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Controlling Costs: The 6-3-5 Method

Nagy, Bruce; Ames, Morgan

Monterey, California. Naval Postgraduate School

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CONTROLLING COSTS: THE 6-3-5 METHOD – NAVSEA AND NATO CASE STUDIES

BRUCE NAGY AND MORGAN AMES

5/10/2016

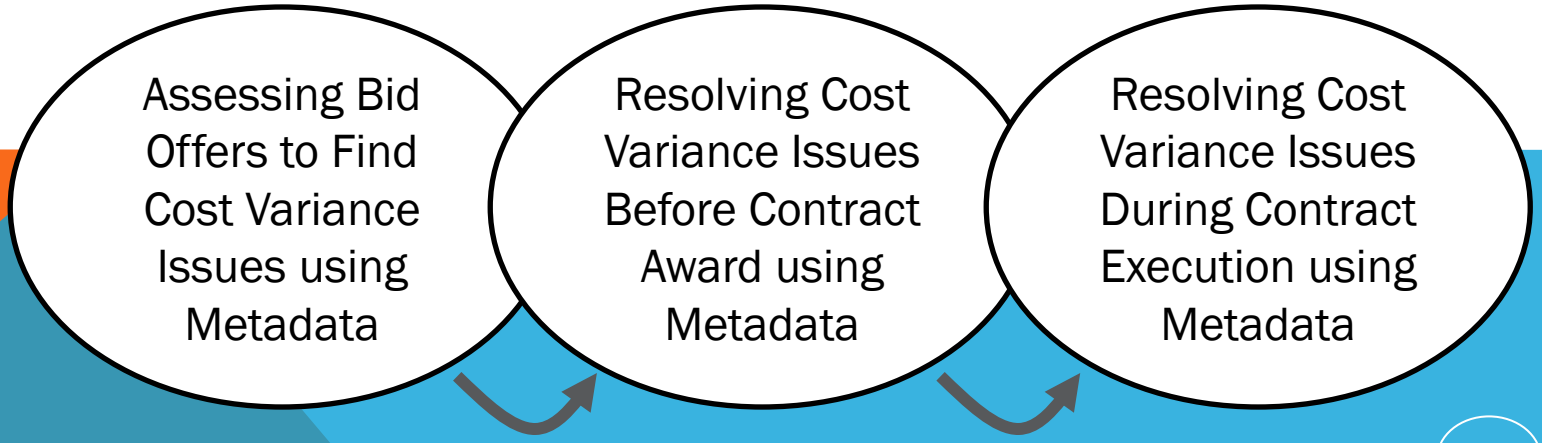
(310) 476-6899
Ridgecrest, CA 93555
www.catalysttechnologies.com

CATALYST TECHNOLOGIES

THE 6-3-5 METHOD: IMPROVING COST CONTROL BY TAGS, OBJECTIVES AND STEPS…

Construct	Six (6) Metadata Tags (MTs)	Three (3) Cost Control Objectives (CCOs)	Five (5) Due Diligence Steps (DDSs)
Elements	Statistical Algorithm	Methods & Measurements	Visual Representation

