Force-Level Engineering: Reimagining Assessment Methods for the Modern Joint Environment

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A Multi-Pronged Challenge

Complex Future Operating Environment

Expanded Attack Surface with All-Domain System of Systems

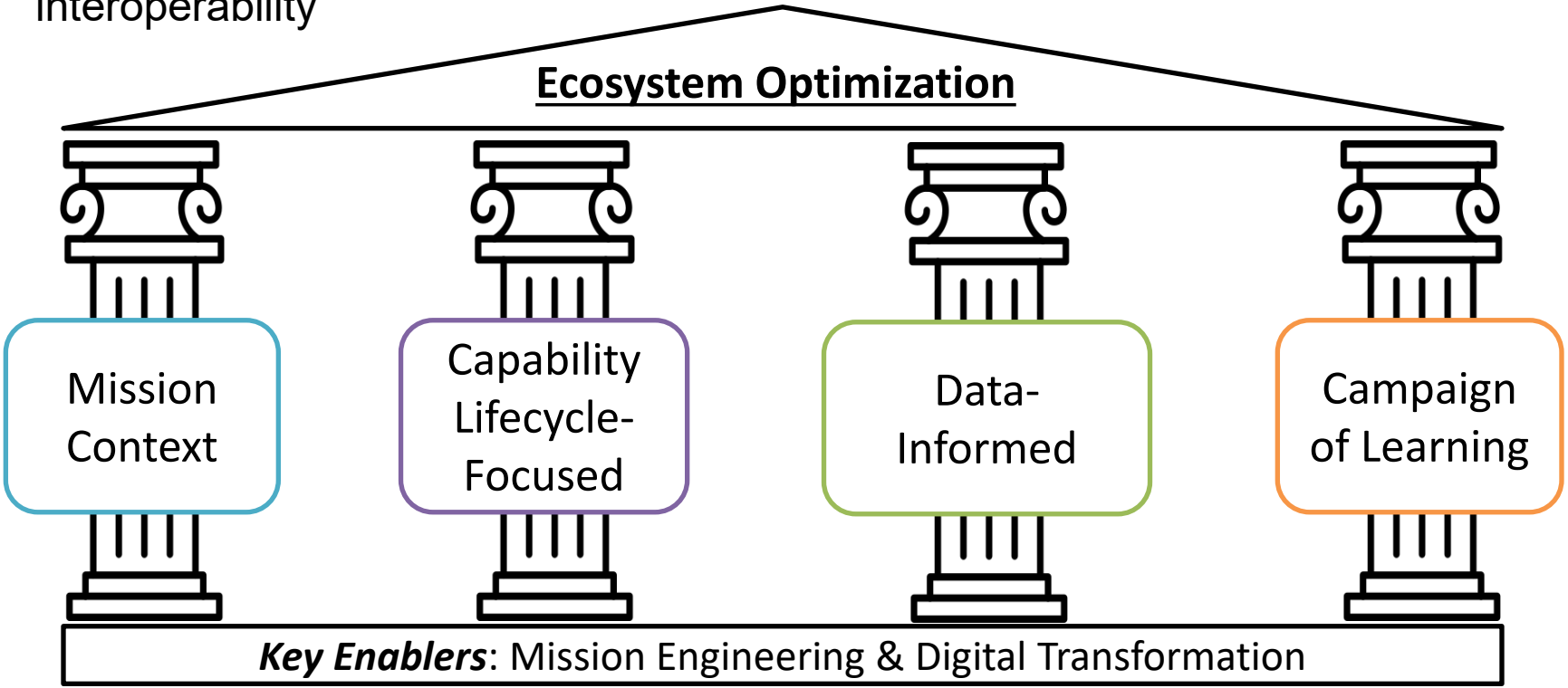
Pressure to Outpace China's Innovation Efforts

