Crossing the Valley of Death **Faster** and **More Often** with **Bigger Outcomes**

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Overview

Faced with acquiring technological capabilities for the U.S. Department of the Navy (DON), traditional contracting methods are burdensome, often inhibiting agencies across the U.S. Department of Defense (DOD) from delivering solutions at the speed of the mission.

- To accelerate tech acquisition, adoption, and achieve information superiority, the DON Program Executive Office (PEO) Digital Technical Director's Office has implemented a new acquisition strategy using value-driven investment methods.

- The authors found that use of this strategy reduced acquisition timelines by 18 months and improved mission value contribution by $2 billion annually.

- Adoption of this acquisition approach may yield similar results at other DOD service-branch program executive offices and improve mission outcomes.

Problem Statement

Escalating costs to taxpayers with declining returns on investment

- ~$321 billion for the DOD to drive innovation and adoption in FY24
- U.S. defense spending has diminished value in the global technological ecosystem

Adversaries are adopting new technologies at a faster rate

- PRC's adoption and integration of automation in shipbuilding practices outpaces U.S. ship production by over 230 to 1.

Value-Driven Investments Approach

How can the U.S. Department of the Navy maintain its global posture and ensure it has the right technological capabilities to maintain the freedom of the sea?

I. World Class Alignment Metrics
II. Investment Horizons
III. Structured Piloting
IV. Strategy Through Execution
V. Structured Divestments
VI. Resilient and Agile Contracting

Innovation Adoption Kit

PEO Digital's Innovation Adoption Kit (IAK) Contains frameworks, tools, and best practices to rapidly innovate and push the boundaries of current operations to deliver cutting-edge solutions into the hands of the warfighter.

PEO DIGITAL VISION & MISSION

VISION

Delivering a **world-class digital experience** at the speed of mission.

MISSION

Provide the Marine Corps and Navy with a **decisive information advantage** through a modern, innovative, and secure digital experience - **any data, any time, anywhere.**

Organizational Goals:

Continuously improve the **digital workplace** experience to enable user collaboration and access to any data, any time, anywhere

Champion industry-leading **cybersecurity and IT lifecycle** practices to rapidly design, deliver and sustain world-class mission solutions

Empower the data workforce, software developers, and application owners through a robust and effective **IT platform** portfolio

Modernize **IT infrastructure** to create lean and diverse transport that brings the power of cloud to the point of mission

Foster a **culture of excellence** through continuous learning and an empowered workforce

