



# **The Pentagon's Revolution in Software-Defined Warfare & Its Testing Dilemma**

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# Challenges & Opportunities Reflecting Modern Warfare



# Transformation of the Battlefield...



**SEAMLESS COLLABORATION ACROSS ALL DOMAINS**

**ATTRITABLE SYSTEMS AT SCALE**

**ENABLED BY AUTONOMY & AI**

**In modern conflicts, the fastest, more robust, & resilient updater wins**

# Transformation of the Battlefield...



**LONG-RANGE LETHALITY**

**ANTI-ACCESS / AREA DENIAL (A2/AD)**

**ATTRITABLE SYSTEMS AT SCALE**

**CONTESTED ELECTROMAGNETIC SPECTRUM**

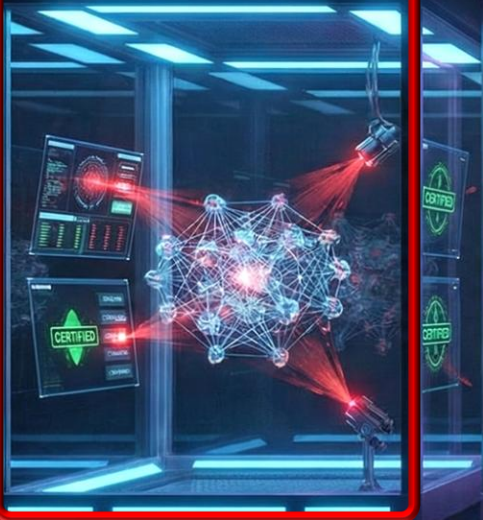
# The Shifting Nature of National Security Acquisition

AI, autonomy, & software-defined warfare are transforming conflict faster than our national defense institutions were built to respond



