

Value Hexagon of Warfighting Acquisition

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Schedule

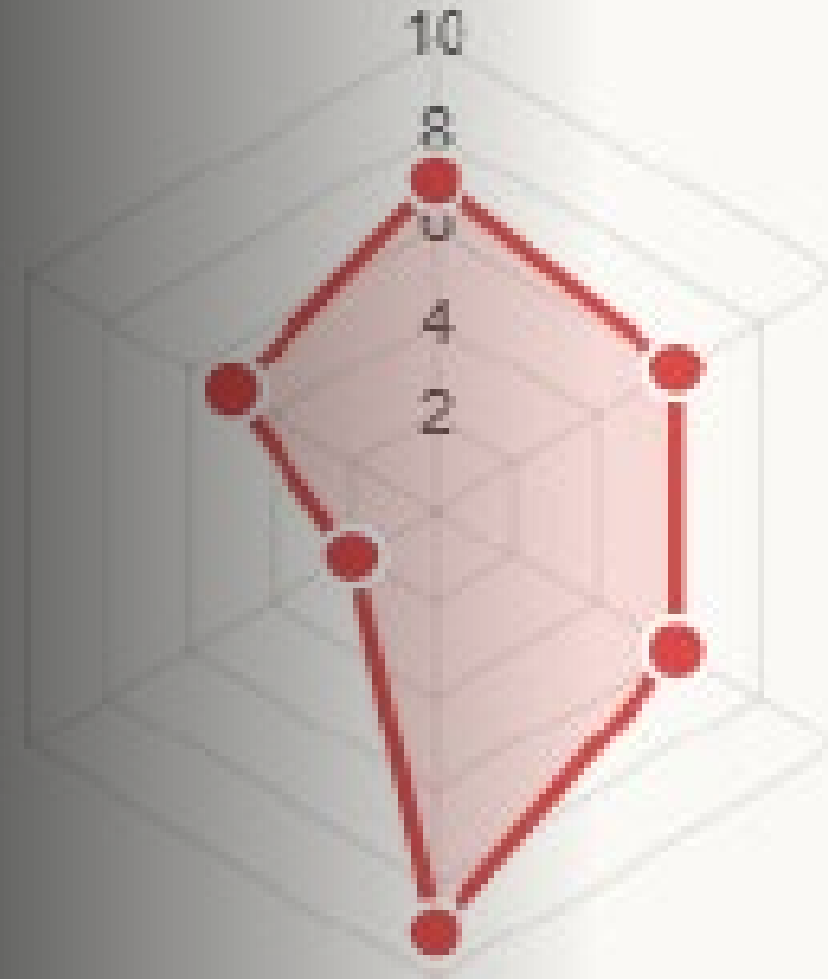
Risk Tolerance

Benefit / Value

Performance

Fiscal Su

CCMD Priority





Research Question

How can the Portfolio Acquisition Executive (PAE) make disciplined, data-driven trade-offs across approved programs of records

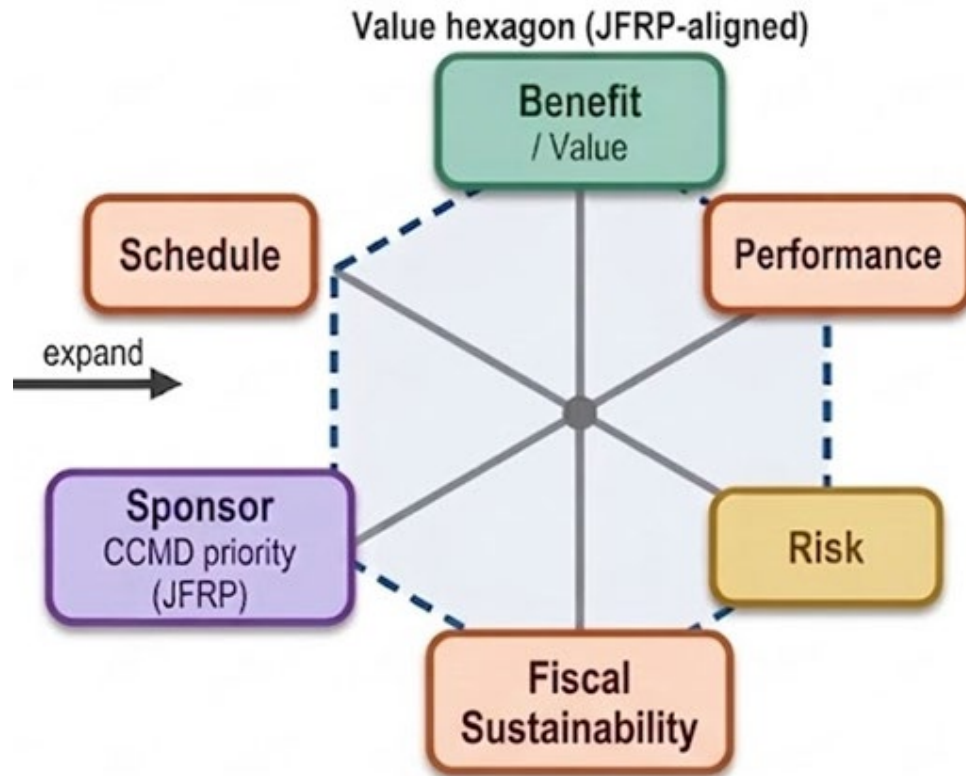
..... and eliminate non-value-added layers of program reviews and bureaucracy to identify **Value Changes** earlier and enable faster and more informed decision making?