Purpose



THREE CASE STUDIES DEMONSTRATED…

Methods & Measurements

1

PEO Carriers RCOH

Assessing Bid Offers to Find Cost Variance Issues using Metadata

Statistical Algorithm

2

NATO Air Traffic Control Program

Resolving Cost Variance Issues Before Contract Award using Metadata

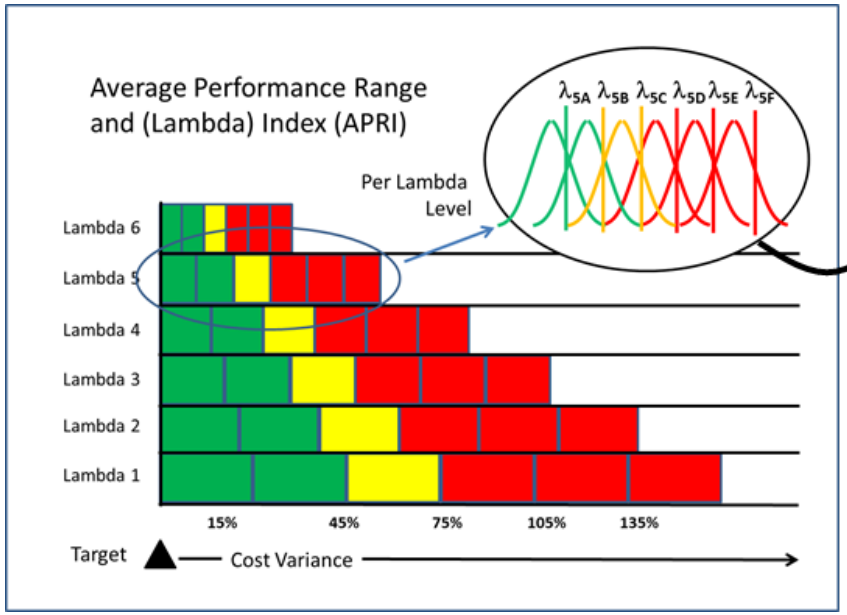
3

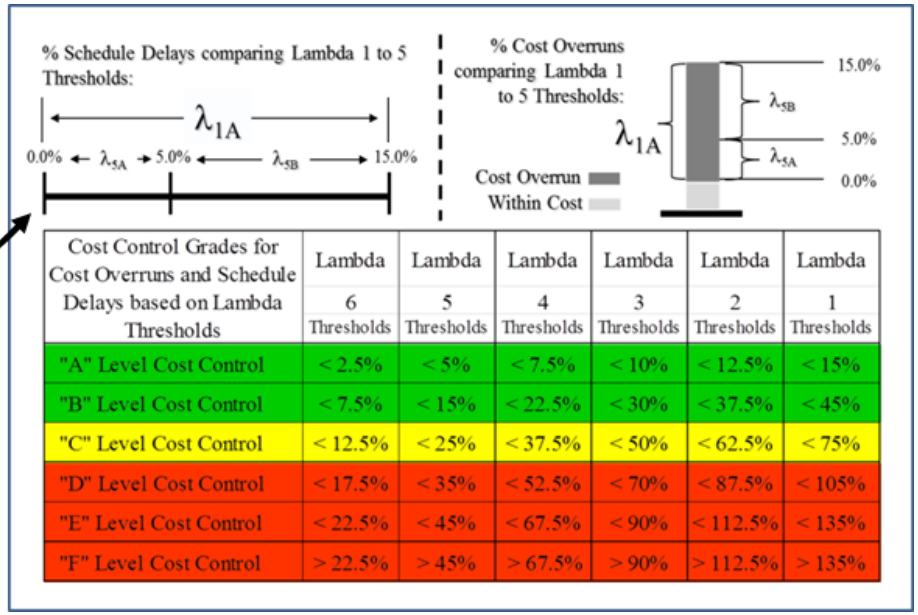
NAVSEA Centers

Resolving Cost Variance Issues During Contract Execution using Metadata

Visual Representation

AVERAGE PERFORMANCE RANGE AND INDEX (APRI)





Cost Control Grades for Cost Overruns and Schedule Delays based on Lambda Thresholds	Lambda 6 Thresholds	Lambda 5 Thresholds	Lambda 4 Thresholds	Lambda 3 Thresholds	Lambda 2 Thresholds	Lambda 1 Thresholds
"A" Level Cost Control	< 2.5%	< 5%	< 7.5%	< 10%	< 12.5%	< 15%
"B" Level Cost Control	< 7.5%	< 15%	< 22.5%	< 30%	< 37.5%	< 45%
"C" Level Cost Control	< 12.5%	< 25%	< 37.5%	< 50%	< 62.5%	< 75%
"D" Level Cost Control	< 17.5%	< 35%	< 52.5%	< 70%	< 87.5%	< 105%
"E" Level Cost Control	< 22.5%	< 45%	< 67.5%	< 90%	< 112.5%	< 135%
"F" Level Cost Control	> 22.5%	> 45%	> 67.5%	> 90%	> 112.5%	> 135%

