



# Performance Based Logistics (PBL) Business Case Analysis (BCA)

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# Agenda

- ▶ What is a Business Case Analysis?
  - Difference between Traditional BCA and PBL BCA
- ▶ PBL BCA Methodology
- ▶ The Benefits Analysis
  - Support Structures
  - Management Criteria
  - Competencies
- ▶ Barriers and Enablers
- ▶ Risk Analysis
- ▶ Implementation Considerations



## What is a Business Case Analysis?

- ▶ **BCA is a comparative analysis that presents facts and supporting details among competing business alternatives**
  - **A BCA solves a problem objectively using quantitative methods**
- ▶ **A PBL BCA is an expanded cost/benefit analysis with the intent of determining a best value solution for product support. The BCA assesses each alternative and weighs total cost against total benefits to arrive at the optimum solution**

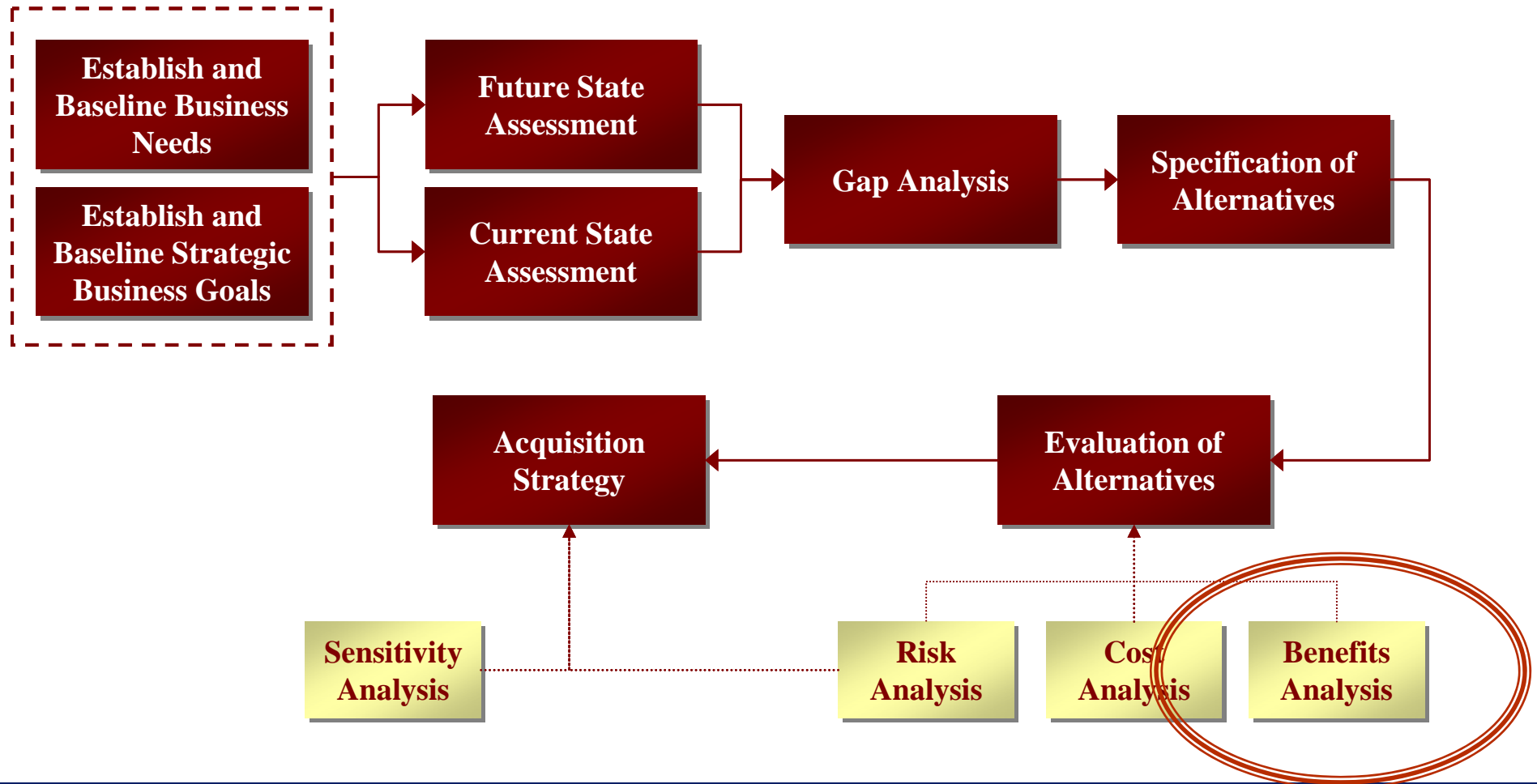
**A PBL BCA is not a tool for deciding whether or not to implement PBL. It is a tool for determining the best performance based solution.**