Portfolio Acquisition Executive (PAE) Model

Under the PAE model, leaders are empowered —and expected— to make disciplined, data-driven trade-offs across cost, schedule, and performance, with a clear priority on **Time to Capability**.



The Value Hexagon



What the Value Hexagon Visualizes:

- *Is the Acquisition Program potential capability (**Benefit/Value**) worth what we are spending (**Fiscal Sustainability**)?*
- *Could a different portfolio program better use these resources based on Sponsor/CCMD priority?*
- *Is the Acquisition Program Schedule (**Time to Capability**) still meeting the warfighter need or is an 80% solution sooner a higher priority?*

The Value Hexagon spider chart is a **visual** that tells the PAE the strategic story of an acquisition program

The six measurement axes radiate outward from a center point like spokes on a wheel and are scored on a scale of 1 to 10 using a Value Hexagon Rubric

The program's scores are plotted along those spokes and connected, forming a closed polygon

The shape provides a **visual representation** of where the program is strong, where it is strained, and whether the tensions within it demand action

Urgency Trap

Legacy Drifter

Rapid Responder

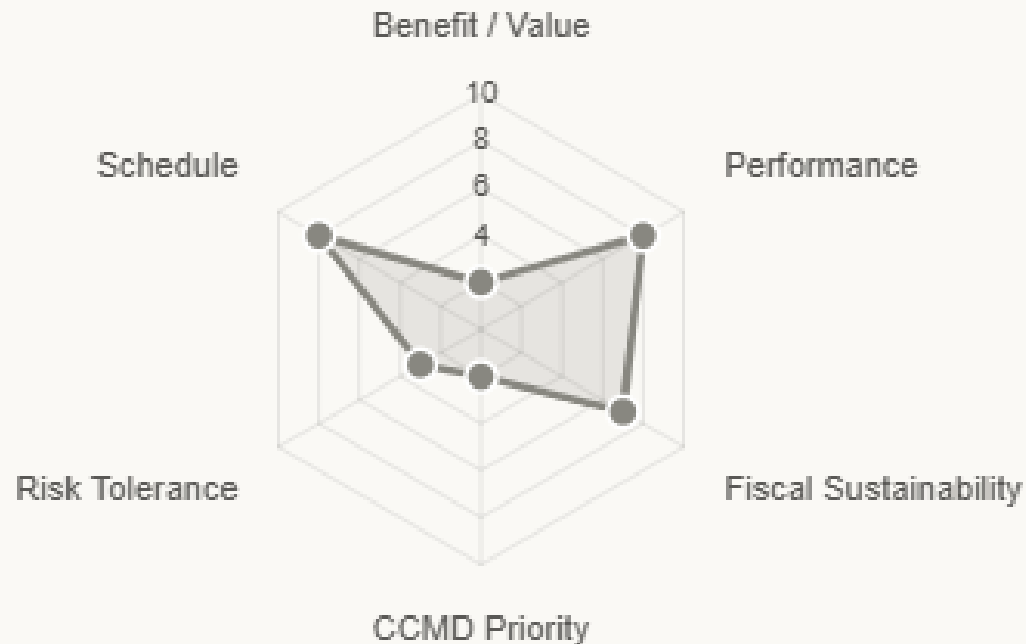
Gold-Plated Anchor

Legacy Drifter

Administratively perfect — strategically irrelevant

The shape is heavy on compliance axes (Performance, Schedule) and nearly absent on mission value axes (Benefit, CCMD Priority). This program hits every milestone and stays on budget — but it no longer solves a high-priority capability gap. The Hexagon makes the divestiture case that a status report cannot.

[Ask about this archetype ↗](#)



Value Hexagon — Program Scorecard

Defense Acquisition Decision Framework — JFRP Era

Axis	Score (1-10)	Band	Rubric Description
Program Name: <i>Legacy Drifter</i>			
Benefit / Value	2	Low (Red)	Marginal improvement to existing capability; not linked to any CCMD gap.
Performance	8	High (Green)	Objectives exceeded across all KPPs; validated in live operational testing.
Fiscal Sustainability	7	High (Green)	Good sustainability. Unit costs stable or declining; EAC at or below original estimate. Program is not crowding adjacent efforts and has adequate funding margin.
Sponsor/CCMD Priority	2	Low (Red)	Referenced in CCMD submission but not prioritized; informational mention only.
Risk (Tolerance)	3	Low (Red)	Low tolerance; small management reserve; near-zero technical risk required.
Schedule/TOC	8	High (Green)	Tracking 3-6 months early; demonstrated schedule discipline across phases.