Disrupt ourselves with **experiments**

Use before rent; rent before buy; buy before build

Beta earlier; a 10% solution is better than no solution

Partner bolder and as often as possible; leverage the success of others

Move with urgency and exercise a **bias toward speed**

Seek **simplicity** for scalability

Seamlessly deliver **customer-centric** technologies

Never duplicate, **always automate**

Reward innovation; make government IT cool to do and boring to maintain

Weaponize data to make better decisions at the speed of relevance
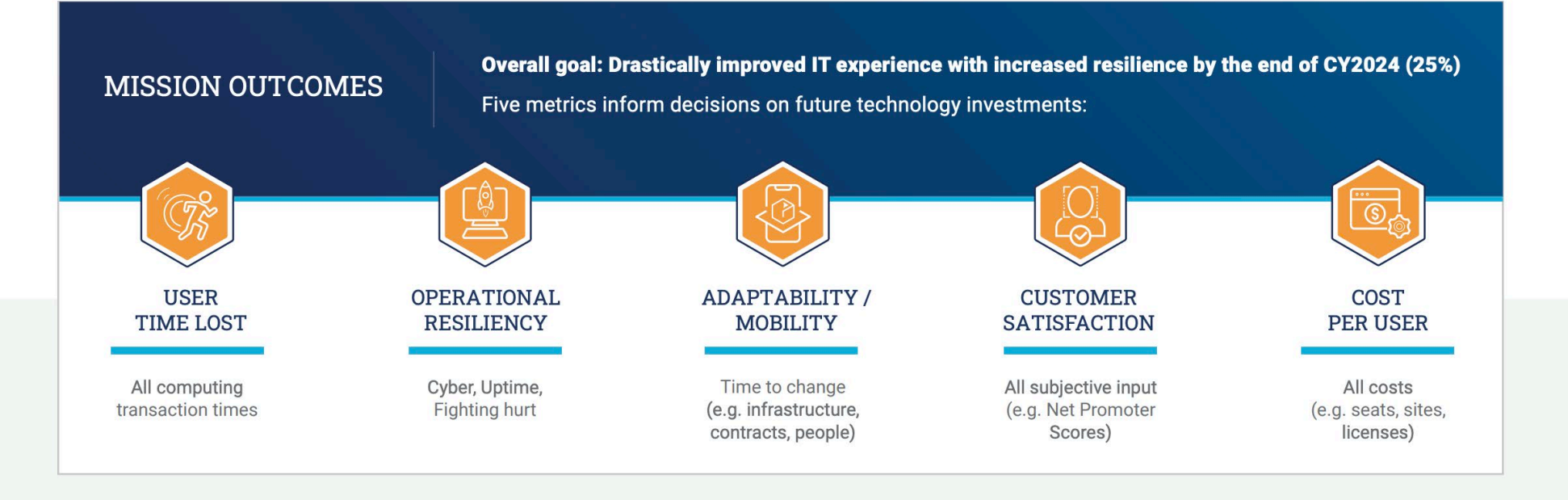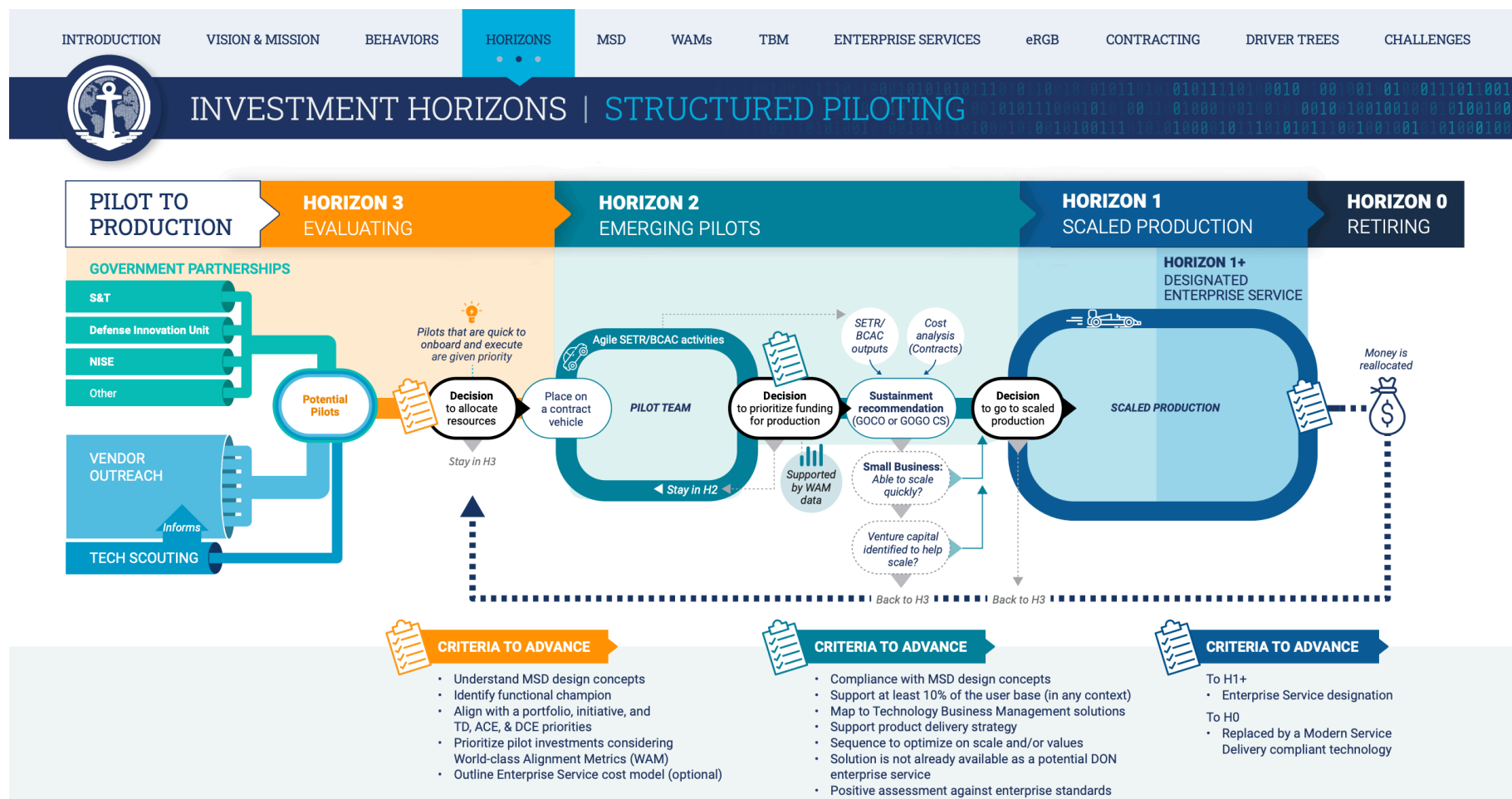
World Class Alignment Metrics