## How PBL BCA is different...

- ▶ The PBL BCA process goes beyond cost/benefit or traditional economic analyses
  - Documents how each alternative fulfills the strategic objectives of the program
  - Describes how an alternative complies with product support performance measures and the resulting impact on stakeholders
  - Tailored process driven by the dynamics of the pending investment decision
  - Identifies which alternative support option provides best value
    - Optimizes mission performance given cost and other constraints, including qualitative or subjective factors

The linkage between the benefits analysis, risk analysis, and implementation considerations to select the **best value strategy** is what sets the PBL BCA apart from the traditional BCA.

# Generic BCA Methodology



# Identify Support Strategies

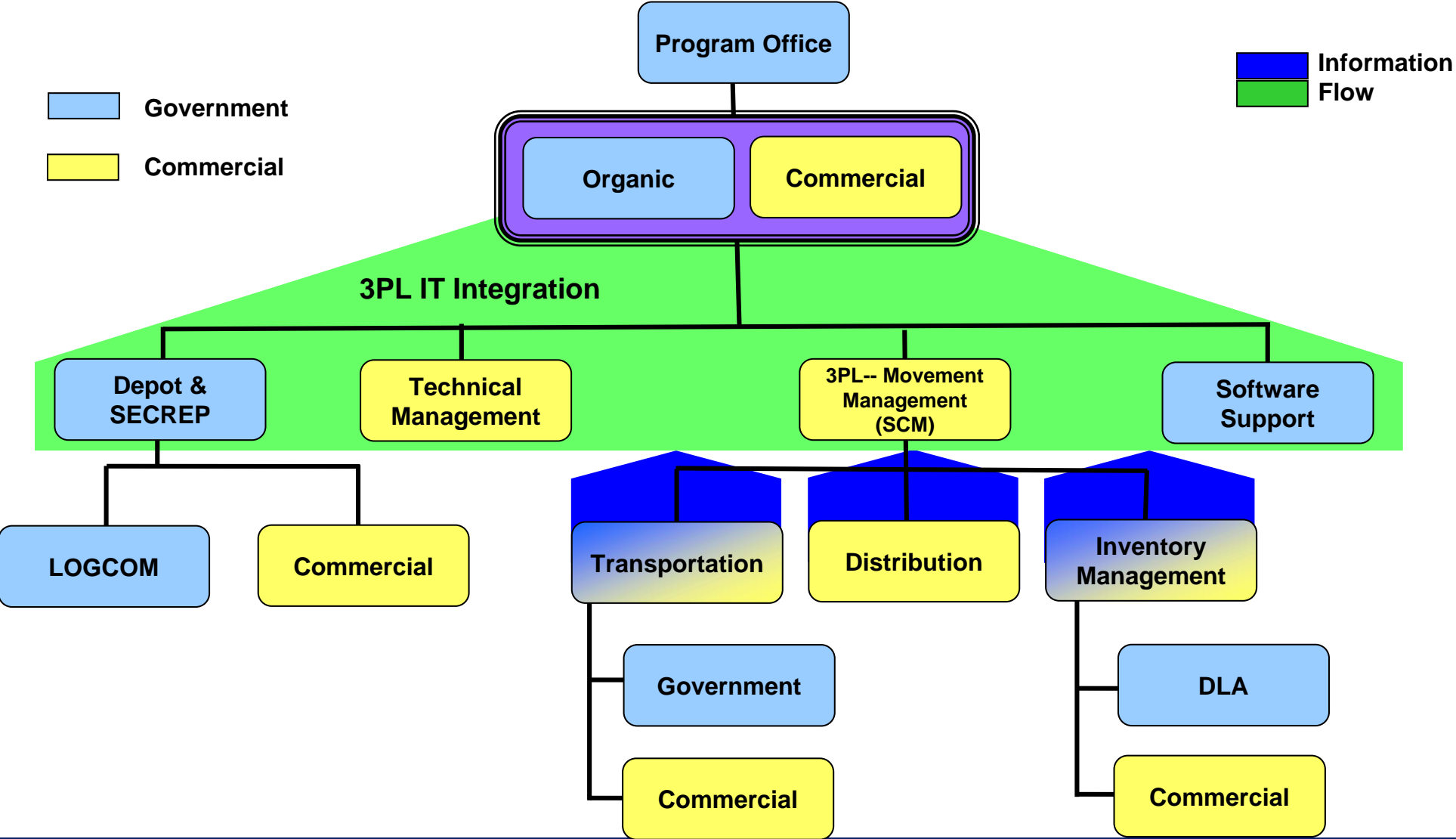
## ▶ **Support Strategies should:**

- Be identified from the overall range of alternatives (fully organic to fully commercial)
- Be viable
  - Be defined with enough detail that they can be implemented
  - Have clear work flows
- Consider all logistic elements
- Support development of a cost and risk analysis

## ▶ **Sample Support Strategies**

- Alt 1: Commercial PSI
- Alt 2: Organic PSI
- Alt 3: Third Party Logistics (3PL) PSI
- Alt 4: Government/Commercial Enterprise PSI

# Example of a support alternative -- Government/Commercial Enterprise PSI



## Criteria should be used to rate the alternatives...

- ▶ Criteria is defined as an accepted standard of required competency used in making decisions or judgments about the supportability of a system
  - ▶ ***The criteria should be:***
    - ***A discriminator***