Score	Benefit / Value	Performance	Fiscal Sustainability	Sponsor/ CCMD Priority	Risk (Tolerance)	Schedule/TOC
1	No measurable mission outcome. Nice-to-have; no campaign plan dependency.	KPPs not met; system fails basic functions in operational environment.	Program is fiscally unsustainable. Cost trajectory is accelerating; EAC growth is crowding out Tier 1 and Tier 2 programs in the portfolio. Immediate portfolio-level intervention required.	Not referenced in any CCMD gap submission; service-internal requirement only.	Zero tolerance; any variance unacceptable; program rigidly constrained.	IOC delayed >2 years against APB; recovery plan not credible.
2	Marginal improvement to existing capability; not linked to any CCMD gap.	Fewer than half of KPPs met; significant gaps vs. threshold requirements.	Severe sustainability risk. Unit cost growth or TOA consumption is disproportionate to the program's JFRP tier. Portfolio is absorbing Tier 3 costs at Tier 1 rates.	Referenced in CCMD submission but not prioritized; informational mention only.	Extremely low tolerance; minor variance requires immediate escalation; no margin.	Delay of 1-2 years; SPI <0.8; critical path at risk; recovery under development.
3	Supports a lower-tier gap; benefit qualitative and hard to quantify.	Most KPPs at threshold only; no objectives achieved; marginal utility.	Poor sustainability. EAC trending significantly above original estimate; funding profile unstable across the FYDP. Adjacent programs are at risk of underfunding as a result.	Addresses a Tier 3 JFRP gap for a single CCMD; limited joint applicability.	Low tolerance; small management reserve; near-zero technical risk required.	Delay of 6-12 months; SPI 0.8-0.9; recovery needs resources or descope.
4	Validated gap addressed; benefit measurable but modest (minor sortie improvement).	All KPP thresholds met; some objectives achieved; adequate in limited conditions.	Below-average sustainability. Cost trajectory shows upward pressure; funding stability requires attention before next milestone. Portfolio rebalancing may be needed at JFRP refresh.	Tier 3 gap across multiple CCMDs; broader but still lower-priority need.	Limited tolerance; modest reserve; accepts low risk on mature technologies.	Delay of 3-6 months; manageable with current resources; no IOC breach.
5	Meaningful improvement to one mission area; supports a Tier 3 JFRP gap.	All thresholds met; majority of KPO objectives achieved; reliable in primary cases.	Moderate sustainability. Program is consuming its authorized share of portfolio resources with minor variance. Stable but offers no margin against unexpected cost growth.	Tier 2 JFRP gap for a single CCMD; meaningful operational priority.	Moderate tolerance; adequate reserve; accepts some schedule slip for capability.	Minor slip 1-3 months; SPI >=0.95; within normal variance; no APB breach.
6	Significant improvement across multiple mission areas; supports Tier 2 JFRP gap.	All thresholds and most objectives met; performs well across expected conditions.	Acceptable sustainability. Cost trajectory is flat or gently declining. Portfolio share is proportionate to JFRP priority tier. No immediate portfolio risk.	Tier 2 gap across multiple CCMDs; joint force relevance clear and documented.	Balanced tolerance; accepts cost/schedule variance if performance is preserved.	On schedule against APB; SPI >=1.0; all major milestones tracking green.
7	Addresses Tier 1 JFRP gap; quantified improvement to kill-chain or logistics.	All KPPs at or above objective values; exceeds baseline in primary mission.	Good sustainability. Unit costs stable or declining; EAC at or below original estimate. Program is not crowding adjacent efforts and has adequate funding margin.	Tier 1 JFRP gap for one CCMD; directly linked to a priority campaign plan.	Elevated tolerance; significant reserve; accepts risk on higher-TRL innovations.	Ahead of schedule 1-3 months; SPI >1.0; milestone compression possible.
8	Critical to a specific campaign plan; removal would degrade CCMD concept.	Objectives exceeded across all KPPs; validated in live operational testing.	Strong sustainability. Demonstrated cost discipline over multiple reporting periods. Portfolio obligation share is declining relative to capability contribution.	Tier 1 gap across multiple CCMDs; cross-theater relevance validated in JFRP cycle.	High tolerance; flexibility explicitly approved; willing to prototype and fail fast.	Tracking 3-6 months early; demonstrated schedule discipline across phases.
9	Joint-force-wide impact; enables/protects strategic objective in priority theater.	Significantly exceeds all objectives; validated under adversarial/degraded conditions.	Excellent sustainability. Unit cost reduction confirmed through production or competition. Program is freeing resources that can be redirected to higher-priority gaps.	Top-tier joint force priority; cited in Joint Warfighting Concept guidance.	Very high tolerance; structured for experimentation; failure is a planned outcome.	Significantly ahead; early IOC achievable; delivering capability ahead of plan.
10	Existential mission criticality; no substitute; absence creates unacceptable NDS risk.	Best-in-class; sets new baseline for capability area; no known shortfalls.	Exceptional sustainability. Net contributor to portfolio health: declining unit costs, stable funding profile, zero crowding of adjacent programs, surplus available for Tier 1 reallocation.	Highest-priority gap in JFRP cycle; supports NDS pacing threat; SECDEF visibility.	Maximum tolerance; OTA/rapid acquisition vehicle; speed over cost certainty.	Exceptional performance; IOC substantially early; new benchmark for speed.