Complex Defense Ecosystem

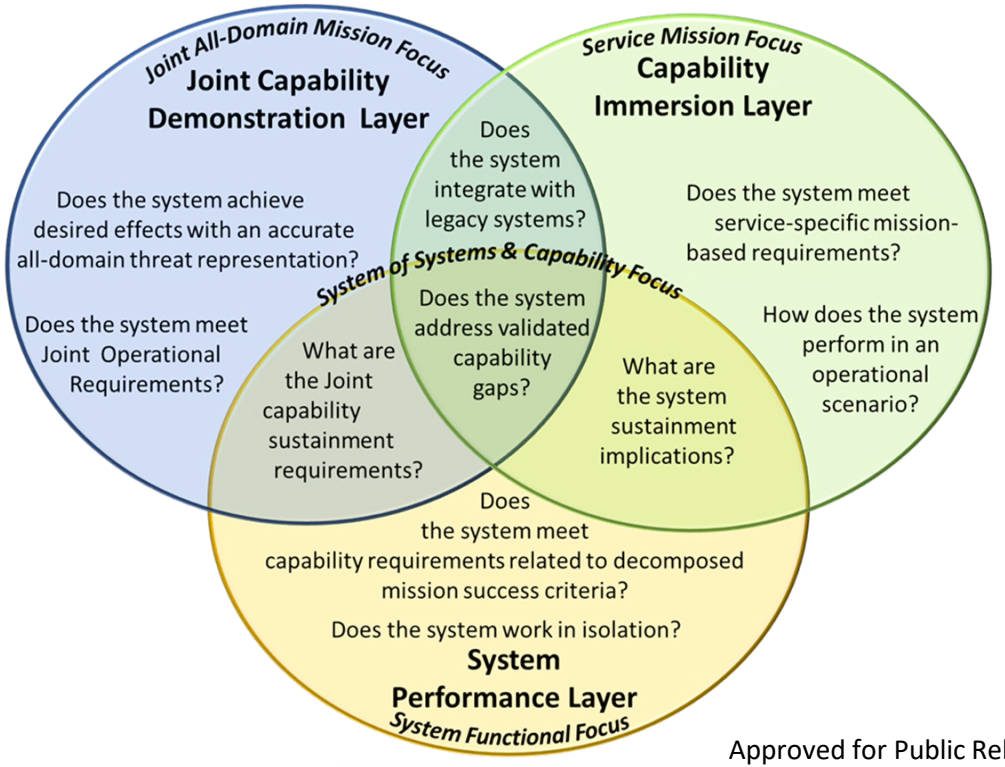
Force engineering & ecosystem optimization is critical to achieve elasticity, readiness, & mission-driven capability-focused processes across the defense ecosystem

Addressing the Challenge

Optimizing the defense ecosystem to achieve Joint Force elasticity, readiness, & interoperability



Optimization Example: Reimagining T&E Through the Joint Test Concept (JTC)



- Reimagine T&E to layer in mission-context across capability lifecycle
- Shift from discrete, phased T&E to flexible & iterative activities across 3 JTC layers
- JTC Layers are overlapping, non-hierarchical

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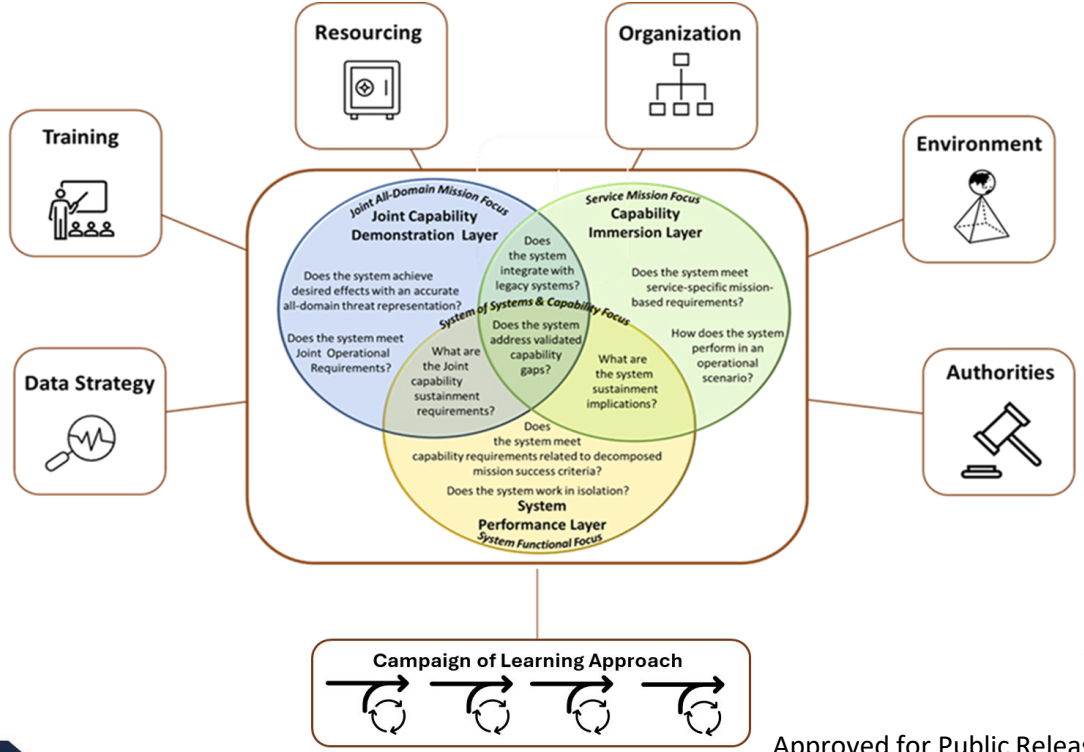

