

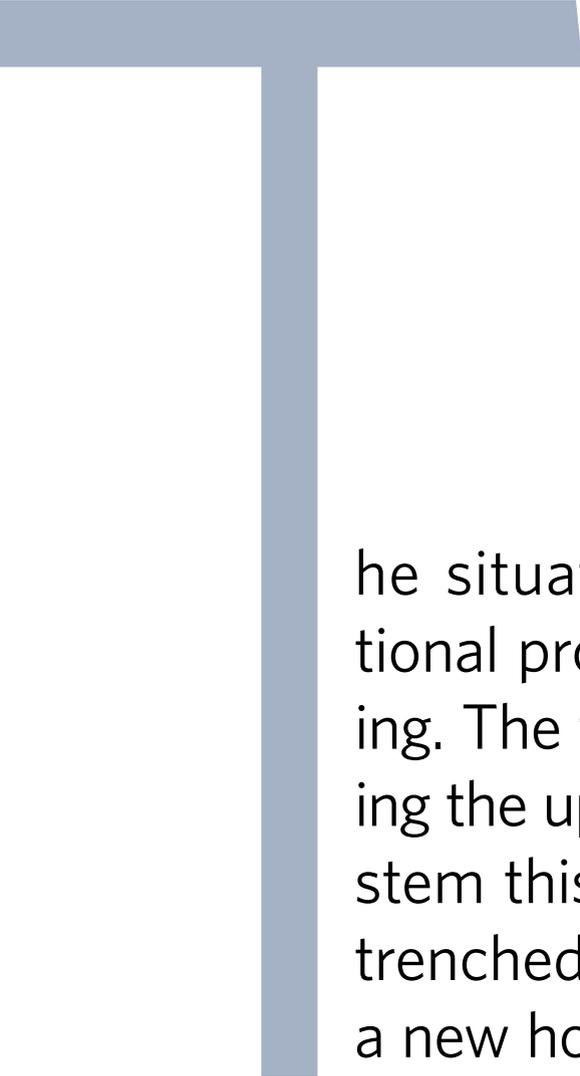


Illustration by Jim Elmore

Misunderstood Superheroes

Batman and
Performance-Based Logistics

Randy T. Fowler



he situation: Normal institutional processes are not working. The forces of evil are gaining the upper hand. At a loss to stem this death spiral, the entrenched bureaucracy turns to a new hope. Using unorthodox but highly effective techniques, a lone champion takes action and slowly turns the tide, pushing the forces of evil over the edge.

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However, in the midst of continuing success, this new champion's techniques, methods, and even motives are continually questioned.

Sound familiar? Are we talking about Batman or PBL (performance-based logistics, or alternatively, performance-based life cycle product support)?

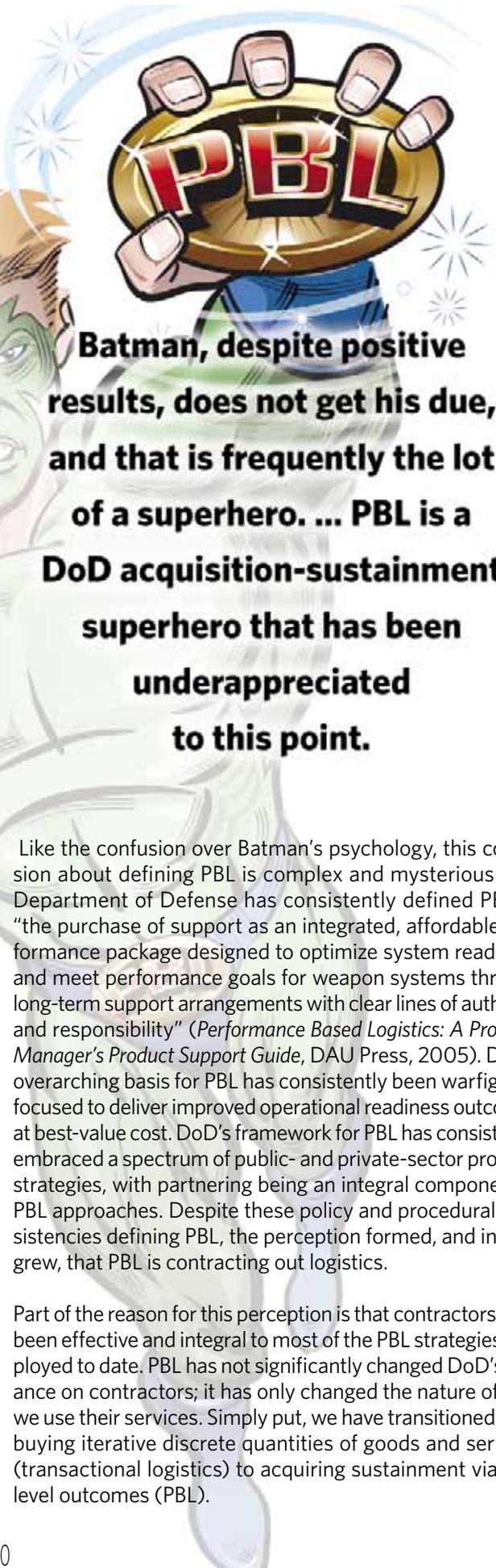
Batman captures our imagination because he is an uncommon superhero. His methods don't conform to established practices. The Caped Crusader is incorruptible but no choir boy. For example, Batman uses enhanced interrogation techniques and global cell phone taps in *The Dark Knight*, the latest Batman movie from Warner Bros. Pictures. He lives somewhat on the dark side. What's more, he possesses no super-human powers. Yet Batman effectively fights chaos and crises with a commitment to the ultimate good of society.