Urgency Trap

Legacy Drifter

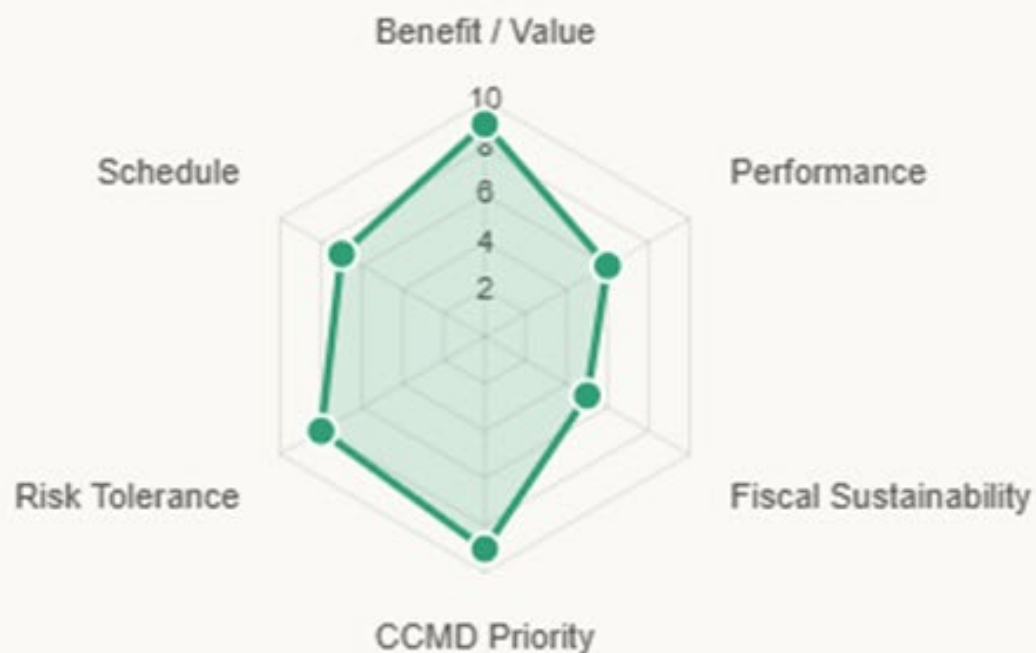
Rapid Responder

Gold-Plated Anchor

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Rapid Responder

Ideal rapid acquisition silhouette



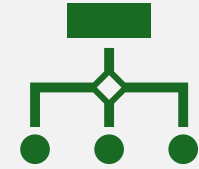
Large and mission-forward. High Benefit and CCMD Priority confirm this is the right capability. High Risk Tolerance confirms the program has been authorized to move fast. Moderate Performance shows the Department has accepted an 80% solution today over a perfect solution too late. This is what rapid acquisition should look like.

[Ask about this archetype ↗](#)

PAE Portfolio Review



THE SPIDER CHART'S MOST POWERFUL USE IS PROGRAM TO PROGRAM COMPARISON.



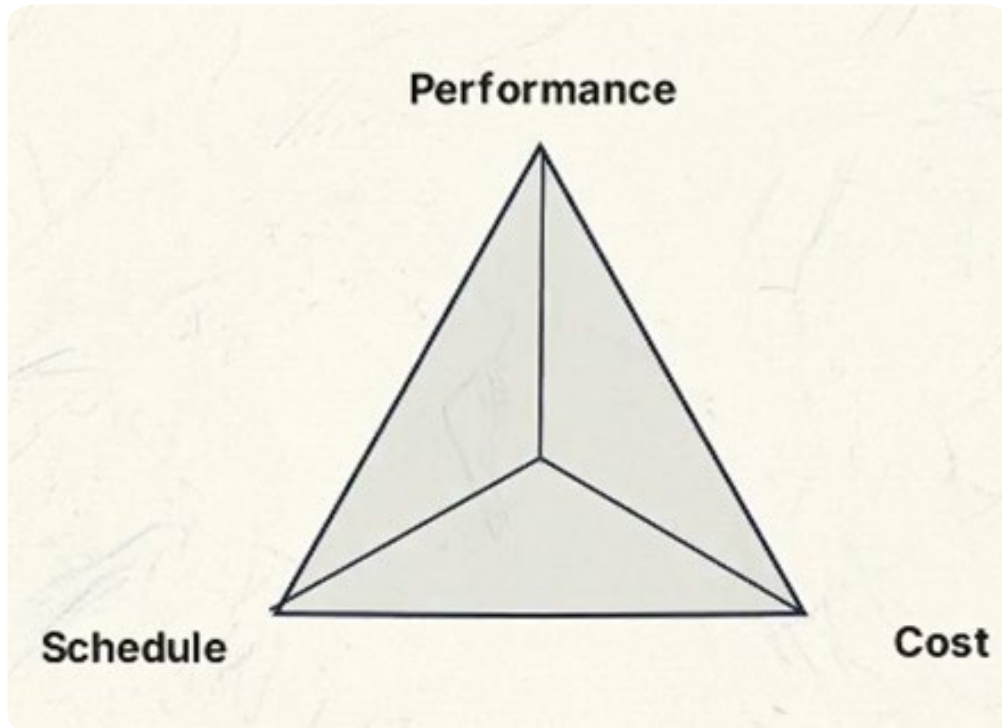
WHEN TWO PROGRAMS ARE PLOTTED SIDE BY SIDE — OR OVERLAID ON THE SAME CHART — THE PAE CAN SUPPORT TRANSPARENT, AUDITABLE, AND DEFENSIBLE FUNDING REALLOCATION DECISIONS



