Λ C C E L E R Λ T E

Speed to Mission Impact

Pete Modigliani
Su Chang
Dan Ward
Chris Glazner

Contact us at accelerate@mitre.org



MITRE

Purpose / Outline

Discuss how agencies can accelerate program deliveries

- Need for Speed and Barriers
- MITRE's Accelerate
- Initial Set of Strategies and Tactics



Agencies Require Capabilities Faster

Emerging Threats



- Near-Peer Adversaries, Insurgents
- Cybersecurity

Changing Operations



- Broader Missions
- Evolving
 Environments

Exploiting New Technologies



- Commercial Tech for Government Solutions
- Leverage Government S&T, R&D Projects

Aging Legacy Systems

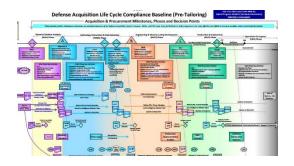


- Costly, Risky, Decades-Old Systems
- Inefficient, Ineffective Processes



We're Not Positioned for Speed

Lengthy, Complex Acquisition Environment



Large, Overly Defined, Static Requirements



Lengthy Budget Processes with Onerous Rules



Lengthy Contracting
Timelines and Protests



Siloed, Large, Complex Systems and Extensive Testing



Risk-averse Culture
Many Reviews and Docs



And we wonder why it takes a decade or longer to field



The Pace of Change



Our adversaries iteratively field multiple capabilities in the time it takes us to field a single system



What is Accelerate?



Strategies and Tactics

Identify, align, and evolve a suite of Accelerate services supporting major phases of the systems engineering and acquisition lifecycle.



Advisors

Offer multidisciplinary teams to collaborate with experts and work with sponsors to apply Accelerate strategies and tactics.



Labs and Tools

Leverage extensive investments in labs and collaborative tools and apply these capabilities across the whole of government.



Pilots

Identify and support a controlled set of external and internal pilots to apply, test and improve Accelerate strategies and tactics.

A suite of offerings to accelerate capability delivery



Accelerate Strategies and Tactics

Leadership & Culture

- Culture Change
- Experimentation
- Decision Authorities
- Recognition/ Awards
- Culture Examples
- Communications
- Risk
- Training

System Design

- Modular Open Systems Arch
- Trimming
- The Simplicity Cycle
- Design Thinking
- Systems Thinking
- Owning the Technical Baseline

PMO Operations

- High-Performing Teams
- Just Enough Documentation
- Document Coord/ Approval
- Tailored Acquisition Models

Contracting

- Other Transaction Authority
- Broad Agency Announcement
- Challenge Based Acquisitions
- Speeding with the FAR

DoD Acquisition Pathways

- 804 Middle Tier Rapid Prototyping/Rapid Fielding
- 806: Prototyping Components
- Rapid Acquisition Authorities

Scope & Requirements

- Minimum Viable Product (MVP)
- Lean Acquisition
- Iterative Program Structure
- Portfolio ICDs
- IT Box
- Agile Requirements
- Engage Users

Test & Evaluation

- Mission Engineering
- Test and Evaluation Framework
- T&E Statistical Engineering
- Cybersecurity T&E Tabletops
- Integ/Joint Test Infrastructure
- Agile SW Development T&E

Initial set designed to help accelerate programs



Leadership and Culture

Guiding Principles

- Flatten the organization and delegate decision authorities
- Identify a program champion from operational environment
- Set expectations, establish goals, and provide incentives
- Support higher risk tolerance fail fast and learn

- Develop a Strategic Culture Change Plan
- Culture of Experimentation
- Decision Authorities
- Recognition/Awards Program
- Communication to Workforce
- Risk Tolerance
- Training





PMO Operations

Guiding Principles

- A small, high performing team will outperform a very large team
- Frequent coordination with end users reduces operational risks
- Constraints foster creativity by eliminating the obvious solution
- Build for the short term, resist unnecessary delays
- PM's influence is inversely proportional to the program's budget

- High-Performing Teams
- Just Enough Documentation
- Document Coordination/ Approval
- Tailored Acquisition Models





Scope and Requirements

Guiding Principles

- Smaller the scope, faster the delivery 80% solution today!
- Smaller requirements docs = rapid Don't overly define solution
- Operational sponsors capture high level objectives via short docs
- Empower Product Owner to set vision and shape detailed requirements
- Current release should leverage only mature technologies/COTS

- Minimum Viable Product (MVP)
- Lean Acquisition
- Iterative Program Structure
- Portfolio ICDs
- IT Box
- Agile Requirements Management
- Sponsor and User Engagements
- Stormdraining





System Design

Guiding Principles

- Reuse Someone probably solved your problem already
- Modularity Ensures design is responsive to new requirements
- Simplicity Complexity adds friction, fragility, and unpredictability
- Focus Priorities Reduces wasted time and missed opportunities
- Smallness Large programs cost more, take longer, and do less

- Agile Acquisition
- Modular Open Systems Architecture (MOSA)
- Trimming
- Simplicity Cycle
- Design Thinking / Systems Thinking/Design
- Owning the Technical Baseline (OTB)





Contracting

Guiding Principles

- Contracting is a holistic business strategy for the organization
- Leverage existing contracts before developing new ones
- Engage contracting as partners to achieve mission objectives
- Gov't contractor relationship must be a partnership to succeed
- Gov't and contractors must be incentivized for speed

- Other Transaction Authorities (OTAs)
- Broad Area Announcements (BAAs)
- Challenge Based Acquisition (ChBA)
- Speeding with the FAR





Testing

Guiding Principles

- Integrated T&E Team, Planning and Data
- Early and Mission-Based development of Testable Requirements
- Statistical Engineering in Evaluation Planning and Execution
- Availability of Test Infrastructure and Tools

- Mission Engineering
- Test and Evaluation Framework
- T&E Statistical Engineering
- Cybersecurity T&E Tabletops
- Integrated/Joint Test Infrastructure
- Agile Software Development T&E





Summary

- Urgency to deliver programs and capabilities sooner
- Attack the biggest schedule drivers lean out the processes
- Rethink core elements of design, contracting, requirements
- Leadership must establish a culture focused on speed
- Mix of strategies and tools tailored to each organization/program

Λ C C E L E R Λ T E

Speed to Mission Impact