6-3-5 Method

- Statistical Algorithm
- Methods & Measurements
- Visual Representation

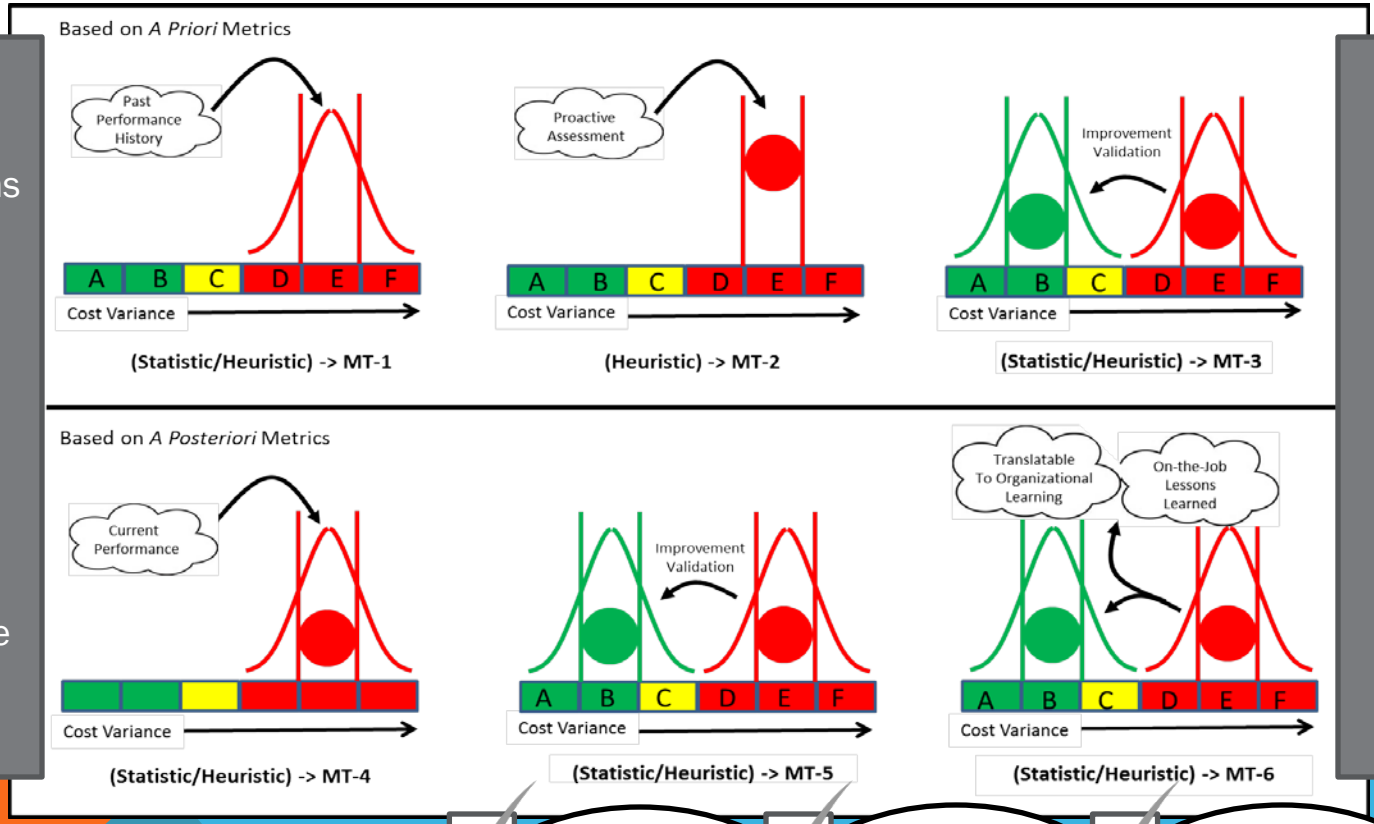
- Assessing Bid Offers to Find Cost Variance Issues using Metadata
- Resolving Cost Variance Issues Before Contract Award using Metadata
- Resolving Cost Variance Issues During Contract Execution using Metadata