End of
Presentation



The Program Management Iron Triangle




- Useful in an era of stable requirements, predictable threats, and the primary concern with fiscal discipline.
- To establish a culture of speed and measured risk taking across the Portfolio– the Iron Triangle provides minimum value to the PAE.

The Hexagon Categories

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Benefit / Value

The explicit mission outcome, measured in operational effects such as kill-chain compression (time to find, fix, and finish) or logistics footprint reduction

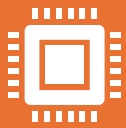


What Mission outcome does this capability deliver?



Benefit/Value is *external* to the system: "Does having this radar range at 300 miles actually change the outcome of the conflict?"

Performance



Technical Key Performance Parameters (KPPs) remain essential, but performance is now a tradeable variable—accepting an “80% solution” today to accelerate fielding is explicitly defensible.



Performance measures the technical efficacy and mission-readiness of the solution—specifically how well the system does what it was designed to do.



Performance is *internal* to the system: "Does the radar detect targets at 300 miles?"

Sponsor/Combatant Commander Priority

The program's importance to current campaign plans rather than decade-old documents

How urgently does a Sponsor/Combatant Commander need this right now?

Fiscal Sustainability



A portfolio-level affordability measure.

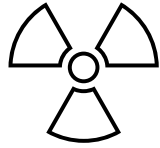


The question is not whether the program is on its own baseline, but whether the portfolio **can sustain it** without crowding out higher-priority efforts.



Can the portfolio absorb this program without crowding out higher-priority efforts?

Risk Tolerance



This dimension transforms risk from a hidden program variable into a deliberate management choice



It converts the implicit risk posture embedded in every acquisition decision into an explicit, co-signed, auditable policy setting that can be compared against the Sponsor/CCMD Priority



How much variance has the PAE authorized this program to absorb?

Schedule / Time to Capability



Reimagined as Time-to-Capability (TOC) rather than administrative milestone compliance — directly embodies the "speed to capability" mandate



The question is not whether the program is on its approved baseline, but whether the capability is arriving in time before the threat environment shifts again



The Decay of Value: In a high-threat environment, the "Benefit/Value" axis is inversely related to TOC. If TOC is too long, the technical solution may be obsolete by the time it reaches the field.



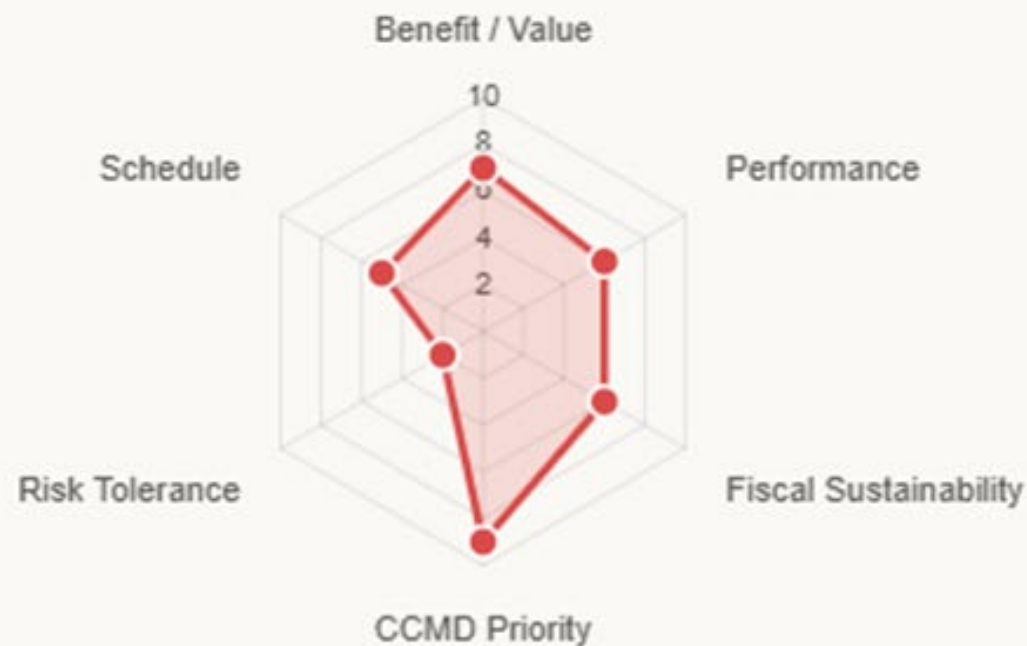
The 80% Solution: Redefining the axis as TOC justifies the "80% solution." A program with a shorter TOC but slightly lower Performance may yield a larger "Value Area" than a perfect system that takes a decade to field.