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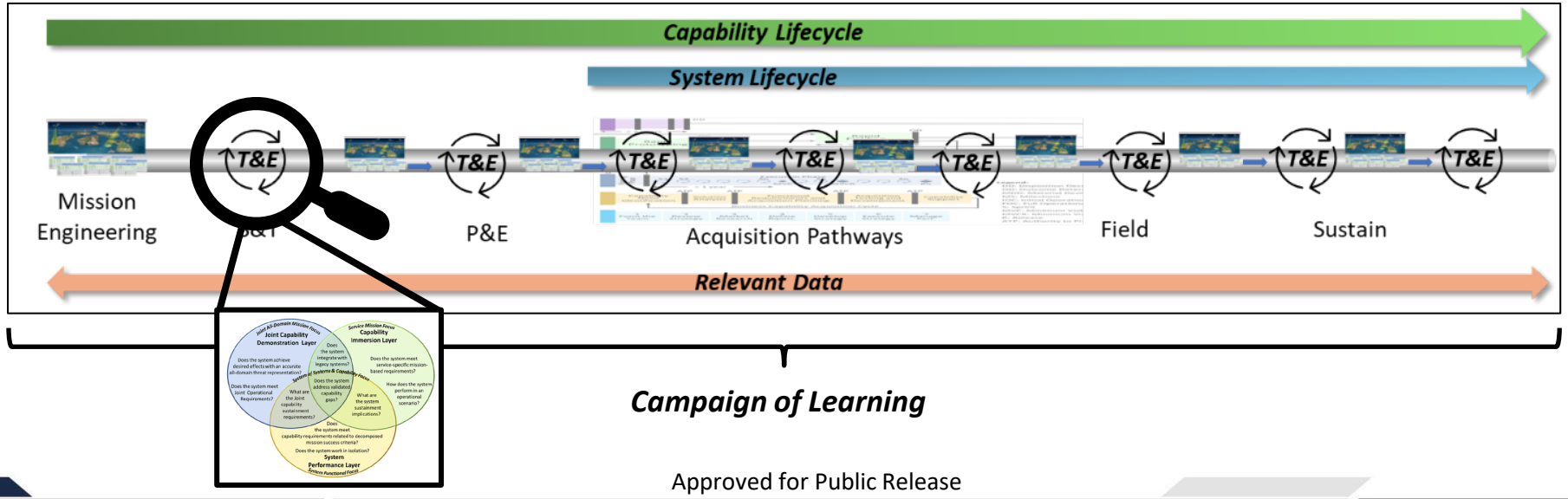
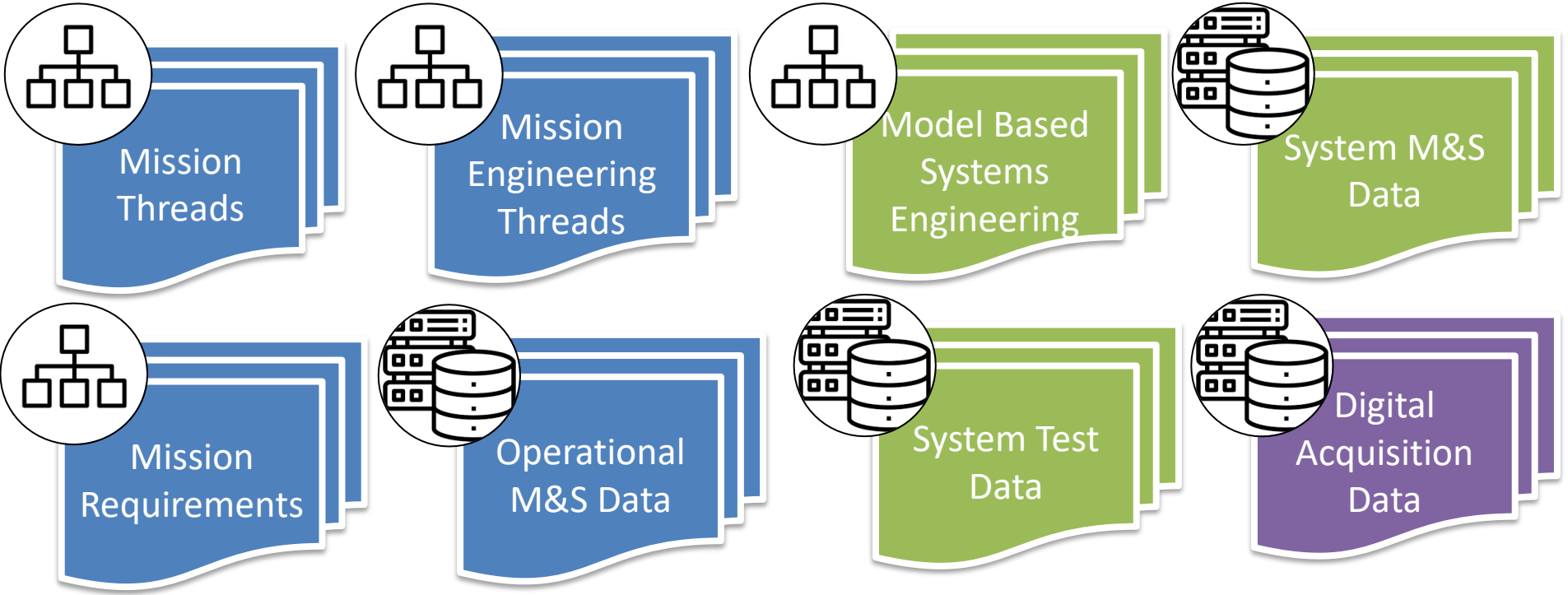
JTC to Achieve Defense Ecosystem Optimization