    - ***Mutually exclusive***
    - ***Exclusive of cost***
    - ***Analytically inclusive***
  
- ▶ There are many ways to use criteria for evaluating alternatives; one is Expert Choice.
  - This program uses inputs from the stakeholders to rank order the criteria through a pair-wise comparison
  - Then the rank ordered criteria are used in rating the alternatives

## Example of Criteria used on a weapon system

- ▶ The following is a sample of criteria that can be used for evaluating support alternatives:

Number	Criteria
1	Supply Chain Management: Ability to establish and maintain control of the supply chain, provide worldwide support, implement Lean Practices and continuous process improvement.
2	Inventory Management: Ability to forecast product demand, integrate Order Management and Forecasting expertise, share forecasts and operate within commercial and government supply systems.
3	Engineering Management: Ability to manage a Technology Insertion Program, manage configuration management efforts, perform data management functions and initiate value engineering actions.
4	Depot Maintenance Management: Ability to improve repair processes, operate in collaborative environment, manage condition-based maintenance programs, implement automated depot maintenance planning and assess, monitor and influence the quality of depot repairs.
5	Supply Chain Information Management: Ability to seamlessly transfer information, capture, maintain, compile and report performance data, utilize Automate Inventory Tracking, and implement and manage Total Asset Visibility.

- ▶ Criteria such as these are further defined through competencies required to perform the mission.

