

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

# Applying the Gaps Model of the Service Industry: Five ways that Prevent Test & Evaluation from Meeting Customer Expectations

National Defense Industrial Association 19<sup>th</sup> Annual Systems Engineering Conference

Allan Alfafara

Systems Test Engineer
Test Planning and Requirements



# Common program questions



- How would I know that my program is delivering exceptional quality to my customer?
- How does my customer grade my performance?
- Is my organization covering everything it needs to do to succeed?
- Are tests and evaluations my only focus?





# Test and Evaluation as a Service Organization



The Top 5 Companies in 2016 According To Fortune Magazine	
Companies	Revenues (\$M)
1 Walmart	\$482,130
2 Exxon Mobil	\$246,204
3 Apple	\$233,715
4 Berkshire Hathaway	\$210,821
5 McKesson	\$181,241

Retrieved from: http://beta.fortune.com/fortune500/

Service- Person or entity providing deeds, processes, and performances to another person or entity





How is the service model applied to a test organization?

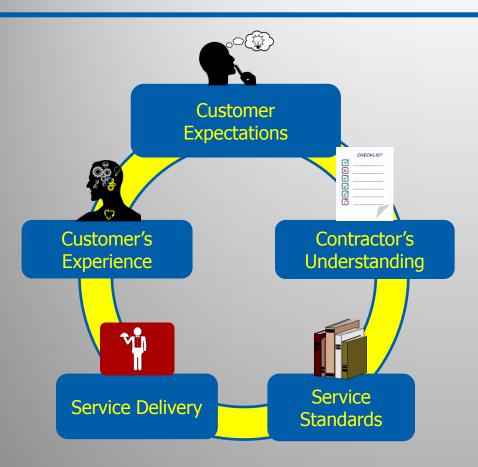
Descriptions	Causes	Solutions
Descriptions of the 5 Service Gaps	Causes of the 5 Service Gaps	Solutions of the 5 Service Gaps
-Identify areas in your organization where quality is lacking	-Understand the conditions that lead to specific gaps	-Learn of preventions or remedies to close specific gaps

Purpose is to provide an understanding of the service gap model to reflect on organizations in order to evaluate the quality provided to your customer whether internal or external



## Describing the Service Gap Model





### Gap 1: The Understanding/Knowledge Gap

- Disconnect between customer expectations and contractor's understanding of those expectations
  - Example: Customer wants a red apple, company thinks they want a green apple

### Gap 2: The Service Design and Company Policy Gap

- Disconnect between contractor's understanding and company policy
  - Example: Employees are told customer wants a green apple and employees do not have standards and policies to define what a green apple is and how it is to be gathered

### Gap 3: The Service Performance/ Delivery Gap

- Disconnect between company standards and actual service provided
  - Example: Lack of or abandoned company policies exists and employees deliver a green pear

### Gap 4: The Communication Gap

- Disconnect between delivered service and external communication
  - Example: A green pear is delivered and apples are advertised

### Gap 5: The Customer Gap

- Disconnect between customer's experience of the delivered service and customer expectations
  - Example: Customer thinks they received a green pear and customer expected a red apple

**Descriptions** 

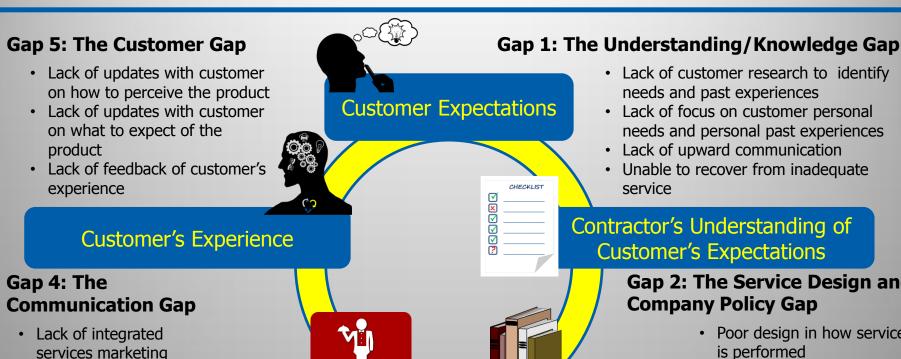
**Causes** 

**Solutions** 



# Causes of Gaps in a T&E Organization





Service Delivery

Lack of customer research to identify

needs and past experiences Lack of focus on customer personal needs and personal past experiences