But does society understand and appreciate Batman? Ultimately, no. An ungrateful society, Gotham City, protests his vigilantism and unorthodox crime-fighting techniques. *The Gotham Times* newspaper headlines scream: "Batman: Savior or Menace?" (<www.thegothamtimes.com>). You can't get much more misunderstood than that. Public sentiment aligns more with the vulnerable White Knight—Two Face, aka District Attorney Harvey Dent, who represents the interests of City Hall and, ideologically, the mass community.

How do the Batman myth, ethos, and psychology pertain to PBL? PBL—born on the dark side in the 1990s, perhaps with a tad of vigilantism to shake up a death-spiraling, transaction-based logistics system—continues to be mischaracterized, misunderstood, and, therefore, often either skeptically embraced or totally despised. Whenever I encounter critics of PBL, I listen closely to see if they understand PBL. Most do not. The following discussion will examine why PBL is misunderstood and what can be done to overcome that misunderstanding.

Definition of PBL

Ask almost any acquisition and sustainment professional, "What is PBL?" and within the first 30 seconds, most will respond with a strong perception that "PBL is contracting out logistics." This is an erroneous observation. I often challenged Executive Program Management students at the Defense Acquisition University, saying that one sure way to fail the logistics class was to leave the classroom thinking that PBL is contracting out. Even so, many of them should have failed. During a recent discussion about continued policy emphasis on PBL, Under Secretary of Defense for Acquisition, Technology and Logistics John J. Young referred to his Navy experience with PBL and contracting out. He readily accepted my polite correction that effective PBL requires balanced contribution by both public- and private-sector providers.



Batman, despite positive results, does not get his due, and that is frequently the lot of a superhero. ... PBL is a DoD acquisition-sustainment superhero that has been underappreciated to this point.

Like the confusion over Batman's psychology, this confusion about defining PBL is complex and mysterious. The Department of Defense has consistently defined PBL as "the purchase of support as an integrated, affordable performance package designed to optimize system readiness and meet performance goals for weapon systems through long-term support arrangements with clear lines of authority and responsibility" (*Performance Based Logistics: A Program Manager's Product Support Guide*, DAU Press, 2005). DoD's overarching basis for PBL has consistently been warfighter-focused to deliver improved operational readiness outcomes at best-value cost. DoD's framework for PBL has consistently embraced a spectrum of public- and private-sector provider strategies, with partnering being an integral component of PBL approaches. Despite these policy and procedural consistencies defining PBL, the perception formed, and indeed grew, that PBL is contracting out logistics.

Part of the reason for this perception is that contractors have been effective and integral to most of the PBL strategies employed to date. PBL has not significantly changed DoD's reliance on contractors; it has only changed the nature of how we use their services. Simply put, we have transitioned from buying iterative discrete quantities of goods and services (transactional logistics) to acquiring sustainment via top-level outcomes (PBL).

