

# ***Practical Software and Systems Measurement***

***Objective Information for Decision Makers***



***Impact of Digital Engineering  
on Measurement***

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# ***Impact of Digital Engineering on Measurement***

- ***DoD has released a Digital Engineering (DE) Strategy***
- ***DoD Services are developing DE Implementation Plans***
- ***PSM has developed an Information Category-Measurable Concept Measurement (ICM) table which reflects measurement best practices***

**What impact does the move towards Digital Engineering have on measurement?**



## Digital Engineering Overview

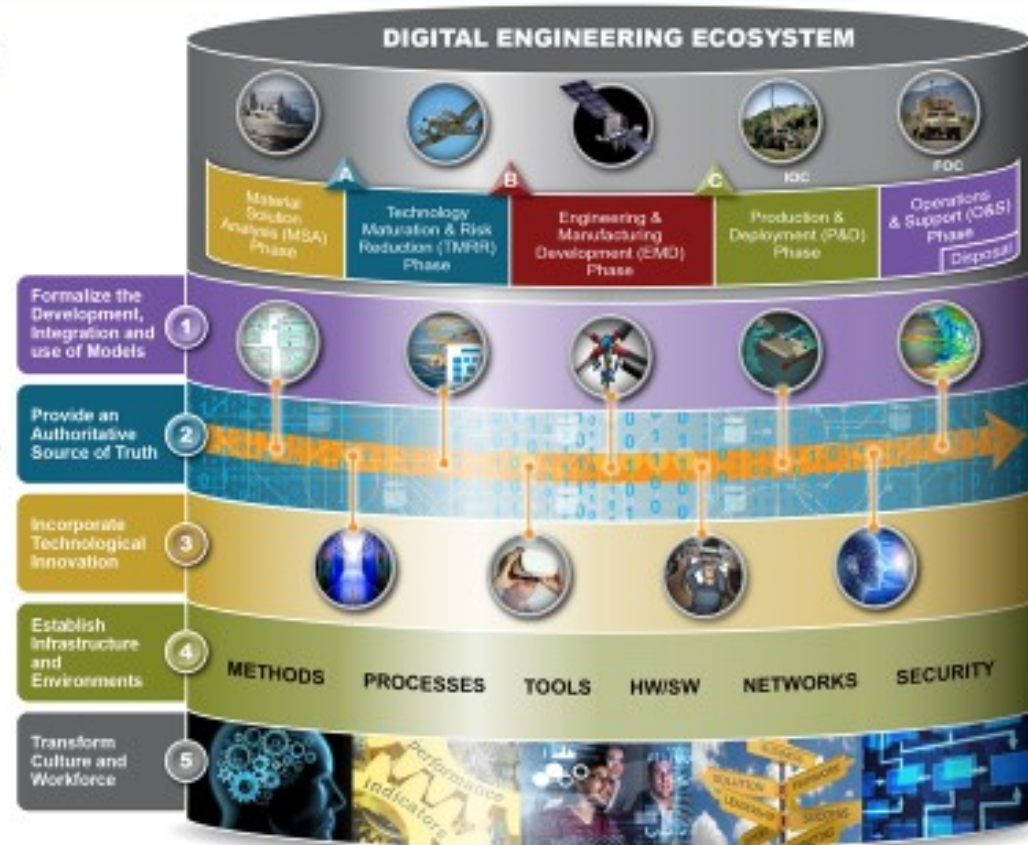


- **What is Digital Engineering?**

- Combines model-based techniques, digital practices, and computing infrastructure
- Enables Delivery of high pay off solutions to the warfighter at the speed of relevance

- **Reforms Business Practices**

- Digital enterprise connects people, processes, data, and capabilities
- Improves technical, contract, and business practices through an authoritative source of truth and digital artifacts



**Modernizes how we design, operate, and sustain capabilities to outpace our adversaries**



# Digital Engineering Strategy



- **Digital Engineering Strategy**
  - Basic capabilities needed by Services and Agencies to begin use of digital engineering practices
- **Objective**
  - Guide the planning, development, and implementation of digital engineering across the services and agencies
- **Expected Impact**
  - Increase technical cohesion and awareness of system in lifecycle activities
  - Reform the Department's business practices for greater performance and agility
- **Coordination**
  - Approved by USD(R&E), DASD(SE), and each Service

<https://www.acq.osd.mil/se/docs/2018-DES.pdf>





# Digital Engineering Strategy: Five Goals



**Modernizes how we design, operate, and sustain capabilities  
to outpace our adversaries**

## ***Objectives of the Workshop***

- ***Assess the impact digital engineering may have on measurement***
- ***In particular, review the ICM table to assess how does measurement change as projects implement digital engineering approaches***

# ***Workshop Format***

***1:30 Introductions, Review of Objectives, Agenda, and Review of DE Strategy***

***2:00 Review of each information category in ICM to identify any areas which may be affected by DE***

- ***Schedule & Progress***
- ***Resources & Cost***
- ***Size & Stability***
- ***Product Quality***
- ***Process Performance***
- ***Technology Effectiveness***
- ***Customer Satisfaction***

***4:00 Review of impacts and implications***

## ***Workshop Background***

- ***PSM has provided a effective forum for addressing best practices in measurement***
- ***With the advent of digital engineering, approaches to systems engineering are changing***
- ***The question is whether these changes will effect the measurement approaches***



## ***Intended Output***

- ***Review of the current ICM table with identification of areas impacted by DE, with possible recommended updates***