- Lack of upward communication
- Unable to recover from inadequate service

Contractor's Understanding of **Customer's Expectations** 

### **Gap 2: The Service Design and Company Policy Gap**

- Poor design in how service is performed
- Absence of customer-driven standards
- Inappropriate physical evidence and servicescape

### **Gap 3: The Service Performance/ Delivery Gap**

- Deficiencies in human resource policies
- Failure to match supply and demand
- Customer not fulfilling their roles
- Problems with other IPTs

**Descriptions** 

Causes

**Solutions** 

**Service Standards** 

communications

management of

Overpromising

communications

Inappropriate pricing

customer expectations

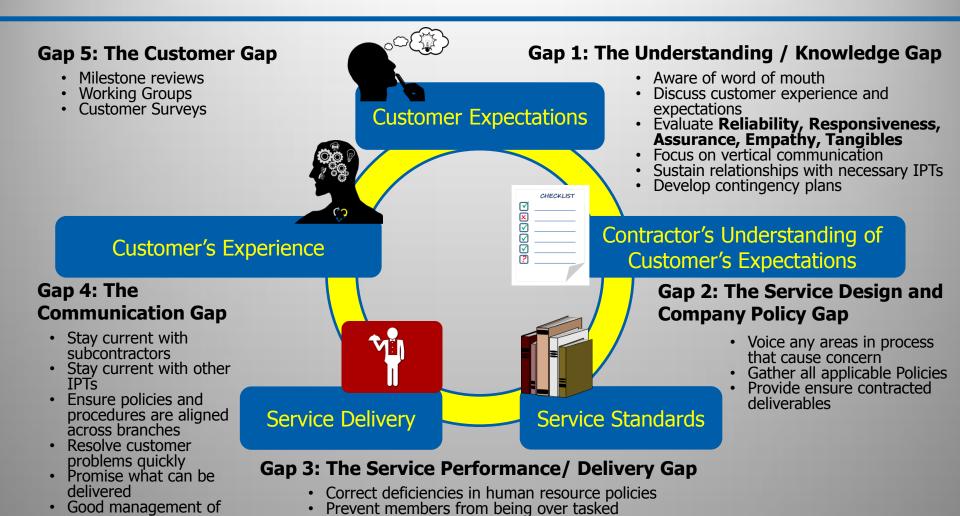
Inadequate horizontal

Ineffective



# Solutions to Gaps in a T&E Organization





Ensure customers provide what they need to provide

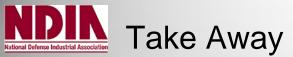
Communicate issues concerning other IPTs upward