THE 6-3-5 METHOD: 6 MTs SUPPORTING 3 CCOs AND 5 DDSs

MT-1: Statistically-Based Lessons Learned Metadata

MT-2: Proactive Assessment Metadata

MT-3: Proactive Due Diligence Metadata



MT-4: Performance Tracking Metadata

MT-5: Reactive Due Diligence Metadata

MT-6: On-the-Job Lessons Learned Metadata

6-3-5 Method

- Statistical Algorithm
- Methods & Measurements
- Visual Representation

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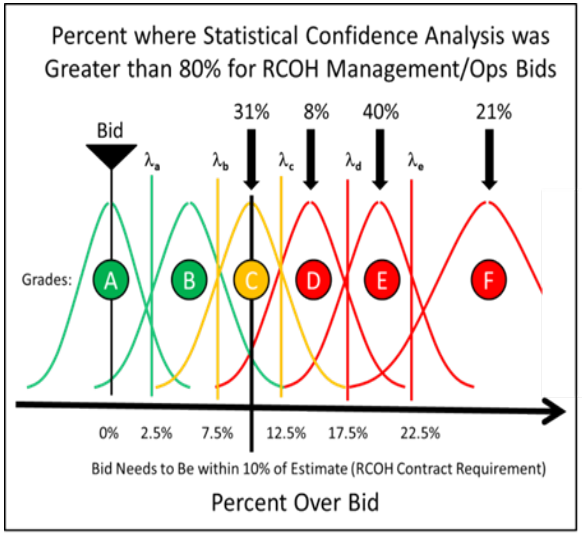
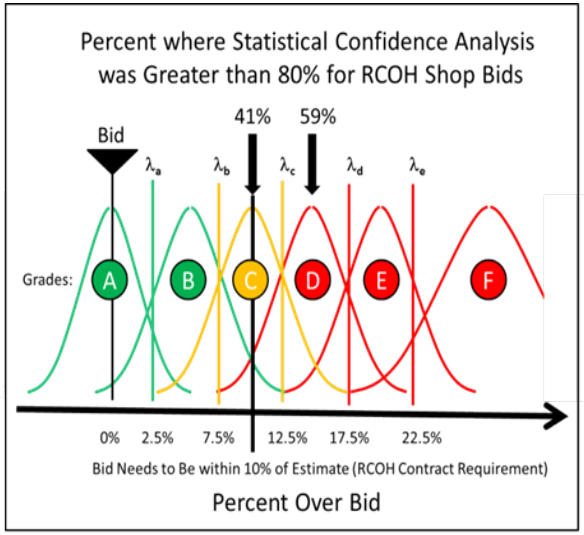
- Resolving Cost Variance Issues During Contract Execution using Metadata

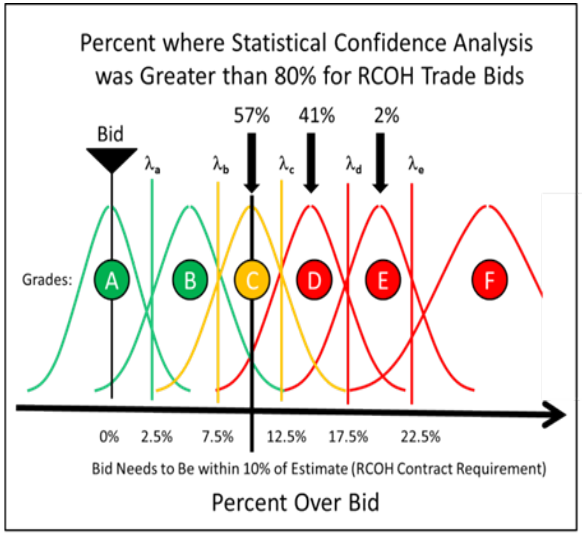
PEO CARRIERS CASE STUDY DEMONSTRATED…

6-3-5 Method
- Statistical Algorithm
- Methods & Measurements
- Visual Representation

- Assessing Bid Offers to Find Cost Variance Issues using Metadata
- Resolving Cost Variance Issues Before Contract Award using Metadata
- Resolving Cost Variance Issues During Contract Execution using Metadata



