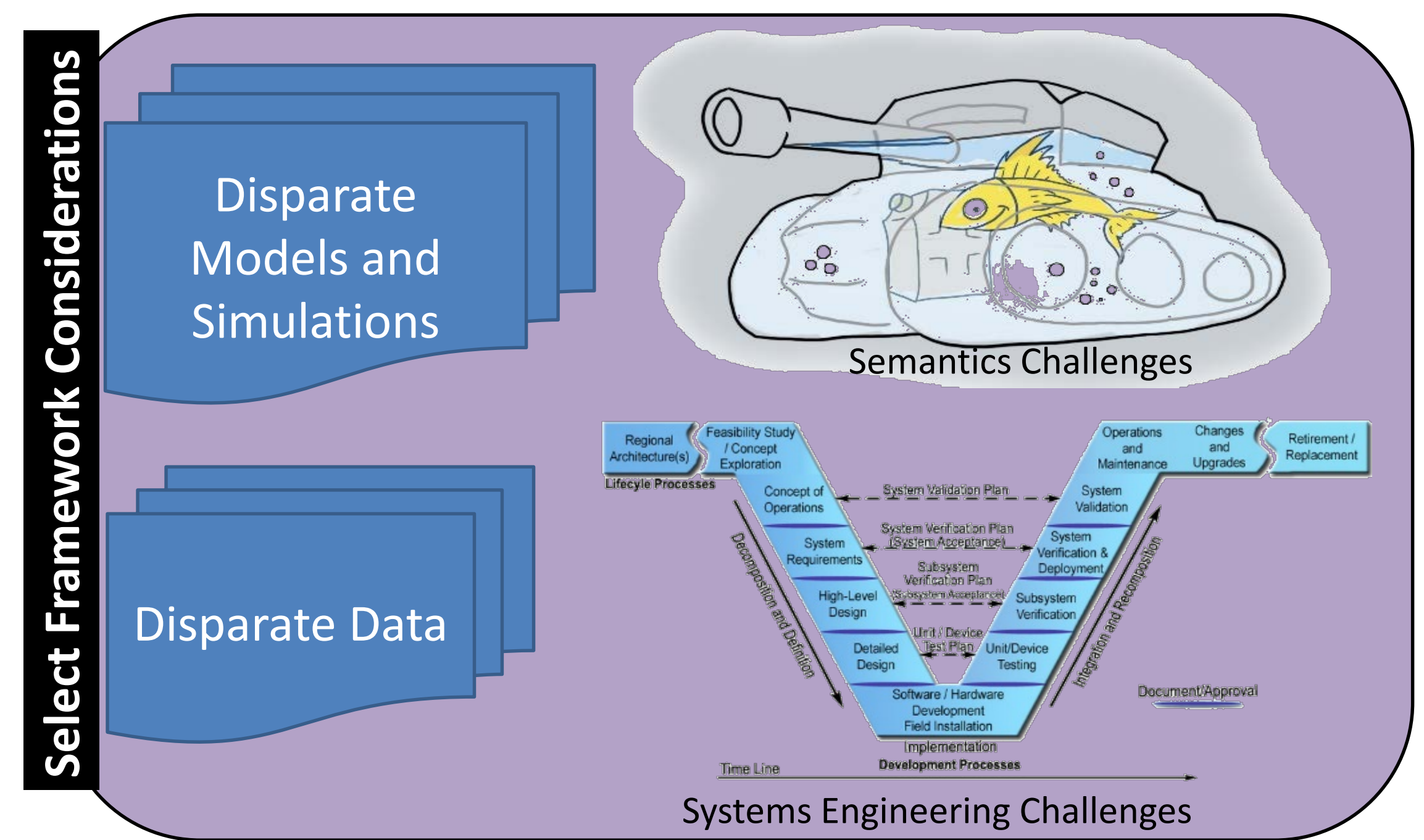


S&T Campaign: Assessment and Analysis
Science of Analysis and Assessment
Key Campaign Initiative

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Research Objective

- Research and develop a robust analysis framework that dynamically integrates models, simulations, and data
- Enable integration of kinetic and non-kinetic effects including cyber, human-agent interactions, and artificial intelligence behaviors
- Permit analyses at various levels of fidelity to support decision-making at all stages of system development and through the continuum of military operations
- Enable assessment of the performance, quality, and effectiveness of systems within complex, multi-domain, operationally-relevant environments