# The Shifting Nature of National Security Acquisition

RAPID AI  
VALIDATION



MULTI-DOMAIN  
INTEGRATION



INTEROPERABLE  
ARCHITECTURE FABRIC

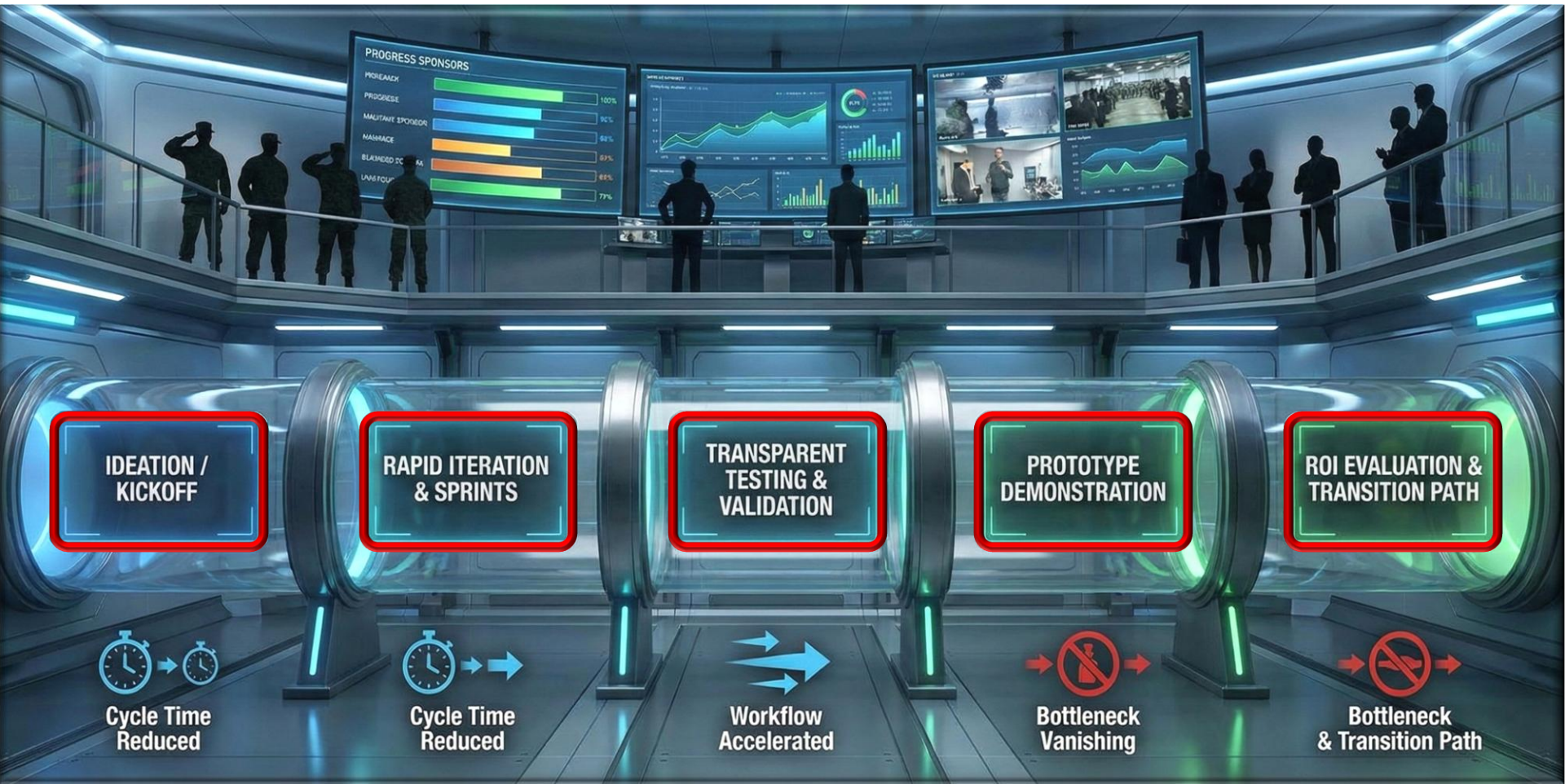


ASSURANCE UNDER  
ADVERSARY PRESSURE

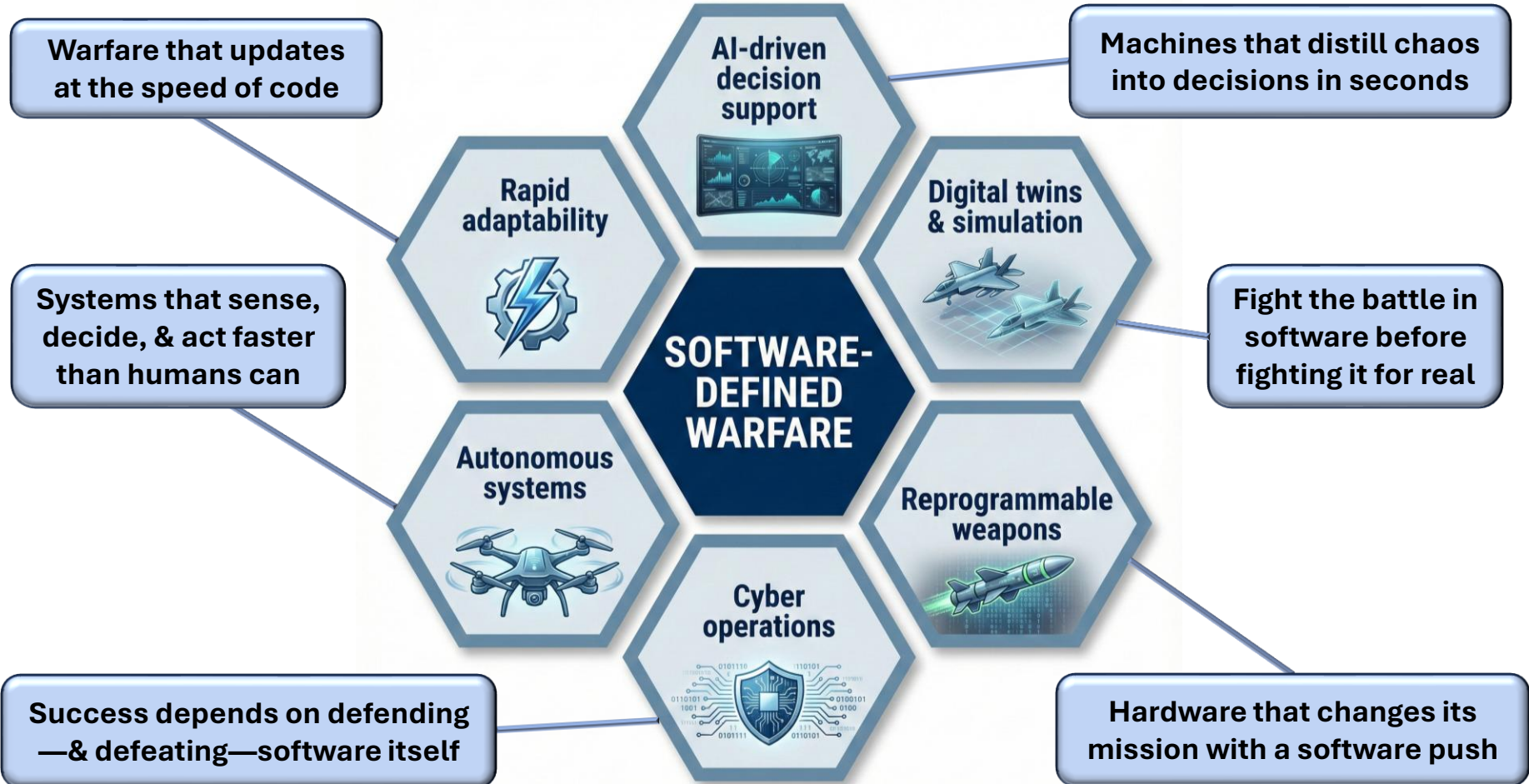


THE FOUR TESTS OF MODERN DEFENSE TECHNOLOGY