# Sample Criteria Definition

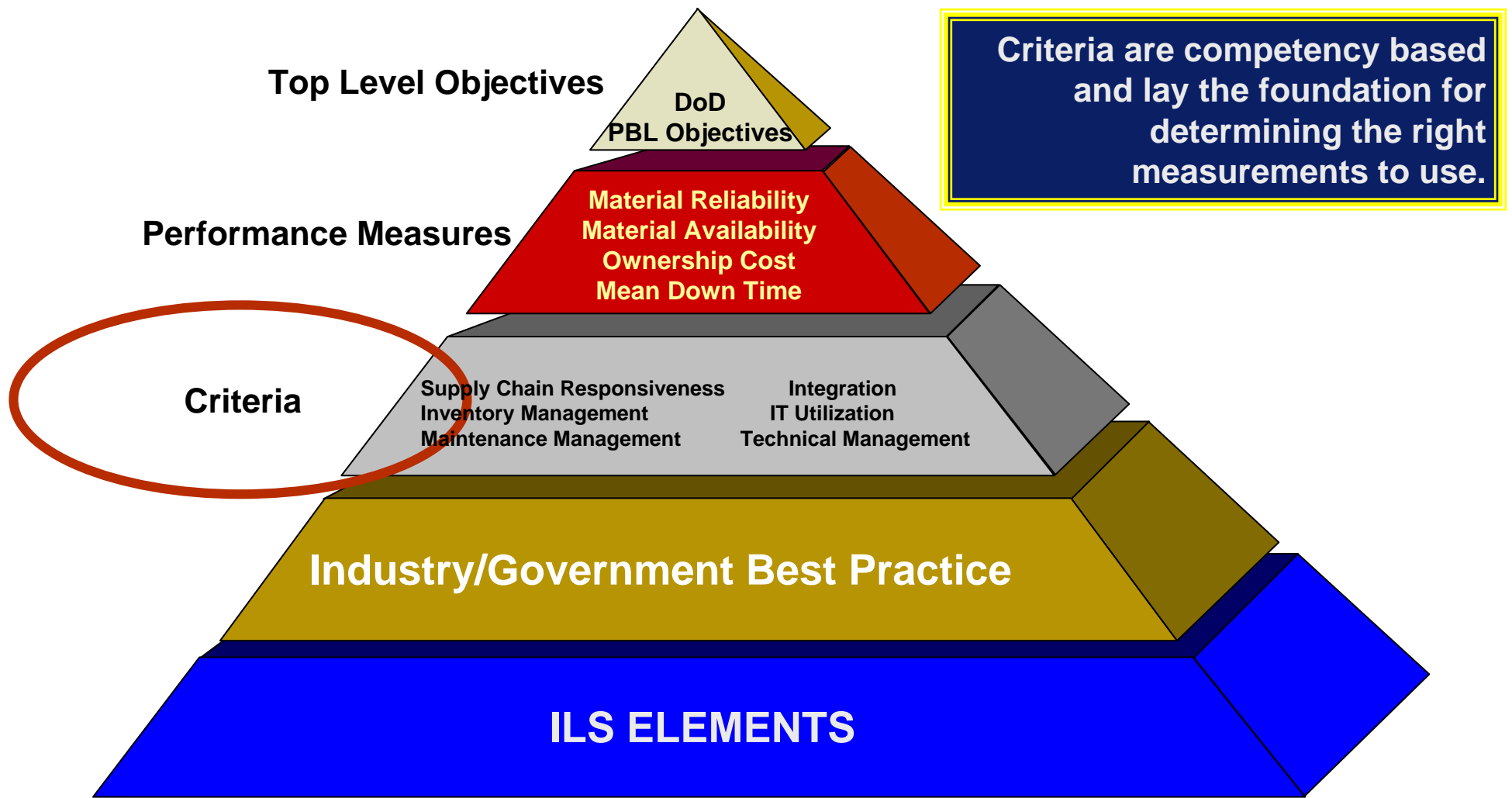
## The Competencies to perform...

### ▶ Ability to Manage Supply Chain

- Ability to establish and maintain control of the supply chain, including clear leadership, process control, and financial management processes.
- Ability to integrate the entire Supply Chain to include forward and reverse processes.
  - Synchronize with customer demands.
  - Ability to integrate Suppliers/Vendors into management of support chain.
  - Integration of distribution, procurement, inventory, and transportation management.
- Global Approach, Local Execution
  - In simple terms, not all pieces of the system can be optimized all the time. There must be a global approach and plan. Leadership must understand the need to balance and integrate processes.
  - Ability to influence process improvements and manage trade-offs in the entire support chain.
- Ability to provide worldwide support, including warehousing capability and capacity.
- Ability to develop and maintain total asset visibility.

**Criteria, defined by competencies, are then used to evaluate how well the support alternative's organizational structure can meet these requirements.**

How do criteria fit into the support solution?