Urgency Trap

Legacy Drifter

Rapid Responder

Gold-Plated Anchor



Urgency Trap

High priority — low risk tolerance

The joint force urgently needs this capability but the program has not been authorized to move fast. The stretched shape between CCMD Priority and Risk Tolerance is the signature tension. The PAE/MDA must raise risk tolerance or honestly acknowledge the timeline cannot be met.

[Ask about this archetype ↗](#)

Urgency Trap

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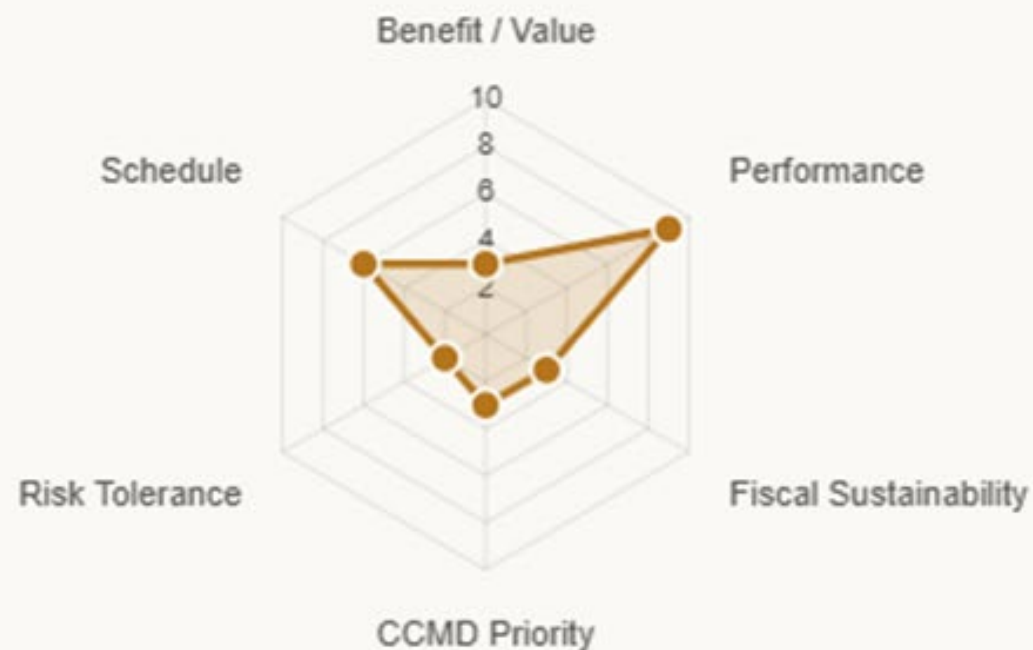
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Gold-Plated Anchor

Over-engineered — value decoupled from performance

Performance is extremely high — the program meets every specification. But Benefit, CCMD Priority, and Fiscal Sustainability are all low. The over-engineering is consuming portfolio resources without delivering proportionate warfighter value. The shape identifies exactly where performance has been decoupled from value.

[Ask about this archetype ↗](#)