The most mysterious part of the misperception is the seeming desire by skeptics and critics to characterize PBL as “contracting out” in an attempt to claim PBL is bad for the DoD enterprise, infrastructure, battlefield operations, information technology systems, and the competencies of the organic workforce. That need not be the case, but PBL is a demanding strategy that requires change in many organic infrastructure concepts. The next-generation PBL strategies need to offer improved attention to the enterprise integration effects—but the DoD infrastructure has to step up to a different incentive set in next-generation thinking as well.

Product-Support Integrators

Linked with the PBL definitional issue is a misunderstanding of the PBL tenet to employ a product-support integrator. Most people believe using an industry PSI equates to doing a wholesale outsourcing of logistics, which is wrong because the integrator integrates, which does not imply performing all logistics services.

In this case, the misperception is more understandable because to this point, most PSIs have been industry original equipment manufacturers (OEMs). However, there is no basis in policy or guidance for preference for an industry PSI. DoD policies and procedures have consistently encouraged flexibility with respect to PSIs. A PSI is defined as “an entity performing as a formally bound agent (via contract [industry] or memorandum of agreement/understanding [government]) charged with integrating all sources of support, public and private, defined within the scope of the PBL agreements to achieve the documented outcomes” (*Performance Based Logistics*, DAU, 2005). This definition accommodates a government or industry PSI. Organic PSIs can work. Naval Inventory Control Point is the PSI for several subsystem PBL strategies that use performance-based contracts with contractors holding them accountable for performance outcomes.

I believe the DAU PBL training curriculum gets it right by having students fully consider PSI alternatives such as the OEM, a sub-tier industry provider, a depot, an inventory control point, the program management office, or a third- or fourth-party logistics provider. DAU students have been diverse in determining their preferred PSI option. DAU faculty estimate that 65 percent of the students determine the OEM to be the preferred PSI; 15 percent elect a sub-tier industry provider; 10 percent choose the PM; and 10 percent select an organic source. The figures are a DAU faculty estimate consolidated by the university PBL program director in August 2008.

Many misconstrue the true role of a PSI. PSIs do not “control” a platform’s sustainment, nor do they perform or even manage all of the support functions. An industry PSI is prevented from doing so by statute (Title 10 U.S. Code), policy, and Service preferences for organic support. I believe a clear

misunderstanding of the PSI role is the basis for the recently proposed House Armed Services Committee language (Section 823), which recommends restricting PSI performance to organic sources—a position opposed by DoD.

The determination of a PSI comes down to which entity has the best ability to drive life cycle systems engineering influence into the asset (to include reliability improvements), who can best direct supply chain management decisions to assure parts availability and obsolescence management, and who can be incentivized to work as an agent for the program manager to meet the operational sustainment metrics. These are all integration functions. Government entities can perform all of them, but arguably are not as well-equipped as the OEM. Government entities lack laser-focus accountability, they are not financially at risk, they have little discretion to invest funds, and they are hesitant to decrease workload. A military service senior leader recently offered, at a PBL forum, the opinion that it is not typically in the incentive set of a depot, for example, to drive away workload; and to some degree, that is what a PSI must do for the sake of reduced operational logistics burden and a reduction of long-term sustainment costs.

Figure 1. Examples of PBL Cost Benefits

Program	System Description	PBL Owner	Total Cost Benefit (\$M)
C-17	transport aircraft	Air Force	\$477
F/A-18	fighter/attack aircraft	Navy	\$688
AH-64	attack helicopter	Army	\$100
TOW-ITAS	integrated mobile missile and targeting system	Army	\$350
Sentinel AN/MPQ-64	mobile air defense radar	Army	\$302
CH-47 (UK)	cargo helicopter	UK Ministry of Defence	\$250

Cost of PBL

Cost savings are another misunderstood attribute of PBL. The Government Accountability Office has consistently asserted it cannot validate claimed PBL cost savings. (GAO Report 05-966, September 2005, and GAO Draft Report 09-41, November 2008). Yet, several DoD programs demonstrate cost benefits achieved by PBL strategies (Figure 1).

Cost savings and avoidance calculations are some of the most inexact art forms within government. I should know; I have been a DoD analyst for a long time. Analysts and auditors, particularly those with an agenda, can make the numbers reflect the case desired. Such facts must be treated with caution.

