

The Tenets of PBL Second Edition

Best Practice Elements in Performance-Based Life Cycle Product Support Management

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Introduction

Performance-based logistics (PBL) is the Department of Defense's preferred product support strategy to deliver improved weapons systems readiness at the same or lower total cost. Additionally, AFI 63-101 states, "A performance based logistics (PBL) strategy shall be used in accordance with the PBL guidance section in this AFI".

The cornerstone of PBL is the purchase of weapons system sustainment as an affordable, integrated package based on output measures such as weapons systems availability, rather than input measures such as parts and technical services. Simply put, performance-based strategies buy outcomes, not products or services.

Air Force program offices managing a weapons system have to make tradeoffs in the face of finite resources. On one hand, weapons systems should be designed, maintained, and modified to continuously reduce the demand for logistics; this requires investment. On the other hand, logistics support itself respects budgetary constraints; this often drives for postponement of expenditure, no matter how compelling the payback. To succeed at PBL, a program office must integrate these perspectives, investing in the future while providing current support, all the while staying within statutory and budgetary guidelines. And the program office must adopt the viewpoint of a life cycle strategy, in particular providing to the maximum extent possible a stable funding environment, from program inception through retirement.

Using PBL creates a cost avoidance opportunity for Air Force program managers, which facilitates investments in affordability, reliability, and availability when Support Providers with system knowledge and investment-oriented business models innovate to convert cost avoidance into performance gains.

While every PBL program has key metrics associated with its outcomes related to cost, reliability, availability and downtime, research sponsored by the Air Force has identified key factors that determine the success of PBL programs:

The result of the continued research and USAF request is a second version of the Tenets. This version consolidates the twenty "tenets" of successful PBL into ten. The three key associated factors are Alignment, Contract Structure and Performance Management.

We believe that this set of tenets is more easily adapted to a variety of situations. The next steps following acceptance will be to test this set of tenets as the last set to ensure the usefulness to programs as they take a performance-based product support strategy.

For a more detailed explanation and exploration of the Tenets, please refer to "The Tenets of PBL Second Edition: A Guidebook to the Best Practice Elements in Performance-Based Life Cycle Product Support Management," published in July 2012.

PBL Tenets

Alignment	
PBL Knowledge and Resources	
Non-PBL: Traditional Approach	<ul style="list-style-type: none"> • PBL not used—knowledge level not applicable
Better: Elements of PBL	<ul style="list-style-type: none"> • Limited understanding of the PBL business model • Knowledge of basic PBL concepts and tenets, with minimal experience in PBL implementation • PBL used—but no centralized knowledge base to leverage learning and improve implementation and effectiveness • No internal benchmarking of PBL programs • No improvement from one effort to the next
Best Practice: Robust PBL	<ul style="list-style-type: none"> • Comprehensive knowledge and experience in PBL concepts, tenets, business model, and strategy implementation • Organization has a PBL Center of Excellence where a formal process exists where knowledge is collected and leveraged across all PBL programs • Formal PBL benchmarking of programs exists • PBL readiness assessment has been completed with an action plan to close gaps in capabilities/competencies associated with PBL • Repeatable processes enable cost and time to implement, along with results to improve over time
Organizational Support for PBL	
Non-PBL: Traditional Approach	<ul style="list-style-type: none"> • PBL not used— no effort to recognize or reconcile stakeholders beyond traditional relationships and no PBL champions
Better: Elements of PBL	<ul style="list-style-type: none"> • Recognition and accommodation of stakeholder interests, short of strong integrated consensus • Little top level support to align stakeholders • Focused advocacy with limited influence • Advocacy in one organization—but not both
Best Practice: Robust PBL	<ul style="list-style-type: none"> • Strong consensus and participation across all stakeholders toward common support strategy objectives • Strong top-down support to align stakeholders for optimal solutions • Senior leadership from both customer and supplier fully engaged with respective organizations to drive towards a true win-win PBL business model • Champions in both organizations are strong advocates for the need to change from the existing course of action and provide a clear uplink for problem resolution •
Align Interests	
Non-PBL: Traditional	<ul style="list-style-type: none"> • Customer and supplier organizations not fully engaged with driving alignment between