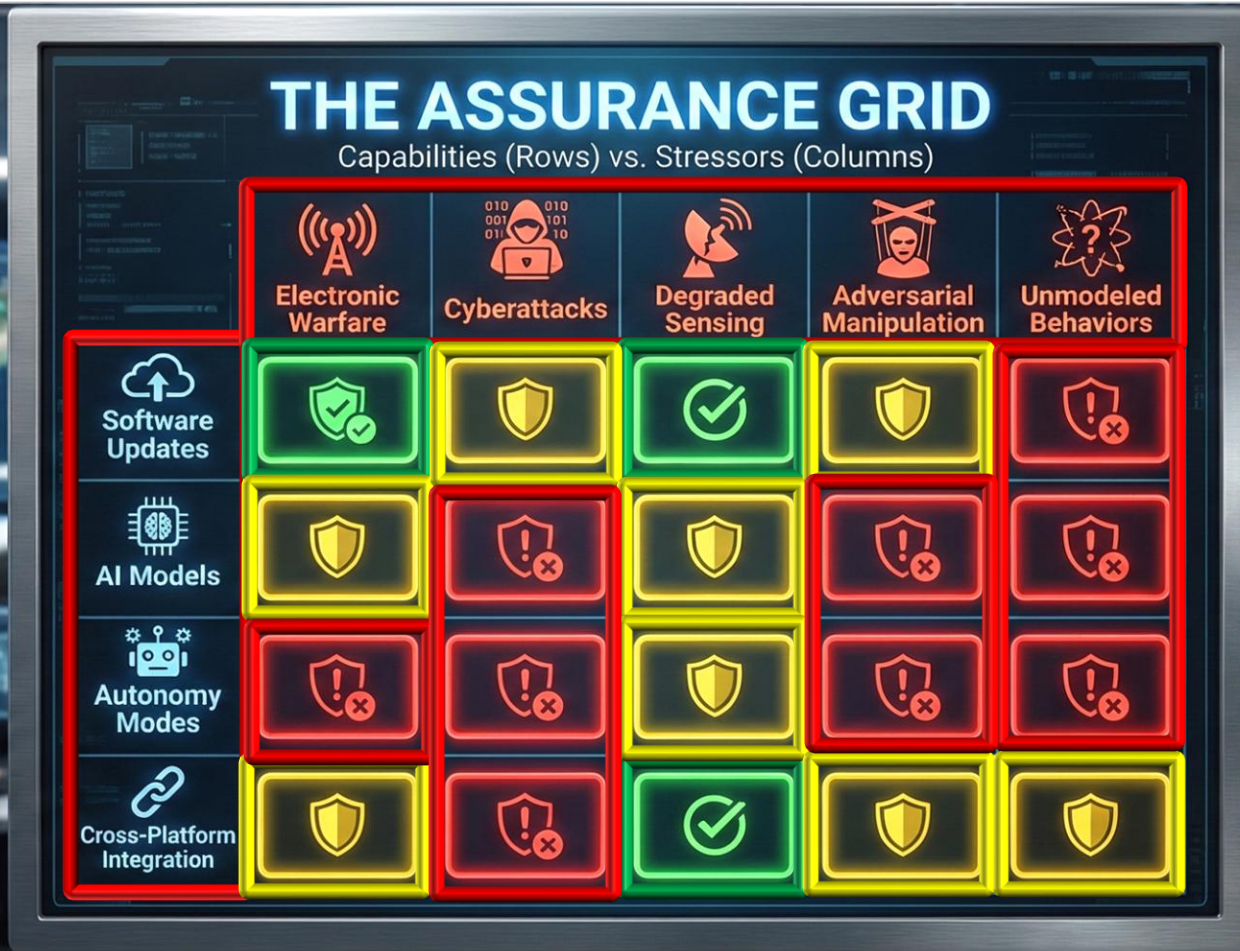
# Evolving Program Expectations



# The Next Offset Will Be Software-Defined



# Agility Isn't Enough—Assurance Wins the Fight



# Confidence at Speed: The New Currency of Warfare

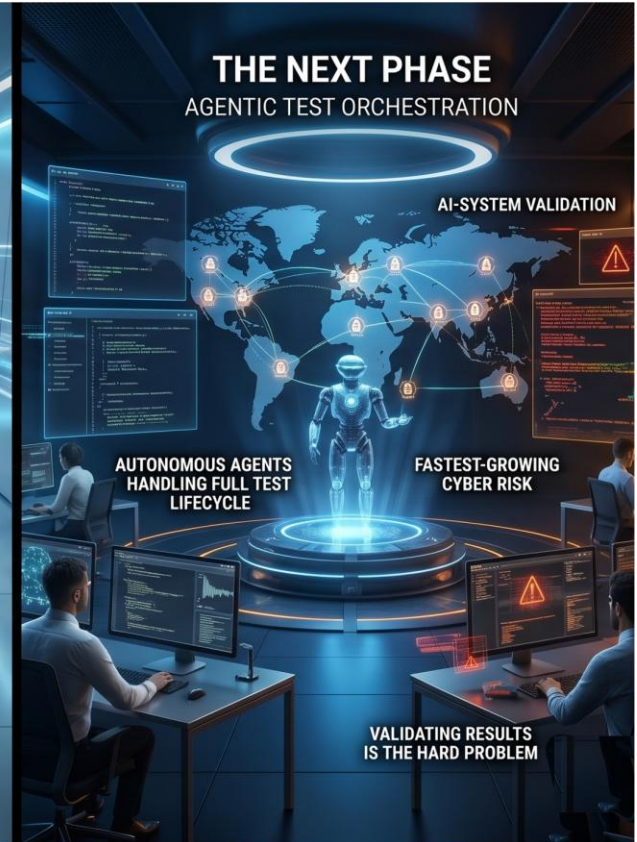
## THE MISSION ASSURANCE DASHBOARD



**ADVANTAGE = UPDATE → TEST → DEPLOY FASTER — WITH UNSHAKEABLE CONFIDENCE**



# Concluding Remarks: AI Transformation of Testing



The success of software-defined warfare depends on robust testing



# Questions & Answers

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