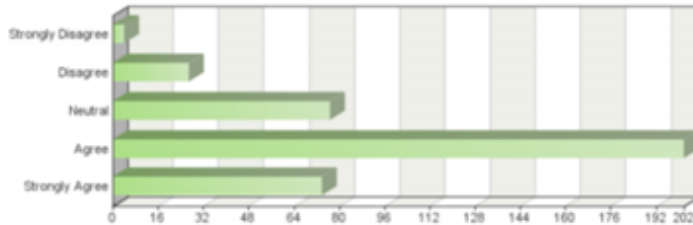


Frequency table

Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	7	1.8%	1.81%
Disagree	41	10.57%	10.62%
Neutral	100	25.77%	25.91%
Agree	169	43.56%	43.78%
Strongly Agree	69	17.78%	17.78%
Sum:	386	99.48%	100%
Not answered:	2	0.52%	-
<b>Total answered: 386</b>			

### Question 3

My organization manages risks



Frequency table

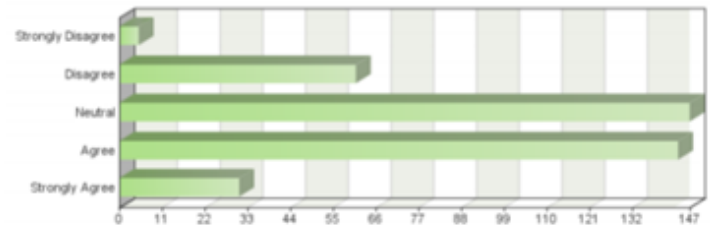
Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	4	1.03%	1.04%
Disagree	27	6.96%	7.03%
Neutral	77	19.85%	20.05%
Agree	202	52.06%	52.6%
Strongly Agree	74	19.07%	19.27%
Sum:	384	98.97%	100%
Not answered:	4	1.03%	-
<b>Total answered: 384</b>			

**71.3% of the participants either agreed or strongly agreed that their organization manages risks**

**45.1% of the participants either agreed or strongly agreed that their organization manages opportunities**

### Question 6

My organization manages opportunities



Frequency table

Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	5	1.29%	1.29%
Disagree	61	15.72%	15.72%
Neutral	147	37.89%	37.89%
Agree	144	37.11%	37.11%
Strongly Agree	31	7.99%	7.99%
Sum:	388	100%	100%
Not answered:	0	0%	-
<b>Total answered: 388</b>			

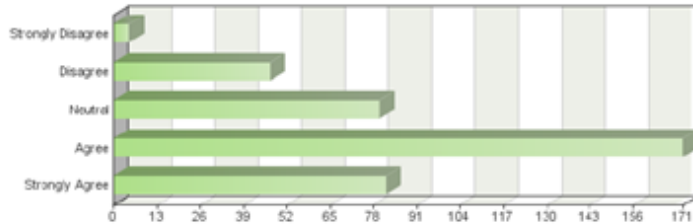




# Process Improvements for Cost Savings

## Question 7

I am encouraged by my leadership to continuously improve my current processes to save money



Frequency table

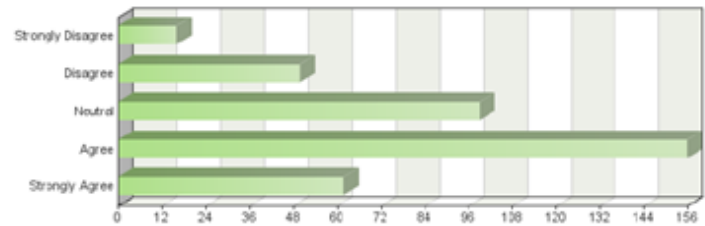
Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	5	1.29%	1.3%
Disagree	47	12.11%	12.21%
Neutral	80	20.62%	20.78%
Agree	171	44.07%	44.42%
Strongly Agree	82	21.13%	21.3%
Sum:	385	99.23%	100%
Not answered:	3	0.77%	-
Total answered: 385			

**56.2% of the participants either agreed or strongly agreed that their leadership encouraged their business process improvement**

**65.2% of the participants either agreed or strongly agreed that their leadership encouraged their continuous process improvement**