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Approach	<ul style="list-style-type: none"> organizations Transaction-based business model (i.e., payments for support based on resources consumed or activities performed by supplier)
Better: Elements of PBL	<ul style="list-style-type: none"> Focused advocacy, but limited ability and influence to drive the organization toward a strategic approach for PBL Some tenets of the PBL business model applied—but business model is still primarily based on transactions Focus is on reducing transaction costs—but not eliminating transactions to drive overall costs down
Best Practice: Robust PBL	<ul style="list-style-type: none"> Senior leadership from both customer and supplier organizations have a common vision to drive towards a true win-win PBL business model and to drive alignment between both organizations Business model is based on achievement of desired outcomes—not based on performing transactions True “partnership” mentality with a desire to develop a “win-win” business model based on mutual self-interest Focused on total system value proposition and total ownership costs Conscientious approach to reducing transactions to drive costs down PBL rewards supplier for innovation...customer shares in benefits and savings
Workload Allocation and Scope	
Non-PBL: Traditional Approach	<ul style="list-style-type: none"> Minimal emphasis on best value and best competencies in placement of workloads Supplier is viewed as competition by organic customer providers No teaming relationships visible Customer develops a Statement of Work (SOW) which defines “how” the supplier should perform the work; detailed work scope restrictively defined in SOW
Better: Elements of PBL	<ul style="list-style-type: none"> Some integration of customer organic and supplier workload distribution based on best competencies; minimal or sub-optimal use of public-private partnering Customer emphasizes and defines top-level desired outcomes, but prescribes excessive boundary conditions that limit supplier flexibility in achieving outcomes
Best Practice: Robust PBL	<ul style="list-style-type: none"> Workloads are distributed to the most effective providers consistent with statutory guidelines; best competencies, best value, effective use of public-private partnering Customer develops a Statement of Objectives (SOO) SOO specifies desired outcomes in terms of high-level objective metrics with minimal prescriptive direction; supplier has flexibility regarding “how” to achieve the designated outcomes Scope of supplier work encompasses a broad range of logistics elements and is fully aligned with assigned performance and support logistics SOO allows the supplier the flexibility to significantly change current traditional process; high-performing PBL programs result where processes are changed
Supply Chain Integration	
Non-PBL: Traditional Approach	<ul style="list-style-type: none"> Traditional management of supply chain—by commodities or services; not oriented to achievement of end to end process effectiveness No value in PBL recognized by the customer or supplier
Better: Elements of PBL	<ul style="list-style-type: none"> Supply chain component aligns internal processes; lack of full alignment towards optimization of the end to end process effectiveness with supply chain partners
Best Practice: Robust PBL	<ul style="list-style-type: none"> Development of a formal supply chain management strategy that focuses on maximum integration (management and visibility) of end to end supply chain effectiveness.

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	<ul style="list-style-type: none">• Supply chain components align to optimizing for the end to end process, vice internal process effectiveness• Established & well defined processes that guarantee alignment, coordination, and horizontal integration. Alignment can be achieved through a virtual arrangement or a physical co-location of all support organizations (weapon system program management, engineering, item management, customer representative, etc.)• Transparency of customer and supplier involvement• Customer is willing to allow the supplier to make significant changes to improve supply chain processes/flow
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<i>Contract Structure</i>	
Appropriate Risk and Asset Management	
<i>Non-PBL: Traditional Approach</i>	<ul style="list-style-type: none"> • Risk management is treated as a zero sum game with incomplete understanding of pricing risk • Customer owns and manages resources (spares, repair depots, etc.) • Off-ramps limited to Termination for Convenience
<i>Better: Elements of PBL</i>	<ul style="list-style-type: none"> • Re-balancing of risk to share across customer and supplier, but little attempt to leverage shared capabilities to reduce total risk • Focus of the discussion is around pricing risk, not optimizing risk • Responsibility for managing most aspects of resources is shifted to supplier, but associated risk remains with the customer • Many off-ramps to bound all risks (complex)
<i>Best Practice: Robust PBL</i>	<ul style="list-style-type: none"> • Balancing of risk with a comprehensive mitigation strategy focused on all parties • Specific attention paid to balancing supplier accountability and authority • Development of a thoughtful plan to introduce improvements to reduce total program risk where appropriate • • Responsibility for managing most aspects of resources is shifted to supplier, along with associated risk • Asset ownership investment by the supplier is considered as an option if relevant to the business • In general, full inventory management control and risk should be shifted toward the supplier; associated risks for asset performance is accepted by the supplier • • Contract includes adequate exit criteria and off-ramps to cover probable contract off-ramp requirements • Off ramps maintained to ensure flexibility in courses of action available as the program evolves and matures. • Limitations on off-ramp options identified early in process (i.e., data rights, customer rights to asset ownership, etc.)
Contracting Environment	
<i>Non-PBL: Traditional Approach</i>	<ul style="list-style-type: none"> • Pricing model is based on charging for transactions • Often pricing models are cost reimbursement-focused (e.g., cost plus fixed fee or cost plus variable fee); if a supplier decreases transactions, they are inherently penalized with reduced revenue and as such reduced margin • Contracts are for a short-term horizon (i.e., one year at a time) with little commitment to out-year contract award which focuses on price versus potentially overall lowest total ownership cost and best value • Incentives—if any—are linked to activities, not outcomes • Incentives do not synchronize behavior between the supplier and customer (win-lose) • No incentives to perform over and above contract requirements
<i>Better: Elements of PBL</i>	<ul style="list-style-type: none"> • Pricing model is typically still based on charging for transactions—but incentives such as gain-sharing help drive a focus for desired performance such as cost reduction •