Strategic Hedge

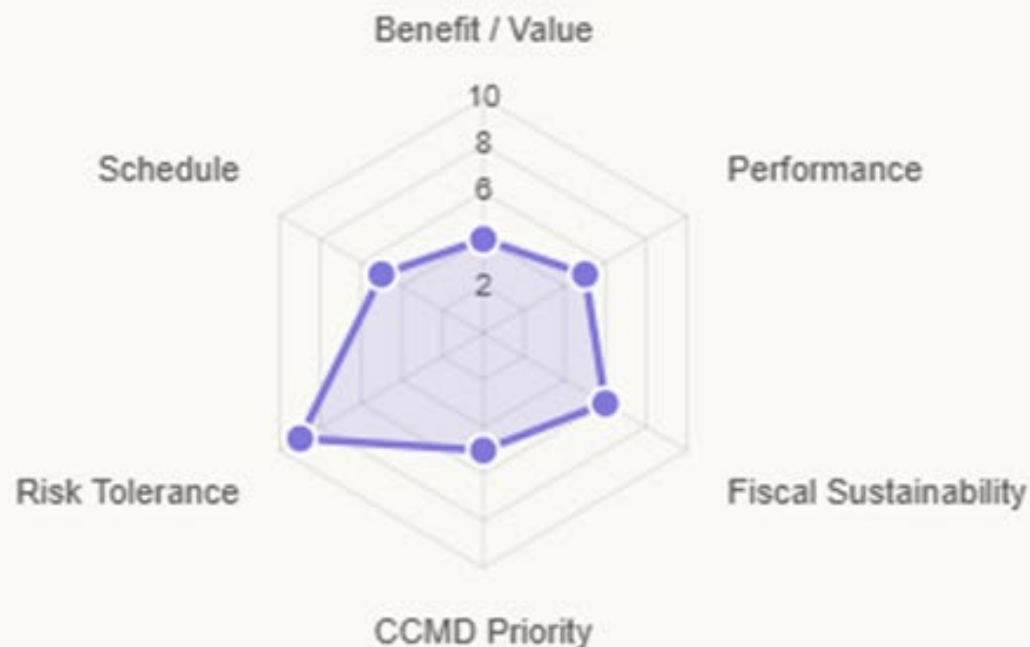
Fragile Winner

Quiet Utility

Sovereign Guard

Strategic Hedge

Moderate priority — high risk tolerance



This is a moonshot or R&D-heavy effort. Because the priority is not immediate, the Department can afford high technical risk in exchange for potentially outsized Benefit in the future. The shape is wide on Risk Tolerance and moderate elsewhere — signaling a deliberate long-term bet. Protect this program from cancellation due to early technical setbacks; early failure is the point.

[Ask about this archetype ↗](#)

Strategic Hedge

Fragile Winner

Quiet Utility

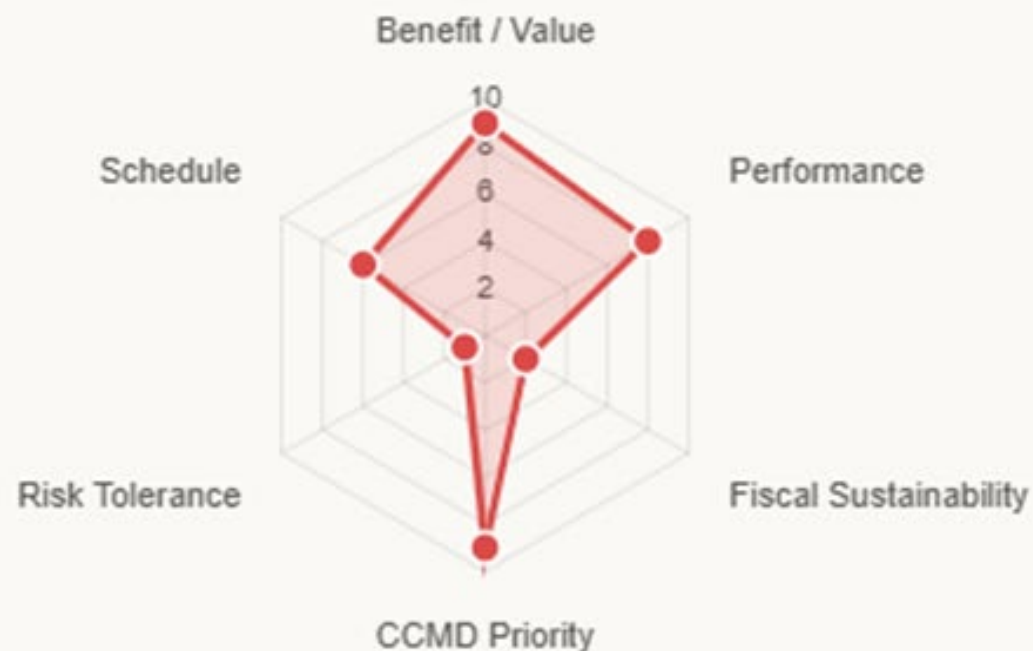
Sovereign Guard

Fragile Winner

Delivering exactly what is needed — with no margin

This program is delivering exactly what the warfighter needs — high Benefit, high CCMD Priority, strong Performance. But Fiscal Sustainability is critically low and Risk Tolerance is near zero. It is too big to fail but too brittle to survive a single technical or fiscal setback. The diagnostic action is immediate top-line resource support, not restructuring. One bad quarter ends it.