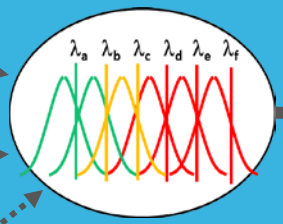




CVN-68 RCOH Past Performance Data

CVN-69 RCOH Past Performance Data

Statistically "Similar" Performance Data



Forecast CVN-70 RCOH Bid Reliability

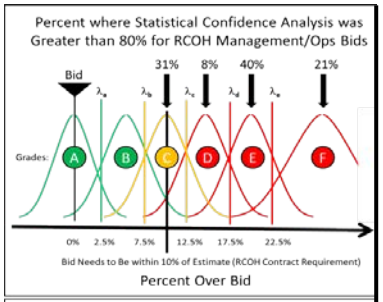
PEO CARRIERS CASE STUDY DEMONSTRATED…

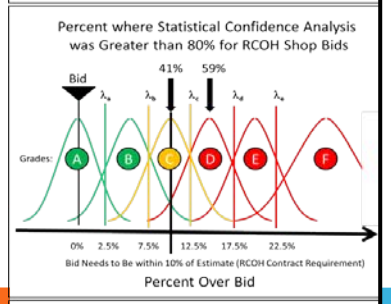
6-3-5 Method
Statistical Algorithm
Methods & Measurements
Visual Representation

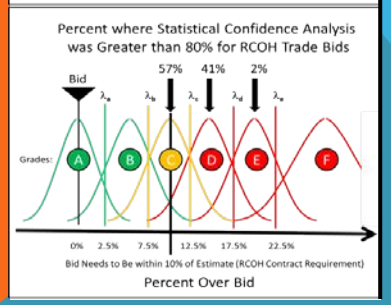
Assessing Bid Offers to Find Cost Variance Issues using Metadata

Resolving Cost Variance Issues Before Contract Award using Metadata

Resolving Cost Variance Issues During Contract Execution using Metadata





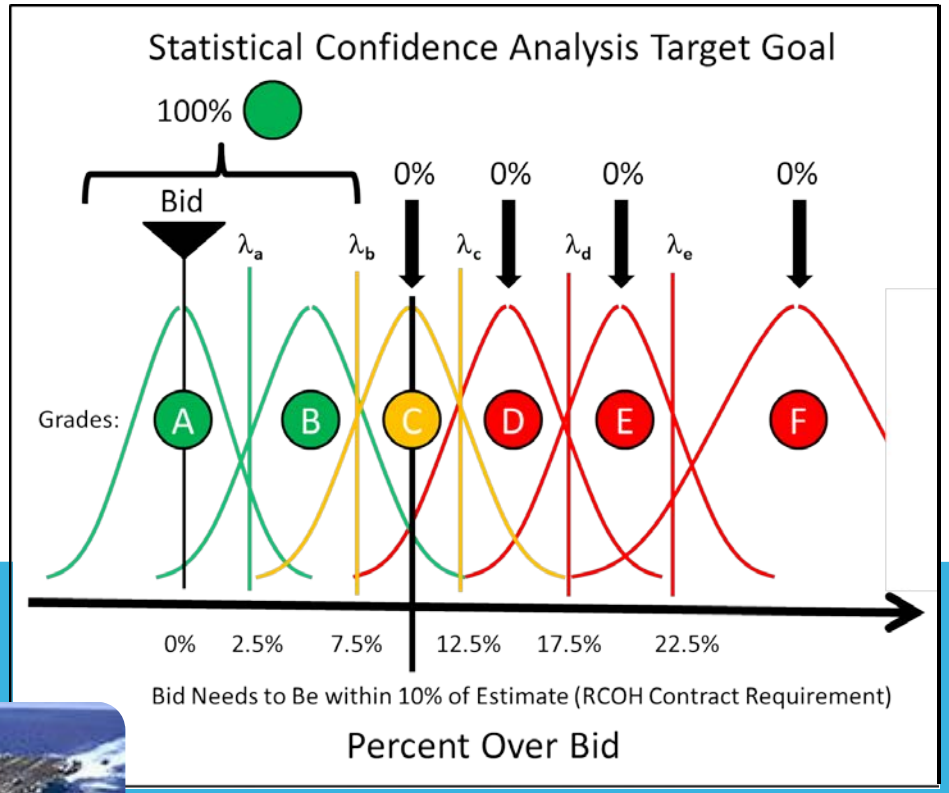


Example…

Problem Solving Collaboration Approach

?

