# Knowledge, Experience, and Training in Incentive Contracting for the Department of Defense











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#### **Presentation Outline**

- Purpose of the Study
- Kirkpatrick Evaluation Model
- Research Model
- Methodology
- Responses to Survey
- Findings
- Recommendations
- Summary





# Purpose of this Study

- Assess the incentive and award fee contracting training, experiences, and knowledge gained by the DOD Acquisition Workforce (DAW), (i.e., Department of Defense (DOD) Program Managers (PMs), Deputy PMs (DPMs), Contracting Officers (KOs), and Contract Specialist (CS)), through the implementation of various contractual incentive arrangements to influence more favorable performance outcomes.
- Identify the presence of any noticeable gaps between required and actual levels of training, experience and knowledge in incentive arrangements.
- Identify opportunities to improve the training and experience for the DAW through
  - Additional Training
  - Improved training and/or
  - Additional experience requirements to support assignment specific DAW members.



### KIRKPATRICK EVALUATION MODEL



Kirkpatrick's four levels of evaluation consist of:

**Step 1: Reaction** - How well did the learners like the learning process?

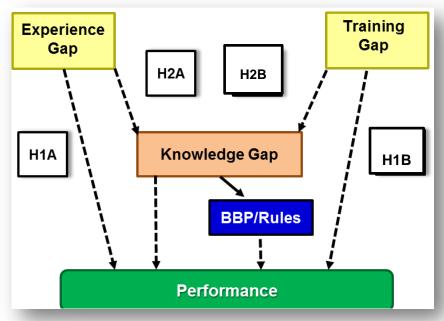
**Step 2: Learning** - What did they learn? (e.g. the extent to which the learners gain knowledge and skills)

**Step 3: Behavior** - What changes in job performance resulted from the learning process? (e.g. capability to perform the newly learned skills while on the job)

**Step 4: Results** - What are the tangible results of the learning process in terms of reduced cost, improved quality, increased production, efficiency, etc.?



### RESEARCH MODEL



Independent Variable

Dependent Variable

Intervening Variable

H1 and H2 Hypothesis Relationship

- Research focus: Better understand the experiences (Ex) (i.e. H1A and H2A) gained through the management of various incentive arrangements and determine if gaps exist in experience levels, and whether these gaps have a potential causal relationship with programmatic performance.
- Training (Tr) (i.e. H1B and H2B) was used to determine the presence of any substantiated gaps and their influence on performance outcomes.
- A gap analysis would confirm the disparity between current and required levels of knowledge (Kn), training (Tr), and experience (Ex) to achieve desired performance outcomes performance.
- For Hypothesis 2, a correlation was used to determine the strength of the relationship between experience and training and its potential causal relationship to knowledge.
- A correlation assessment was also performed to determine the presence of any strong connections among gaps in knowledge, training and experience.

### RESEARCH QUESTIONS AND HYPOTHESES

#### Research Question 1

- What are the relationships among training gap, experience gap, and performance attributes that affect incentive contract arrangements among Defense Acquisition Workforce members in the contracting and program field?
- <u>Hypothesis 1:</u> There are gaps in training and experience that affect performance attributes associated with incentive contract arrangements among Defense Acquisition Workforce members in the contracting and program field.
  - Hypothesis 1A: There is a reliable relationship among experience gaps and performance attributes among contract professionals and program managers.
  - Hypothesis 1B: There is a reliable relationship among training gaps and performance attributes among contract professionals and program managers.

#### Research Question 2

- What are the relationships between training gaps, experience gaps, and knowledge gaps that affect incentive contract arrangements among Defense Acquisition Workforce members in the contracting and program field?
- <u>Hypothesis 2:</u> There are differences in the relationships between training gaps, experience gaps, and knowledge gaps associated with incentive contract arrangements among Defense Acquisition Workforce members in the contracting and program field.
  - Hypothesis 2A: There is a reliable relationship among experience gaps and knowledge gaps among contract professionals and program managers.
  - Hypothesis 2B: There is a reliable relationship among training gaps and knowledge gaps among contract professionals and program managers.