PEO Digital has adopted World-class Alignment Metrics (WAM) to better evaluate our Information Technology (IT) investment and performance by connecting data to mission outcomes. The intent is to increase effectiveness across the Navy and Marine Corps through a clear, data-driven approach to evaluating success.
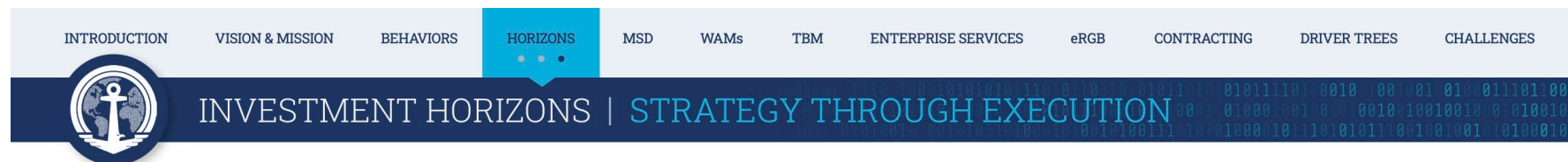
MISSION OUTCOMES

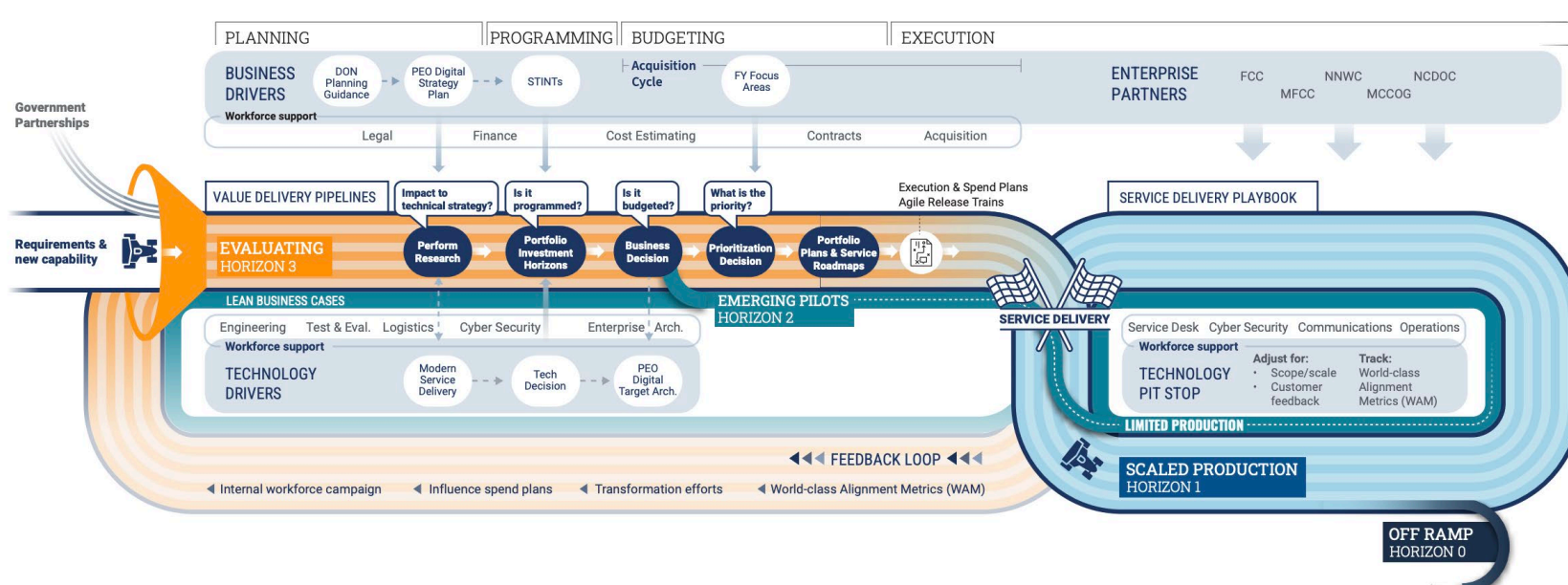**Overall goal: Drastically improved IT experience with increased resilience by the end of CY2024 (25%)**

Five metrics inform decisions on future technology investments:

USER TIME LOST	OPERATIONAL RESILIENCY	ADAPTABILITY / MOBILITY	CUSTOMER SATISFACTION	COST PER USER
All computing transaction times	Cyber, Uptime, Fighting hurt	Time to change (e.g. infrastructure, contracts, people)	All subjective input (e.g. Net Promoter Scores)	All costs (e.g. seats, sites, licenses)

Investment Horizons/Structured Piloting

Strategy Through Execution

Structured Divestments

STRUCTURED DIVESTMENTS

Redundant IT systems create a complex environment that hinders the DON's ability to achieve information advantage.

"Structured Divestments" outlines a clear path to identify, assess, and sunset outdated technologies.

IDENTIFY TO RETIRE

The goal is to replace redundant systems with Modern Service Delivery (MSD) compliant technology. When the criteria to divest is met, obsolete capabilities are sunset.
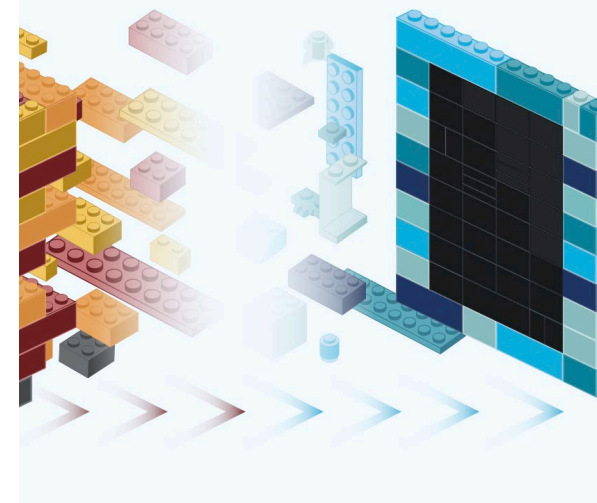
Criteria for retirement include:

- Does not pass assessment for an enterprise service
- Replaced by a MSD compliant technology
- No longer delivering on mission outcomes, using World-class Alignment Metrics (WAMs).
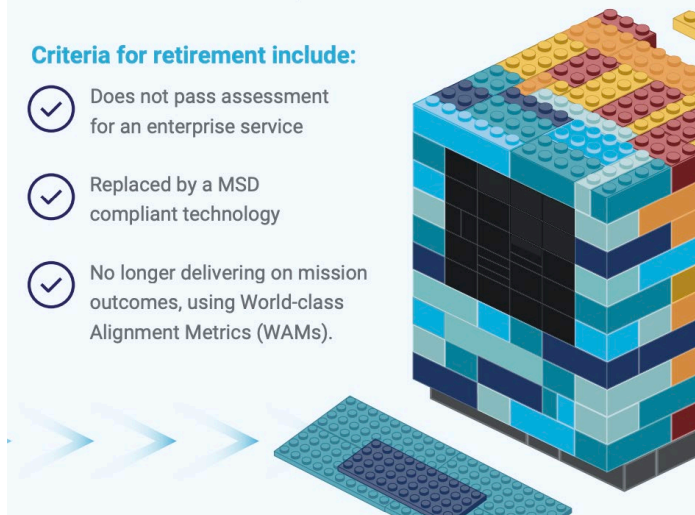
RETIRE TO REINVEST

Divested resources and savings are reinvested in modern and secure capabilities for our Warfighters.

Findings

One Program Executive Office (PEO) conducting 21 pilots demonstrated significant enhancements using the Value-Driven Investment Approach, <u>completing pilots 105 times faster and producing outcomes 25 times greater than traditional methods.</u>

- Manual data entry burdens decreased notably, contributing to a 20% increase in user satisfaction.
- The streamlined processes substantially reduced award times from a previous duration of 6 to 9 months down to 4 weeks or less.
- The efficiency of staff involvement improved significantly, with required touchpoints reduced from 10-15 people to only five.
- Financial efficiency was enhanced as fees decreased dramatically from 3% to 0.04%.
- Additionally, increased speed in adopting Technology Knowledge (TK) pilots was noted.
- Collaboration with innovative industry partners fostered superior technical outcomes and rapid onboarding of emergent capabilities within a 14-working day window to obligate funds.

Methodology

Action research methodology with an iterative, qualitative approach comprised of planning, acting, observing, and reflecting cycles to drive continuous improvement.

- **Planning phase:** Established baseline measurements, using World-Class Alignment Metrics (WAMs), to provide quantitative benchmarks for comparison post-intervention.
- **Action phase:** Introduced the expanded use of WAMs, Investment Horizons Charts, Structured Pilots, Structured Divestment Approach, Structured Challenges Approach, and the Innovation Adoption Kit (IAK).
- **Observation phase:** systematically capture quantitative and qualitative data.
- **Reflection phase:** Analyze quantitative and qualitative data for empirical insights into effical.
- **Continuous improvement:** Utilize findings from reflective analysis to inform subsequent action research cycles, refine strategies and promote sustainable innovation.

Discussion/Limitations

- The findings highlight critical factors influencing the efficacy and agility of defense procurement processes, emphasizing structured methodologies, agile practices, and proactive portfolio management.

- This research underscores the necessity of integrating agile methodologies and structured portfolio management practices within defense procurement to maintain operational effectiveness.

- The study's findings align with existing literature emphasizing the significance of agile practices and adaptive management in enhancing defense procurement effectiveness.

- This study's scope and methodological approach introduce certain limitations. The primary limitation involves potential biases inherent in qualitative interpretations and the generalizability of the results.

Conclusions

- The application of World-Class Alignment Metrics, Investment Horizons, Structured Pilots, Structured Divestments, and agile contracting mechanisms has demonstrated significant, measurable outcomes, including substantially reduced acquisition timelines, enhanced user satisfaction, and optimized resource utilization.

- Future efforts should further examine the scalability and adaptability of these approaches across various Department of Defense contexts to ensure consistent and sustained innovation.