## Barriers and Enablers

- ▶ Common barriers and enablers to PBL support solutions:

<b>PBL Barriers</b>	Statutory Requirements	Performance Measures	Funding	PSI Organizational Management	Asset visibility	Organizational Resistance	Propriety Date
<b>PBL Enablers</b>	Integrated Supply Chain Management	Strategic Alliances/partnerships	Performance Measurement Monitoring System	Contracting Strategy	Funding Strategy	Integrated Information Flow/Asset Visibility	

**Identification of barriers and enablers is critical to finding the best value solution.**

- Barriers to implementing a PBL strategy help the analyst to identify the potential risks.
- Enablers are key to defining implementation considerations/strategies which act as risk mitigation plans.

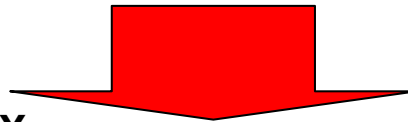
## Risk analysis

Risk Area	Specific Risk Concern	Risk Impact	Risk Probability
<i>C, S</i>	Marine Corps will not be able to maintain adequate funding streams to support program.	Medium	Medium
<i>P, C</i>	Failure to negotiate binding performance measures with the support providers may result in poor performance.	Medium	Medium
<i>P</i>	Complexity of establishing metrics that properly hold organizations accountable and empower them to perform tasks.	Low	High
<i>C, S</i>	The inability to align processes, organizations, and customer requirements with proper incentives under this structure may inhibit the investment in long term cost reduction initiatives.	Low	High
<i>P, C, S</i>	Multiple information flows can result in difficulty in collecting and compiling useful data.	Medium	Medium

## Implementation Considerations

- ▶ Factors to be considered to increase the probability of a successful implementation of the best value alternative.

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C, S	Marine Corps will not be able to maintain adequate funding streams to support program.	Medium	Medium



### ▶ Funding to Support Program X

- NWCF (Navy Working Capital Fund) & commercial PBL contracts to incentivize support providers.
  - Established under Title 10 USC, Section 2208 to fund activities such as depot maintenance, supply, R&D, and information services.
  - PO will partner with SCM Command and Maintenance Command.
  - Pros: focus on cash management & infusion of O&M funds that are available in future fiscal years.
  - Cons: When a contract is in place, all cash must be paid on the first day of the FY.

## Summary

- ▶ **A PBL BCA is a tool for determining best value solution**
  - Evaluates relative cost vs. benefits vs. risks of each support strategies
  - Aligns the support strategy with the strategic objectives of the program through a tailored process driven by programmatic dynamics
- ▶ **PBL BCA should be competency based**
  - Keeps focus on warfighter requirements
  - Provides insight into support strategy abilities to perform effectively
- ▶ **An effective PBL BCA should include**
  - The methods and rationale used to quantify benefits and costs
  - Analysis and classification of risks
  - Implementation considerations to mitigate risk
- ▶ **A PBL BCA is a living document that must be updated as the program matures**

# Questions?

# PBL BCA Methodology

- ▶ PBL Requirements Analysis / Risk v. Benefits / Modeling
  - Provides life cycle support objectives and measurement criteria
  - Develops analytical baseline to identify and prioritize alternatives
  - Identifies barriers and enablers to successful PBL implementation
  - Develops feasible life cycle support constructs
  
- ▶ PBL Alternatives/Strategies Development
  - Identifies the benefits, costs, and risks for each potential life cycle support construct, to include:
    - Cost Analysis
    - Benefits Analysis
    - Risk and Sensitivity Analysis

# PBL Methodology

- ▶ Benefits Analysis includes
  - Wire diagrams to demonstrate support alternative constructs
  - Stakeholder participation
  - Analysis of the competencies required to provide support
  - Development of criteria to analyze support structures
- ▶ Risk & Sensitivity Analysis
  - Determines the severity and likelihood of risks associated with each support construct
  - Identifies and quantifies uncertainty to overcome the analytical limitations of conventional logistics strategy modeling
  - Examines each alternative's sensitivity to changes in costs and benefits
- ▶ Identification of PBL Best Value Support Strategy
  - Identifies a preferred life cycle support alternative
  - Develops risk mitigation plan and provide implementation strategy considerations