### METHODOLOGY -EMPIRICAL DATA

- This research was designed to measure gaps; and identify any correlations among knowledge, training, experience, and performance that might prevail with incentive and award fee contracts.
- Question: Was the incentive contracting training sufficiently practical and comprehensive to enable PM/CM to achieve program outcomes in <u>eight</u> specific performance areas?
- Question: Were there any training and experience gaps that impacted knowledge and performance outcomes?

#### **2 Controlled Groups DAWIA Level III**

- Program Management (PM)
  - 1194 PM Participants
- Contracts Management (CM)
  - 946 CM Participants
- 70% Civilian
- 24% Military
- 6% Contractors

Findings Recommendations

#### **Qualitative Component:**

- Over 6,000 comments
- Augmented several findings

#### **Quantitative findings centered on:**

- Training/Experience/Knowledge
- Presence of gaps
- Training/Experience influence on performance
  - <u>Program Management group consisted of Program Managers</u>, Deputy Program Managers, and function acquisition leads.
  - <u>Contracts Management group consisted of Procuring</u>
     Contracting Officers, Administrative Contracting Officers, and Contract Specialists.
  - 30 Question Online Survey
  - Non-attribution





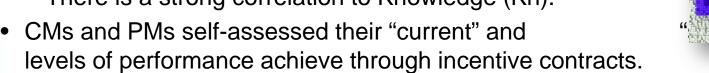
### Findings: Quantitative Data

- Moderate (self-assessed) gaps exist in training, experience, and Performance (H1A/H1B).
- ).
- PMs and CMs/KOs perceive a <u>strong relationship</u> between both the <u>observed training gap</u> and <u>experience gap</u> to the <u>observed knowledge gap</u>.
- The <u>experience gap</u>, vice the <u>training gap</u>, is perceived to be more closely related to performance outcomes.
- CMs see training to be more closely related to performance outcomes than do PMs.
- Training and experience are highly correlated to knowledge.
- Current state of skill-sets is more about the mechanics
- Desired state focused upon the performance achieved through drafting incentives to achieve desired outcomes.



## Findings: Quantitative Data (Cont'd)

- H2A/H2B Incentive contracting Training(Tr)/Experience (Ex)
  - There is a strong correlation to Knowledge (Kn).





- CMs (Should Be) need to increase Tr/Ex to structure incentive contracts to support more in-depth Kn levels.
- PM (Current) assessments of CM performance level is closely aligned with CM selfassessments and corroborated what the research confirmed.
- PM (Should-Be) self-assessments were very similar to CM (Should Be) self-assessments.
- CM (Should Be) assessments of PMs
  - Except Assessment of DPMs lack a clear understanding of incentive knowledge.
  - DPMs has a 2 point gap with incentive contract formation to performance outcomes.
- A strong relationship exists between the observed training and experience gaps and knowledge gaps—reducing Tr/Ex gaps could also reduce Kn gaps.





# Gap Analysis (H1A/H1B)

#### Table 8

Results of a Mean Gap Analysis Between Contract Managers Current and Should Be Performance Level

Variables	N	Current Mean	Current SD	Should be Mean	Should be SD	Mean Gap
Program Manager	304	3.0968	1.7832	4.1184	1.7723	1.0216
Deputy Program Manager	301	3.0370	1.7899	4.0864	1.7318	1.0494
Contracting Officer	327	4.0185	2.0340	5.1804	1.5412	1.1619
Contract Specialist	369	3.3425	1.9019	4.7015	1.7621	1.3590

#### Table 9

Results of a Mean Gap Analysis Between Program Managers Current and Should Be Performance Level

Variables	N	Current Mean	Current SD	Should be Mean	Should be SD	Mean Gap
Program Manager	386	3.0200	1.7777	4.1036	1.7756	1.0836
Deputy Program Manager	383	2.0112	1.5380	4.0496	1.7351	2.0384
Contracting Officer	343	3.9510	2.0372	5.1590	1.5382	1.2080
Contract Specialist	327	3.2416	1.9019	4.6812	1.7604	1.4396

**Table 8** - Mean gap analysis of current & should be performance levels by CM respondents.

- The scale measures the various levels of understanding of outcomes that can be achieved through incentive arrangements
- CM respondents identified a gap greater than 1.0 for all four groups (PM, DPM, KO, & CS).
- Greatest gaps were CS with a 1.3590 and KO with a 1.1619.