DoD needs more clear and compelling insights into the cost benefits of PBL strategies. However, I believe the evidence is and has been there. It’s a question of whether some parties really want to understand and embrace the data. Going back to the genesis of PBL, we were committed to reversing

the aforementioned “death spiral” of readiness degradation associated with severe upward trends in operations and sustainment budget accounts. Admittedly, after the Sept. 11, 2001, terrorist attacks, DoD’s attention turned more to the warfighter urgency associated with increased readiness, sortie generation rates, and equipment ready for tasking. An excellent question would be what would have been the cost of supporting the Global War on Terrorism without PBL. Now, that’s about as scary as Batman’s psychotic nemesis, the Joker!

Business Case Analysis

The most debated characteristic of Batman is why he does not kill his foes. The most debated characteristic of PBL is the business case analysis. Sometimes I wish we would just kill the BCA! It is probably the most misunderstood and misused aspect of the PBL process. No, on second thought, I would not kill the BCA if it can be understood that it is not an end in itself and that BCAs are meant to be iterated to explore alternatives and find the best balance among sustainment alternatives.

In its simplest form, the objective of the BCA is to determine the best value basis for a strategy. Elements of the BCA include costs, risks, alternatives, outputs, and outcomes. Many of the early BCAs examining PBL strategies were limited to cost analysis, which created unhealthy decision making and suppressed creative PBL approaches.

We have progressed beyond the myopic orientation on near-term costs in the BCA. The guidance of DoD and the Services has become clearer about the “best value” objective of the BCA. Still, the Services apply an inordinate number of resources to the BCA, to the extent that a BCA cult mentality has evolved. Many still forget the BCA is a means to determine a performance-benefiting end, not the end itself.

As DoD examines where to proceed with next-generation PBL, the role and methodology of the BCA must be clarified. One simple suggestion is to label the BCA as a life cycle management BCA. There are a myriad of BCAs prevalent in government and within the acquisition process, so specifying a BCA that is directed at optimizing the LCM concept of operations seems a healthy refinement.

Figure 2. Examples of PBL Performance Benefits

Program	System Description	PBL Owner	Availability Improvement ¹	Cycle Time Reduction ²
F/A-18	fighter/attack aircraft	Navy	23%	-74%
Tires	aircraft tires	Navy	17%	-92%
F-22	fighter	Air Force	15%	-20%
UH-60 Avionics	utility helicopter	Army	14%	-85%
F404 Engine	jet engine for the F/A-18 aircraft	Navy	46%	-25%

1. Ready for tasking, operational readiness, mission capable, etc.
 2. Logistics response time or repair turnaround time

PM Responsibility and Control

Speaking of superheroes, here’s to the PM! In my opinion, no job scope in the federal government compares to the responsibilities of the PM (particularly when you rank the responsibilities associated with the position). Chuck Cochrane, former DAU PM Center director and one of the best program management experts I know, cites DoD 5000 policy as establishing more than 500 “shall do’s” and many more “expected to do’s” with which the PM must contend. No wonder PMs sometimes appear selective in the balls they attempt to juggle.

Now here come the “loggies” with another big ball to throw at the juggler: PM responsibility for total life cycle systems management as mandated in DoD Directive 5000.1, para. E1.29, May 12, 2003. Being a life cycle manager is not an insignificant or marginal duty. Moreover, we logisticians have never made it easy for the PM, with our 10 elements of logistics support; countless “ilities” to emphasize; complex supportability analysis and documentation methods; and a tendency to wallow in stovepipes of supply, maintenance, transportation, and arcane IT systems. No wonder we drive PMs crazy.

First, despite the fact that it is mandated by DoD regulation, not all PMs readily accept responsibility for sustainment. Second, some in the logistics enterprise do not trust the acquisition and PM community to manage and control sustainment functions because PMs often vertically integrate their support systems, whereas the logistics infrastructure tends to be more horizontally focused. Third, PMs who want to take on the responsibility often become frustrated at their inability to be effectively accountable because of the myriad of input and output funding sources that must be amalgamated to achieve effective system management.

PBL, with its outcome-focused principles, metrics, and incentives, serves as a simplifying strategy for the PM. PBL offers a one-stop approach for the PM to perform effectively as the life cycle manager. PBL is the best enabler of the total life cycle systems management concept; it provides a means for the resource-constrained program management office to develop, implement, and manage the sustainment of a system over its life cycle. Transactional logistics, with its dispersed support organizations, distributed funding, and lack of top-level system integration function, is too unwieldy (to say nothing of ineffective) for the PM in terms of effectively performing as the life cycle manager. All of these PM responsibility issues must be worked. Paraphrasing Batman, “It’s not who you are, it’s what you do that defines you” (*Batman Begins*, Warner Bros. Pictures).