[Ask about this archetype ↗](#)



Strategic Hedge

Fragile Winner

Quiet Utility

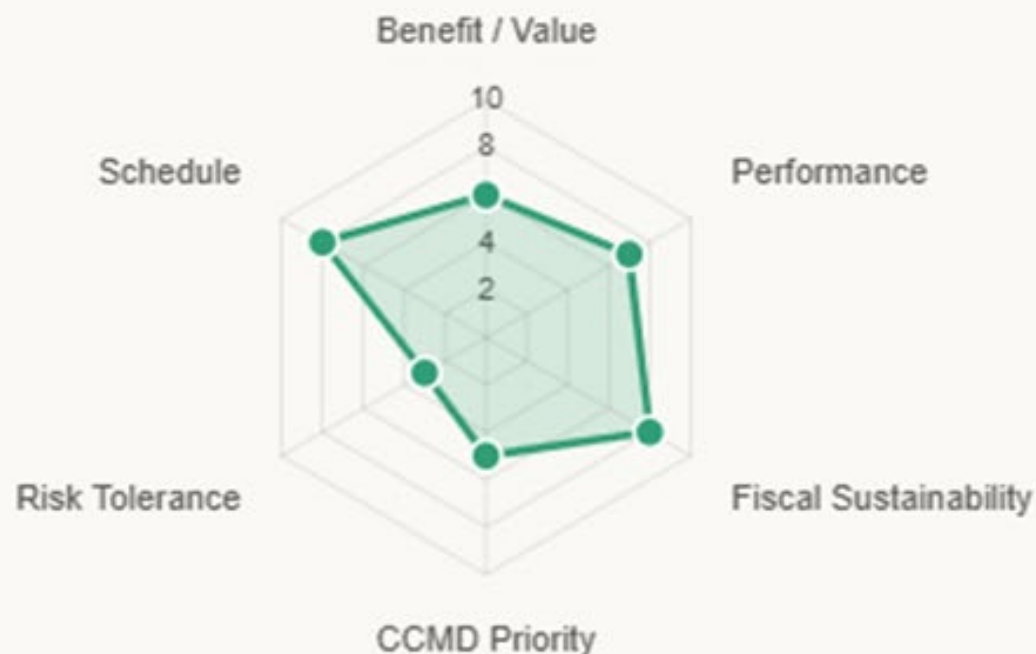
Sovereign Guard

Quiet Utility

Moderate priority — steady workhorse

These are the essential workhorse programs — transport, tankers, base infrastructure, logistics networks. Not flashy, not high-priority, but indispensable. The shape is balanced and stable, with high Fiscal Sustainability and Schedule discipline. The strategic risk is cannibalization: high-priority surges will target this program's budget. The Value Hexagon makes its quiet contribution visible and defensible.

[Ask about this archetype ↗](#)



Strategic Hedge

Fragile Winner

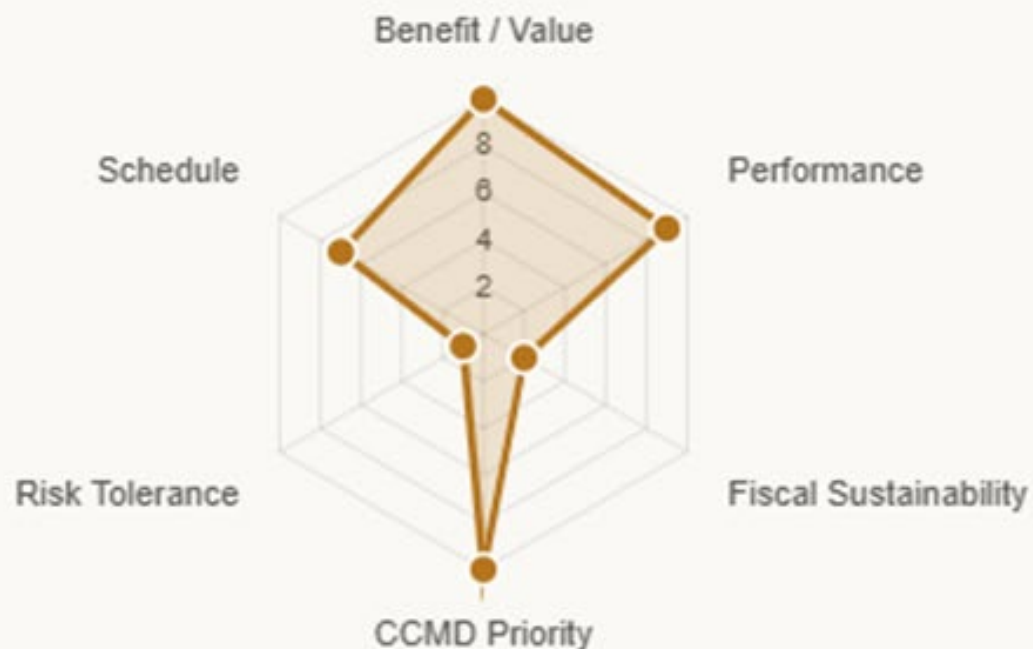
Quiet Utility

Sovereign Guard

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Sovereign Guard

Zero-failure requirement — justified cost premium



Crown-jewel capabilities where failure is not an option — nuclear triad modernization, specialized encryption, national-survival systems. Extremely Low Risk Tolerance is correct and intentional, not a dysfunction. High Cost and poor Fiscal Sustainability are a justified premium for absolute reliability. The Value Hexagon makes the case explicitly: the high cost IS the strategy, not a problem to be solved.

[Ask about this archetype ↗](#)

- <https://gemini.google.com/share/d4a24cccb780>