**Descriptions** 

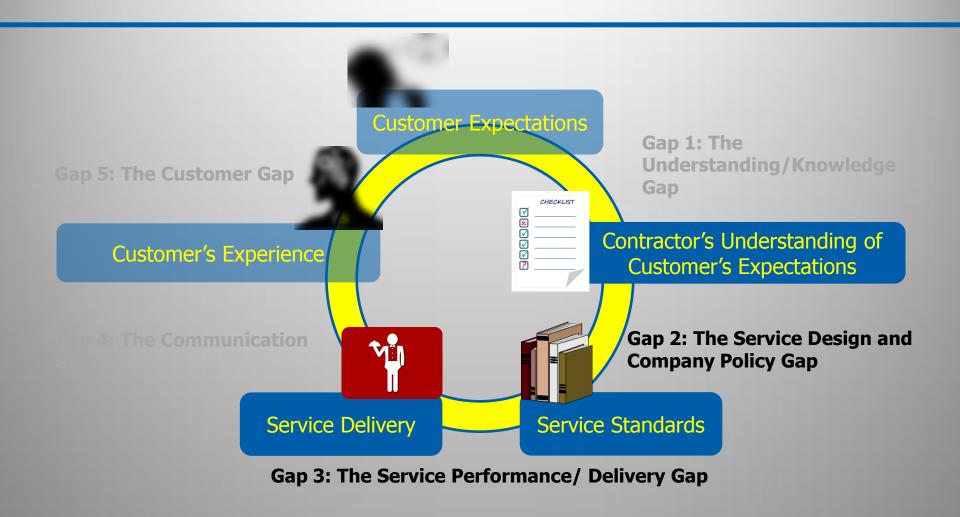
**Causes** 

**Solutions** 

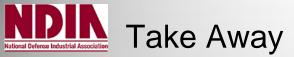
**EVMS** 



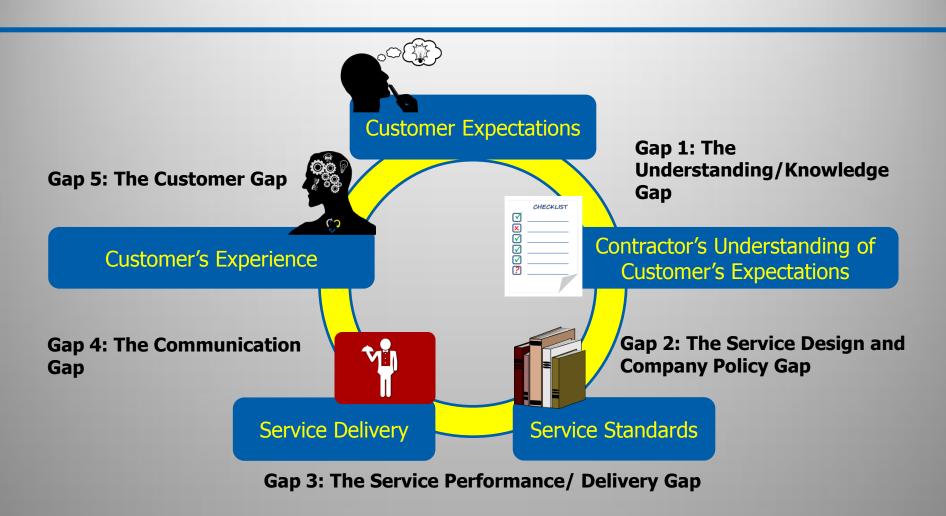




Focus only on Test Design and Test Conformity, will not lead to full customer satisfaction







Awareness of all five gaps would decrease rework, increase customer validation, and lead to customer satisfaction

### THE VALUE OF PERFORMANCE.

# NORTHROP GRUMMAN





- Common program question image on slide 2
  - Title
    - · Walking to the future
  - Author
    - Cyberang3l
  - Source
    - Creative Commons Zero 1.0 Public Domain License
  - License
    - CC0 1.0 Universal (CC0 1.0)
- Customer Expectation Image on slide 5-9
  - Title
    - · Bright Idea
  - Author
    - GDJ
  - Source
    - Creative Commons Zero 1.0 Public Domain License
  - License
    - CC0 1.0 Universal (CC0 1.0)

# Credits cont.



- Contractor's Understanding image on slide 5-9
  - Title
    - Checklist
  - Author
    - GDJ
  - Source
    - Creative Commons Zero 1.0 Public Domain License
  - License
    - CC0 1.0 Universal (CC0 1.0)
- Service Standards image on slide 5-9
  - Title
    - Books
  - Author
    - Dear\_theophilus
  - Source
    - Creative Commons Zero 1.0 Public Domain License
  - License
    - CC0 1.0 Universal (CC0 1.0)

# Credits cont.



- Service Delivery image on slide 5-9
  - Title
    - Service
  - Author
    - narrowhouse
  - Source
    - Creative Commons Zero 1.0 Public Domain License
  - License
    - CC0 1.0 Universal (CC0 1.0)
- Customer expectation image on slide 5-9
  - Title
    - · The human mind
  - Author
    - hweeshin
  - Source
    - Creative Commons Zero 1.0 Public Domain License
  - License
    - CC0 1.0 Universal (CC0 1.0)