PBL Success

Usually at this point in a PBL article, the author cites how many PBL applications there are to date. If one insists on counting, most experts estimate there are

over 200. But I'm tired of counting. PBL has been DoD policy since 2003, and the strategy shows signs of institutionalization in the Services, Defense Logistics Agency, industry, and internationally. Figure 2 summarizes some of the performance benefits associated with many of the more prominent PBL program applications. Benefits tend to be characterized in two primary dimensions—readiness or availability improvements, and cycle time reductions measured by logistics response time and repair turnaround times.

Annually at this time of the year, DoD honors the best of the PBL programs with the Secretary of Defense PBL Awards. This year's winners are:

- System Level: F-22 Raptor (Air Force)
- Sub-system Level: ALR-67(v)3 Radar Warning System (Navy)
- Component Level: AN/TSQ-221 Tactical Airspace Integration System (Army).

This is the fourth year of the PBL awards and the first that each of the military services has captured one of the award categories.

The Way Ahead

The evidence is clear: PBL works. PBL delivers dramatic improvements in performance with lower operating costs across the total life cycle. PBL does more for the warfighter with less from the taxpayer. Instead of paying for transactional activities, the government and industry partners deliver improved performance at lower costs.

Ten years of implementation attest to the fact that PBL has been institutionalized. It is time to evolve and refine its application. There are issues to be worked out and PBL methods to make more repeatable and better integrated with Defense logistics enterprise strategies. The future path is not to move away from PBL, but to recognize its value and work diligently to improve and spread its application.

In a July 31, 2008, memorandum ("Implementing a Life Cycle Management Framework") from Young, and in the draft DoD Instruction 5000.02, *Operation of the Defense Acquisition System*, the Office of the Secretary of Defense affirmed the continued policy emphasis on PBL. In this affirmed direction, OSD makes one notable change: Renaming performance-based logistics to performance-based life cycle product support. This change in nomenclature reflects a more precise calibration of the targeted acquisition and sustainment application of PBL and indicates progressiveness in understanding the nature of PBL. Do not read anything more into the name change than that—it is to help understanding and correct some of the past misunderstanding.

One key ingredient for more effective PBL strategies is better acceptance in the logistics community. Like Bruce Wayne (aka Batman), who was orphaned from his family, PBL has in some quarters been orphaned from mainstream logistics.

PBL seems to strike animus and angst in government logisticians. I firmly believe that this perspective is based on lack of knowledge of the PBL business model, particularly the vital role for government managers' oversight and integration of PBL strategies. I have faith that our logistics community wants what is best for our warfighters, and that a continued emphasis on reshaping our government workforce to become PBL managers can turn skeptics into advocates.

We must also focus on how to effectively integrate PBL into future acquisition and sustainment governance processes. In response to this challenge, PBL can be an excellent lens in establishing post-initial operational capability reviews. PBL can also give the military services greater affordability, agility, flexibility, and resilience in future sustainment strategies.

We are examining these areas and more in a product support assessment and way ahead review initiated in September 2008. Integral to the assessment is examining the PBL strategies launched, matured, working, and not working over the last decade. These fact- and data-based insights will drive the discussions and debates about how to fix issues with current sustainment strategies and how to evolve future life cycle management strategies. I sincerely hope we are willing to move forward with strategies more approximating next generation PBL and not a return to the past "schlock and dreck" of transactional-based logistics, emphasizing buying parts and support equipment, and driving PMs crazy with stovepiped logistics.

PBL: Unappreciated Superhero

Batman, despite positive results, does not get his due, and that is frequently the lot of a superhero. Today, we need solutions more than ever. The country and DoD face a budget crisis of enormous dimension. Retrograde, recapitalization, reset, reconstitution of the force, and the continuing long war on terrorism are challenges that will not go away.

PBL is a DoD acquisition sustainment superhero that has been underappreciated to this point. Even if one does not understand what is going on inside the soul of PBL, it is still a proven superhero—and in the 21st century, superheroes are in short supply.

There is no better way to understand than through communication. In this article, I've attempted to do that, and I look forward to the cards and letters to follow—love notes and hate mail alike. We must move away from parochial interests, focus on the greater good, and establish a dialogue to define and implement the next-generation product support strategies that are warfighter-focused and drive down sustainment costs. PBL is a vital and necessary component of that dialogue.

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