## Question 9

I am encouraged by my leadership to question current business process requirements when money can be saved



Frequency table

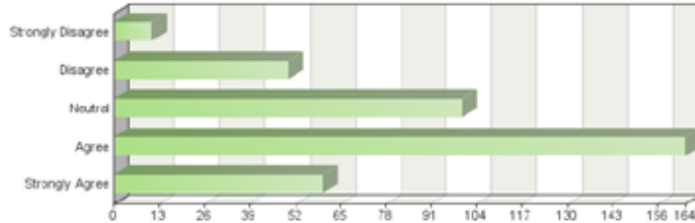
Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	16	4.12%	4.18%
Disagree	50	12.89%	13.05%
Neutral	99	25.52%	25.85%
Agree	156	40.21%	40.73%
Strongly Agree	62	15.98%	16.19%
Sum:	383	98.71%	100%
Not answered:	5	1.29%	-
Total answered: 383			



# Requirements Trade-off for Cost Savings

## Question 8

I am encouraged by my leadership to question performance requirements when money can be saved



Frequency table

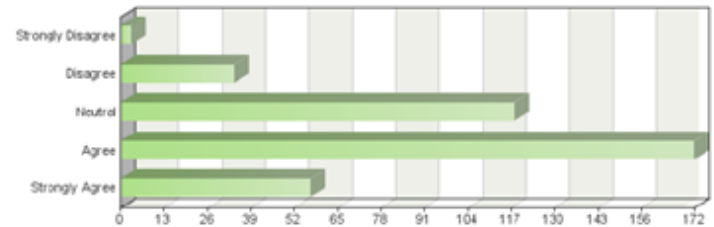
Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	11	2.84%	2.86%
Disagree	50	12.89%	12.99%
Neutral	100	25.77%	25.97%
Agree	164	42.27%	42.6%
Strongly Agree	60	15.46%	15.58%
Sum:	385	99.23%	100%
Not answered:	3	0.77%	-
Total answered: 385			

**57.7% of the participants either agreed or strongly agreed that their leadership encouraged questioning performance requirements**

**59.0% of the participants either agreed or strongly agreed that can think of at least one performance requirement that we could trade-off to save our program money**

## Question 10

I can think of at least one performance requirement that we could trade-off to save our program money



Frequency table

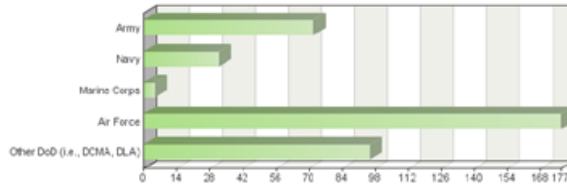
Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Strongly Disagree	3	0.77%	0.78%
Disagree	34	8.76%	8.85%
Neutral	118	30.41%	30.73%
Agree	172	44.33%	44.79%
Strongly Agree	57	14.69%	14.84%
Sum:	384	98.97%	100%
Not answered:	4	1.03%	-
Total answered: 384			



# Demographics

## Question 11

Branch of service:

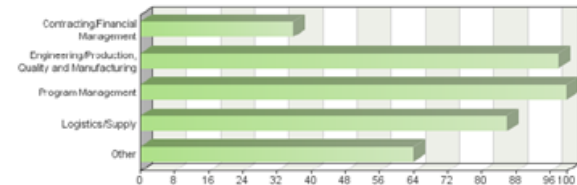


Frequency table

Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Army	72	18.56%	18.85%
Navy	32	8.25%	8.38%
Marine Corps	5	1.29%	1.31%
Air Force	177	45.62%	46.34%
Other DoD (i.e., DCMA, DLA)	96	24.74%	25.13%
Sum:	382	98.45%	100%
Not answered:	6	1.55%	-
Total answered:	382		

## Question 12

My primary acquisition career field is:

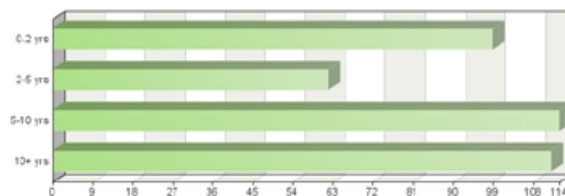


Frequency table

Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
Contracting/Financial Management	36	9.28%	9.38%
Engineering/Production, Quality and Manufacturing	98	25.26%	25.52%
Program Management	100	25.77%	26.04%
Logistics/Supply	86	22.16%	22.4%
Other	64	16.49%	16.67%
Sum:	384	98.97%	100%
Not answered:	4	1.03%	-
Total answered:	384		

## Question 13

Years working in acquisition career field

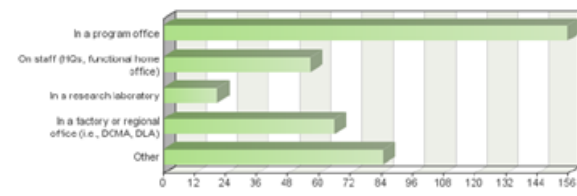


Frequency table

Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
0-2 yrs	99	25.52%	25.58%
2-5 yrs	62	15.98%	16.02%
5-10 yrs	114	29.38%	29.46%
10+ yrs	112	28.87%	28.94%
Sum:	387	99.74%	100%
Not answered:	1	0.26%	-
Total answered:	387		

## Question 14

I currently work:



Frequency table

Choices	Absolute frequency	Relative frequency	Adjusted relative frequency
In a program office	156	40.21%	40.52%
On staff (HQs, functional home office)	57	14.69%	14.81%
In a research laboratory	21	5.41%	5.45%
In a factory or regional office (i.e., DCMA, DLA)	66	17.01%	17.14%
Other	85	21.91%	22.08%
Sum:	385	99.23%	100%
Not answered:	3	0.77%	-
Total answered:	385		



# Increased Education on OM

- Address largest gap between participants
- Lack of TLOs addressing OM should be analyzed by Functional IPTs and any adjustments communicated to DAU
- Investigate developing DAU Continuous Learning Module on OM
- Other military higher education organizations, e.g., NPS, AFIT, etc., should analyze their curriculum to determine applicability

- The role of “lean” in developing a “should cost” culture is identified as implementation strategies
  - Carter/Mueller: PMs should “call in the assistance of Lean Six Sigma experts to assess your processes and trim the fat.”
  - Van Buren/Morin: “Program managers must begin to drive leanness into their programs by establishing Should-Cost estimates at major milestone decisions.”
- Survey results encouraging, but could be improved
- Inculcating continuous process improvement into acquisition workforce is beyond the scope of this research; however:
  - Importance that lean is part of culture rather than program to follow
  - Liker: “most attempts to implement lean ... fairly superficial ... most companies focused too heavily on tools ... without understanding lean as an entire system that must permeate an organization’s culture.”
  - Womack: “The big danger is that it becomes a ‘program’ that everyone is doing as a staff exercise but which no one understands and no one believes in ... It inevitably will fail.”



# Performance Requirements Trade-off (Questions #8 & 10)

- SAF/AQ: “The warfighter can point us to the knee in the curve and say, ‘You know what? I’m not willing to pay more for this capability than that capability’”
  - Oriented towards pre-award
  - Risks and opportunities often become more evident as the detailed design progresses
- Use OM methods to outline cost-avoidance/savings opportunities using robust “tradeoff – benefit” statements per practices from RIO Guide’s RM section
  - Using RIO Guide for registry development, requirement tradeoff opportunities (RTO) can be documented/tracked using same handling choices for opportunities – pursue now, defer, reevaluate or reject
  - RTO Register could designate RTO; likelihood of warfighter reducing or eliminating requirement; negative impact on performance; and positive impact on producibility, reliability, maintainability and life cycle costs
- This extension of OM process is only possible if OM process enjoys more consistent application as tool for Should Cost



# Use OM to Drive Culture Change

- Leadership incentivize system engineering to emphasize OM in manner similar to RM
  - Opportunity Management Reviews
- Culture change is hard
  - Requires visible signs of OM – posters, brochures, published success stories, reward and recognition
- Goal-setting important tool
  - Must ensure doesn't drive unintended behaviors
- Recommend longitudinal study as indicator of cultural inculcation success
- Leadership-driven, persistent OM emphasis will be key



# Questions