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	<ul style="list-style-type: none"> • Multiple year contract terms with minimal base period (i.e., one year) and maximum option years with some confidence in exercising option years; allows supplier to make rational commitment to performance-improving investments with expectation of earning back investment. • Incentives promote achieving certain performance targets; however, incentives don't promote optimal behavior and are often focused on achieving performance against activity or transaction level performance and not achievement of overall desired outcomes • Some incentives to perform over and above contract requirements are specifically included
<p>Best Practice: Robust PBL</p>	<ul style="list-style-type: none"> • Pricing model is based on mutual self-interest • Focus is on reducing non-value added transactions—not on simply reducing transaction price; pricing model fixes revenue and encourages activities to reduce cost • Typical pricing model does not provide the supplier with a “given” profit margin; supplier has the potential to earn increased profit through incentive structures based on their ability to reduce overall costs and/or achieve performance target • Optimal pricing models are typically: <ul style="list-style-type: none"> ○ Fixed price where supplier is inherently incentivized to reduce costs to drive profit margin while attaining set performance levels ○ Cost plus where profit margin is earned by achieving desired targets for cost and performance; supplier “earns” margin for achievement of desired outcomes, and risk is shared by incorporating “cost plus” • Incentives (aka performance payments) are specifically connected to the vital few top level outcomes, and balanced so that rational economic behavior will drive goal alignment between the supplier and the customer. • Contract price adjustments are made at pre-defined timeframes to review costs and re-price the work; customer has a strategy of “harvesting the savings” created by cost reductions and process improvements • Pricing models should reflect the balance of risk/reward tradeoff ; the pricing model may change over time as risk levels change (e.g. shift from a cost plus to a fixed price contract once a firm baseline is known) • Incentives tightly aligned, promoting behaviors and outcomes that benefit both the customer and supplier • Explicit reflection of factors like program maturity, scope of agreement, complexity of the system, context of use, etc., in the incentive set • Incentives are often award term extensions meeting or exceeding pre-specified outcomes whereby the contract will not be re-bid if specified outcomes/goals are being achieved. • Cost cutting targets are inherent if a fixed price model is used; the more the supplier cuts costs the more margin they make; contract price adjustments made at pre-defined times to review costs, re-price work • Contract length is commensurate with payback period for supplier’s investments • Longer term contracts encourage long-term investment to improve product or process efficiencies • Contracts are typically multi-year or multiple year (i.e., 5 years with additional option or award term years). Award Terms are achieved through achievement of pre-specified

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	<p>outcomes, which may be set at a level that correlates to superior performance.</p> <ul style="list-style-type: none">• Provisions provided to recognize supplier investment and provide opportunity for recoupment• Contract Management recognized as key function over Life Cycle.
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Funding	
<i>Non-PBL: Traditional Approach</i>	<ul style="list-style-type: none"> • Funding tied to level of effort in the transactional support • Short-term funding provides little stability from period to period and limits the supplier’s ability to make investments in long-term product and process improvements
<i>Better: Elements of PBL</i>	<ul style="list-style-type: none"> • Contract recognizes the requirement to accommodate funding variability • Good visibility (consolidation) of support funding • PBL support is part of overall major systems program funding plan. Every effort should be made to ensure that sufficient funds have been included in the overall funding profile. Impact of funding shortfalls discovered after contract award resulting in contract modification are addressed in accordance with change management clause in the contract
<i>Best Practice: Robust PBL</i>	<ul style="list-style-type: none"> • PBL funding is prioritized to maintain significant confidence of funding availability over total contract term. Stable funding incentivizes support provider to invest in process improvement; however, fact-of-life funding variability can occur and both customer and supplier need to be prepared to fairly adjust performance and risk to accommodate funding variability • Complete visibility of funding; all necessary “colors of money” aligned in program as needed