Challenges for Multi-Domain Analysis

ARL Facilities and Capabilities Available to Support Collaborative Research

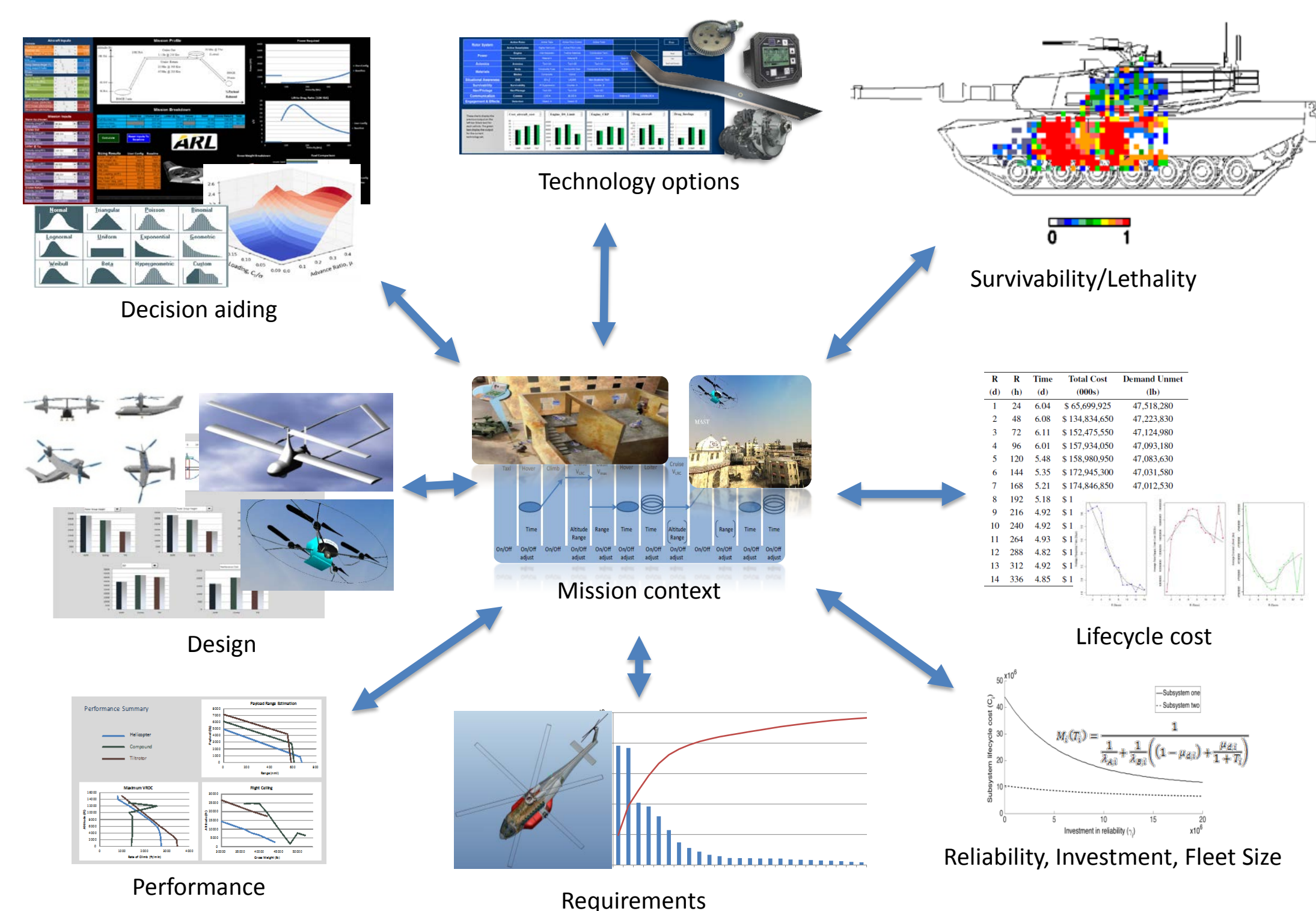
- The Army Research Laboratory, Department of Defense Supercomputing Resource Center (ARL DSRC)
- Platform and personnel vulnerability modeling
- Munition lethality modeling
- Communications modeling
- Electronic warfare modeling



TRADOC Multi-Domain Battle Concept

Challenges

- Developing an enduring standard interface that enables semantic interoperability between models, simulations, and data.
- Modeling autonomous and cognitive systems.
- Modeling emerging warfare concepts that have limited data and model representations.



Analyzing Systems and Technologies in Mission Context

Complementary Expertise / Facilities / Capabilities Sought in Collaboration

- AI/Autonomous agent modeling
- Cyber effects modeling
- Human performance modeling
- Flexible simulation architectures