Promoting Acquisition Team Due Diligence



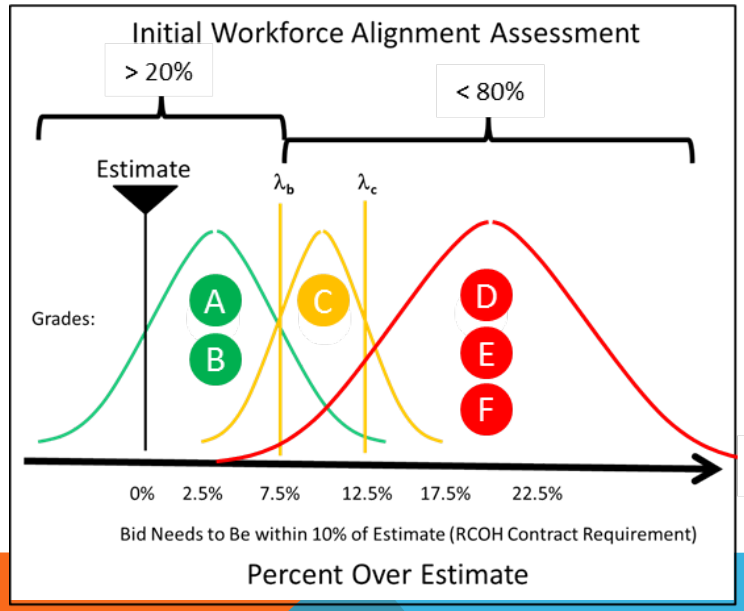
NATO PROGRAM CASE STUDY DEMONSTRATED…

6-3-5 Method
- Statistical Algorithm
- Methods & Measurements
- Visual Representation

Assessing Bid Offers to Find Cost Variance Issues using Metadata

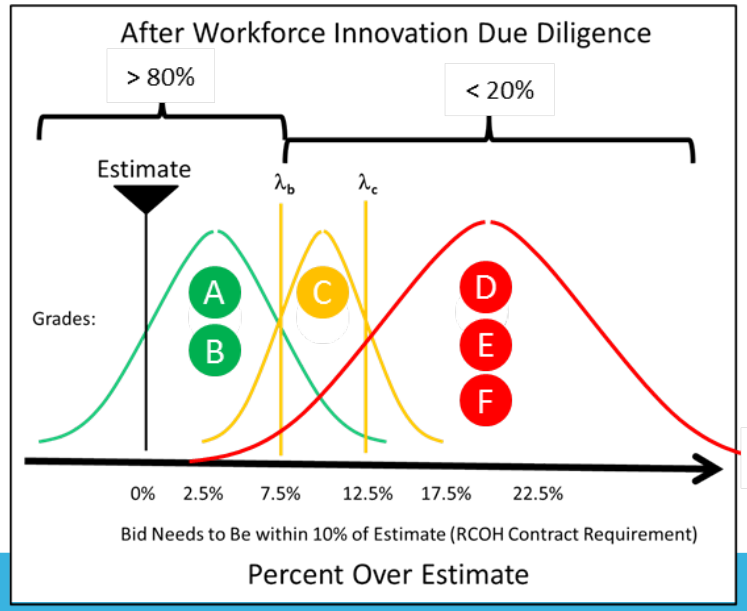
Resolving Cost Variance Issues Before Contract Award using Metadata