Optimized T&E will apply a ***capability lifecycle campaign of learning approach*** that is grounded in ***mission engineering*** and enhanced by enterprise ***data-informed decision-support tools***.

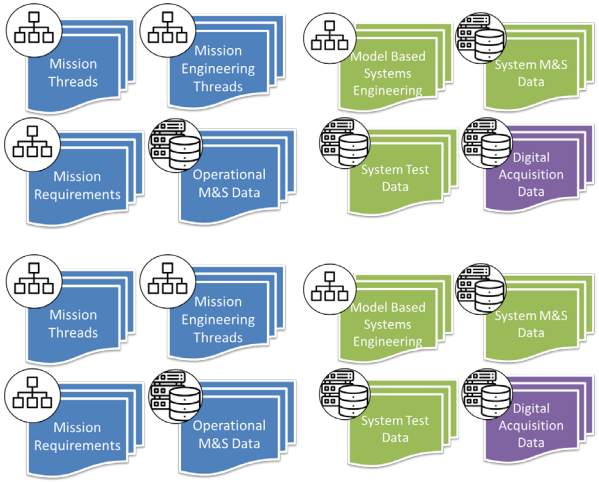


Data & Information Across the Campaign of Learning



Capability Lifecycle Data for Mission-Informed Decisions

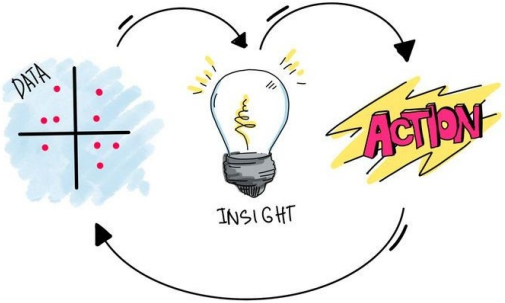
Disparate Data Integration



Meaningful Data Exploration & Sense-Making

Image Source

Decision-Making Landscape



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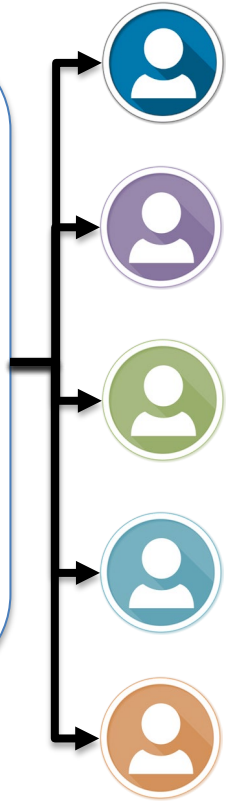

Mission-Informed Capability Lifecycle Planning & Decisions Across a Campaign of Learning

Thank you! Any Questions?