<i>Performance Management</i>	
Establish and Align Top Level Desired Outcomes	
<i>Non-PBL: Traditional Approach</i>	<ul style="list-style-type: none"> • Metrics are based on transactions; Not on measuring desired outcomes • Calculations for metrics are not defined – or definitions and calculations are vague or unclear • If metrics exist they are typically measuring functional silo activities and not the end to end desired outcomes • Data sources unreliable • Achievement of metrics mostly reported by the Supplier • Incentives – if any – are linked to activities, not outcomes • Supplier is not contractually responsible for achieving metrics • No attempt to flow down top level outcomes to sub Supplier base • Sub Supplier contracts are transaction based business models (i.e. payments for support based on resources consumed or activities performed by Supplier)
<i>Better: Elements of PBL</i>	<ul style="list-style-type: none"> • Narrow performance focus; some SLAs (service level agreement) metrics used but metrics are generally transactional and functional focused • Clearly defined metrics with formal written definitions and calculations • Often a proliferation of metrics – contract or Service Level Agreements often have more than 5 top level metrics • Metrics may or may not be aligned to the scope of the Suppliers work; however metrics are not tracked at the entire process level to best understand the performance across the end to end process • Data sources incomplete, inaccurate or untimely • Unclear linkages among expectations of performance, actual performance, incentives, and top level outcomes. • Metrics accountability is aligned with the scope of Suppliers authority; Program Manager accountable for achievement of overall metrics not aligned with the scope of Suppliers authority. • Some attempt to align and flow down sub Supplier incentives to top level outcomes
<i>Best Practice: Robust PBL</i>	<ul style="list-style-type: none"> • Performance focused on a few (generally 5 or less) top level desired outcomes versus transaction or activity focused metrics • Metrics are clearly aligned to desired outcomes (ideally focused on achieving end Customer requirements) • Metrics are identified and tracked for the entire process to best understand the performance across the entire process (PBLs rely on both parties acting toward to the common desired outcomes and metrics should not be limited to supplier metrics) • Metrics accountability is aligned with the scope of Suppliers authority; Program manager remains accountable for the achievement of the overall metrics, but there is a lead supplier with a scope of authority sufficient to be held responsible for performance. No key metrics fall outside of the scope of the lead supplier. • Data sources are accurate and timely • Achievement of metrics validated by a mutually agreed Quality Assurance Surveillance Plan (QASP) • Clear understanding of financial impact of metrics across all levels; profits of the Supplier linked directly to achieving success in delivering performance outcomes. • Explicit linkage and flow down of Sub Supplier to top level outcomes

Performance Reporting Continuous Improvement Focus	
<i>Non-PBL: Traditional Approach</i>	<ul style="list-style-type: none"> • Little emphasis on a business model that drives continuous improvement • No formal continuous improvement program in place (e.g. Six Sigma, Lean, etc) • Metrics reports are reported on a regular basis – but not frequently; typical formal metrics reports reviews are monthly to quarterly with working level reviews monthly • Metrics reports are often used only by a few individuals • Metrics reporting is a mix of manually tracked information and data that is pulled from reports (e.g. Crystal Reports, Cognos, etc.) • Metrics reports are treated as reports and not “dashboards” to drive change
<i>Better: Elements of PBL</i>	<ul style="list-style-type: none"> • Supplier is afforded flexibility to plan and implement continuous product and process improvement, but the PBL business arrangement does not provide incentive to do so • A formal continuous improvement program in place (e.g., Six Sigma, Lean, etc) aimed at making improvements; however, improvements are not directly focused on the top level desired outcomes • Metrics reports are reported on a regular basis – but not frequently; typical formal metrics reports reviews are monthly to quarterly with working level reviews monthly • Metrics reports are often used only by a few individuals • Metrics reporting is a mix of manually tracked information and data that is pulled from reports (e.g. Crystal Reports, Cognos, etc.) • Metrics reports are treated as reports and not “dashboards” to drive change
<i>Best Practice: Robust PBL</i>	<ul style="list-style-type: none"> • Supplier is clearly incentivized and afforded the authority to plan for and implement continuous product and process improvement • A formal continuous improvement program in place (e.g. Six Sigma, Lean, etc) that effectively drives improvements against the top level desired outcomes. • Continuous improvement plan supported by investment plan for improvements in process, product, and reliability • Metrics reports are reported on a regular basis at frequent intervals; typical formal metrics report reviews are monthly with working level reviews weekly or daily for critical operational metrics • Metrics reports are used as part of regular review meetings across all functions/all levels (e.g.. linking strategy to shop floor metrics to ensure all parties are marching to the beat of one drum) • Metrics are used to drill down and change the process to get results • Metrics are posted and communicated companywide (e.g.. intranet, etc); Reports seen and used by all levels to proactively manage performance • Fully automated dashboards with “Drill down” functionality for Root Cause Analysis