Resolving Cost Variance Issues During Contract Execution using Metadata



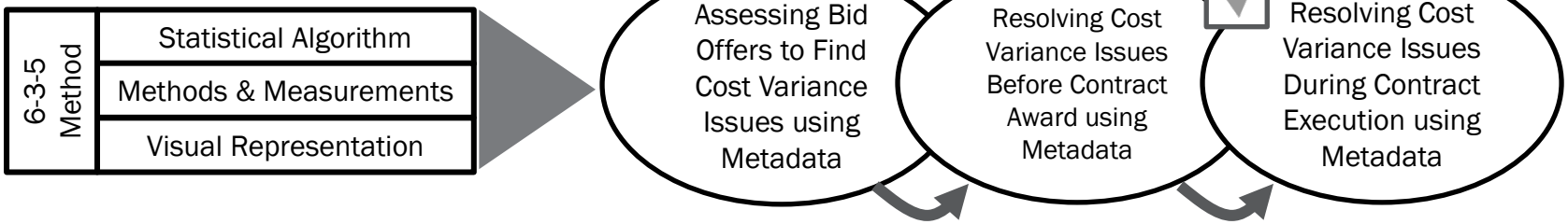
Problem Solving Collaboration Approach

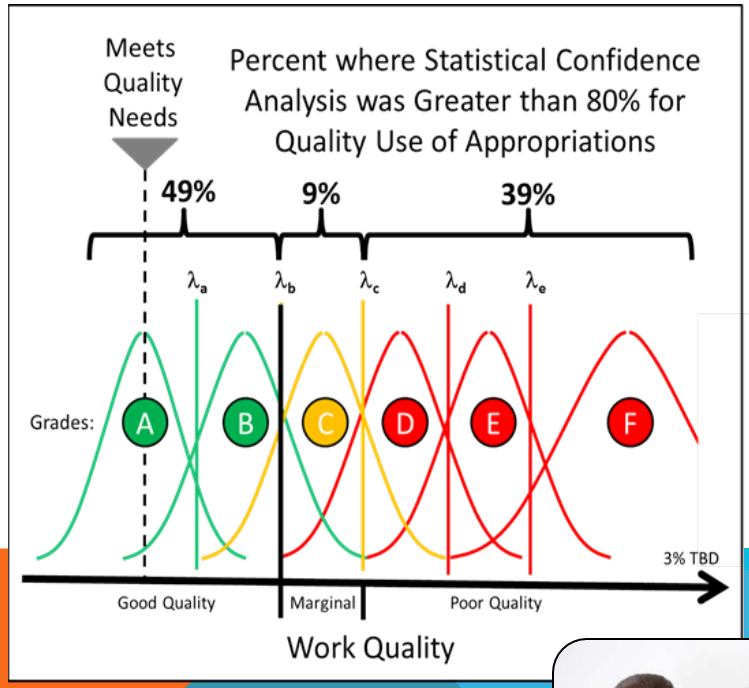
Promoting Workforce-Driven Innovation Due Diligence



Air Traffic Control System (HW & SW)

NAVSEA CENTERS CASE STUDY DEMONSTRATED…





Problem Solving Collaboration Approach

Promoting Workforce-Driven Innovation Due Diligence

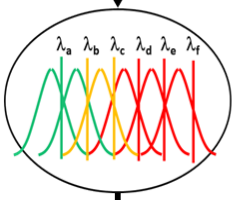
Multiple Branches

Two Centers

THE 6-3-5 METHOD IN SUPPORT OF DON POM SUBMISSION PROCESS

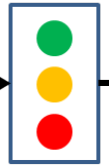
Provides "A Priori" Support of DON POM Submission Process

Statistically Same or Similar Performance Data



6-3-5 Method

Results



Visual Addition to Table

Fixed Wing	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FYDP
F-35B (STOVL JSF)	6	6	6	9	14	20	55
F-35C (CV JSF)	4	4	6	9	14	20	53
F/A-18E/F	26	-	-	-	-	-	-
CA-18G	12	21	-	-	-	-	21
E-2D AHE	5	5	5	6	8	8	32
P-8A (MMA)	13	16	16	16	14	10	72
C-40A	-	-	-	-	-	1	1
KC-130J (USMC)	-	2	1	1	1	2	7
Other Support Aircraft	-	1	-	-	-	-	1

FYDP for Fixed Wing Aircraft

Fixed Wing	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FYDP
F-35B (STOVL JSF)	6	6	6	9	14	20	55
F-35C (CV JSF)	4	4	6	9	14	20	53
F/A-18E/F	26	-	-	-	-	-	-
CA-18G	12	21	-	-	-	-	21
E-2D AHE	5	5	5	6	8	8	32
P-8A (MMA)	13	16	16	16	14	10	72
C-40A	-	-	-	-	-	1	1
KC-130J (USMC)	-	2	1	1	1	2	7
Other Support Aircraft	-	1	-	-	-	-	1

Reliability of FYDP and Visibility of Risks

Statistical Confidence of 80% or greater in Estimate

- Within 7.5%
- Within 7.5% to 12.5%
- Greater Than 12.5%

Statistical Algorithm
Methods & Measurements
Visual Representation

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