**Table 9** - Mean gap analysis of current & should be performance levels by PM respondents.

- PM respondents identified a gap greater than 1.0 for each of the groups.
- Greatest gaps were deputy program managers with a 2.0384 and contract specialists with a 1.4396.
- Program managers believe that among DPMs and CSs, performance levels should result in more meaningful performance outcomes.



# Findings: Qualitative Data

#### Knowledge:

 "Contractor outcomes- profit/fee- were higher than they should have been because personnel <u>routinely failed to hold contractors</u> to the criteria formed in the Award or Incentive plans."



types they don't fully

# Over 6,000 comments provided from respondents.

to use FFP or CPFF or IDIQ arrangements become formation of award fee contracts."

a ine

"Not sure all of my people are good at thinking through how different incentive structures will cause the contractor to behave. Incentives other than cost are particularly tricky and I generally shy away from them because I sense that the contractor will 'outfox' us and we will end up regretting the structure down the road."



### Findings: Qualitative Data

#### **Experience:**

- "Experience is the main driver of shortfalls. Not everybody is in situations where they are using CPAF, FPIF, or CPIF contracts regularly."
- "This lack of experience, understanding and training makes it very difficult to effectively utilize these contract types."
- "Nobody seems to know what to do, if and when we use it and/or the required information is not passed to the field.
- "Experience seems to drive individuals to contracts that they are familiar with."
- "Lack of experience with multiple contract types can cause under-performance."
- "The lack of experience outs (place) the government at a disadvantage in execution of these types of contracts."
- "There's just no substitute for experience, not IQ, not education. With experience comes intuition, and it's intuition that recognizes what flies and what doesn't.
   Oftentimes, people are thrust into programs and projects for which they lack a basis for making informed decisions about the future."





### Findings: Qualitative Data

### **Training:**

- "People had the training, but did not understand how to use it in their duties."
- "Most time is spent trying to apply mechanics of type rather than truly implementing meaningful measures."
- "The biggest problem is developing meaningful criteria.
   Services acquisition are very hard to 'incentivize'. The wording of the meaningful criteria is the bigger problem than coming up with 10, 20, 30 percent incentive. That is simple math."
- "Because we don't have good command level training for how to administer these overly complex contracts, everyone struggles to efficiently do their work."
- "Lack of training is the biggest problem."
- "We do not receive enough training to understand these concepts enough to execute effectively."





### Recommendations

- Create user-friendly knowledge sharing access for lessons learned, proven practices, successes, etc. <u>DAU Workflow.</u>
  - Use as resource for teaching & searchable practicing opportunities for PMs/CMs



- Reinvigorate incentive contract development training for PMs and CMs so they better understand the fundamental principles and benefits of incentive contracts. <u>DAU Develop CLM – Incentive Contracts.</u>
- Establish multiple training opportunities for incentive contracts. <u>DAU</u>
  - Leverage just-in-time training and consulting services
  - Develop assignment-specific workshops that contain rigorous exercises and fundamental understanding of the principles and benefits of incentive contracts
  - Design team training vignettes using available activities data
- Produce an incentive and award fee guidebook. <u>DAU/DPAP.</u>



# Recommendations (Cont'd)

- <u>Identify the lessons learned from successful and unsuccessful incentive arrangements within the past 10 years. Workflow Product.</u>
- Ensure the appropriate <u>acquisition workforce qualification</u> <u>competencies</u> (or any variation thereof) incorporate the key standards that address incentive and award fee contract proficiencies that are sometimes assignment specific.
- Encourage the Functional Integrated Product Teams (FIPTs) to explore a <u>minimum set of competencies that are specifically tuned to the</u> <u>implementation of incentive arrangements</u> for PMs and CMs in assignment specific positions.
- Conduct a follow on study to address the relationship between knowledge, performance, and the applicable regulations.



# Summary

- There is a need for more in depth incentive contract training for PMs/KOs to support assignments specific duties in support of complex programs with incentive arrangements.
- CMs/PMs need additional training, hands on experience, and skill development in the development of complex incentive and award fee arrangements that specifically target performance outcomes.
- Any incentive arrangement training needs to include information on both the development and application of objective incentives to achieve program outcomes while rewarding the contractor when program goals are achieved.
- BBP encourages the use of incentive arrangements.