How to Assess and Progress Your Digital Maturity

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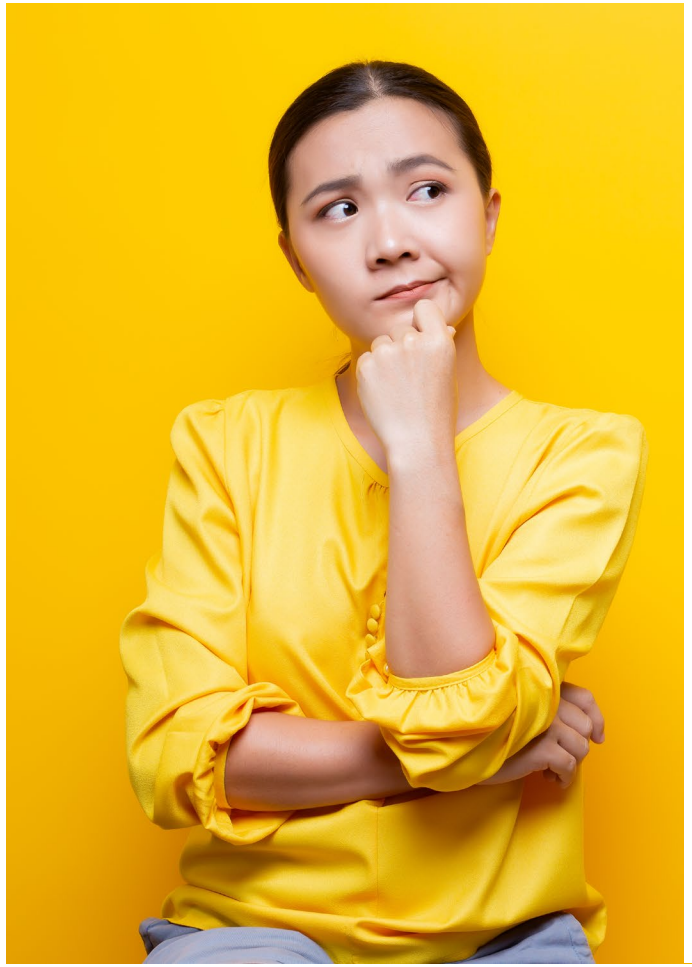
Digital Maturity Self-Assessment Introduction

Why should I self-assess?



- **Why should my organization perform a self-assessment?**
  - ***Problem statement***
    - In the acquisition community's pursuit of digital transformation, finding **a way to organize and focus digital engineering planning efforts** will be key to successful execution
  - ***Digital Maturity Self-Assessment solution***
    - Assesses an organization's **baseline digital engineering capabilities**
    - Defines **near-term goals** that are specific and practical
    - Provides **standardized metrics** to enable measurement of progress over time
  - ***Benefits***
    - Improves **digital fluency and awareness** of DE activities
    - Engages participants in **collaborative discussions** on tools, data, methods, and training
    - Guides **prioritized decisions** on investments and planning
    - Informs **roadmaps** for DE development
    - Supports **communication of DE capabilities** and development progress to leadership or other organizations in a standardized framework
    - Aligns space acquisition programs with the **Space Systems Command Digital Transformation Lines of Effort**
      - *Digital Transformation at SSC (dps.mil)*

This presentation will provide an overview of how a Digital Maturity Self-Assessment pilot effort was conducted for government space acquisition program offices, including lessons learned and tips for effective execution

Self-Assessment Materials

Set up and get started

- **What is a Digital Maturity Self-Assessment?**
  - The Digital Maturity Self-Assessment is a process that guides the users through an exercise to **characterize their current digital capabilities and define future target capabilities**

Product Comes With:

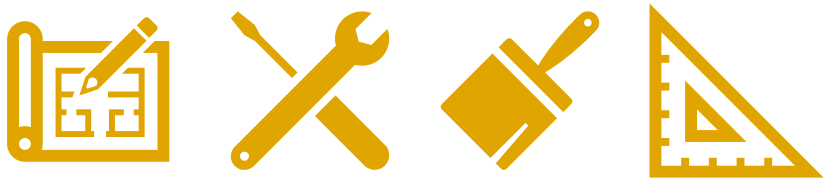
- Digital Maturity Guide
- Digital Maturity Assessment Matrix
  - 19 DE Components
  - Maturity Descriptions (Scale of 0-4)
  - Scoring Results Visualization Templates

- **What is the Digital Maturity Self-Assessment based on?**
  - This assessment was based on the **International Council on Systems Engineering (INCOSE) Model-Based Capability Matrix**, which is primarily focused on model-based systems engineering (MBSE) and has been vetted in industry
    - INCOSE MODEL-BASED CAPABILITIES MATRIX | The Aerospace Corporation
- **Where do I find the Digital Maturity Self-Assessment materials?**
  - The Department of the Air Force Digital Maturity Assessment was developed to expand the scope to **evaluate maturity of digital engineering and management capabilities**
    - What does it mean to be digital? (dps.mil)

A Government and Industry supported tool that characterizes an organization's DE capabilities

Digital Maturity Self-Assessment Pilot Effort

Real world practical application



Assessments
Conducted, Supported, or Planned

- Assessments facilitated for two acquisition program offices
- Consulted, provided materials/guidance for four program offices, including two planned for periodic re-assessments
- Two additional programs targeted for assessment facilitation within CY2023

Accomplishments

- Optimized assessment starter materials developed
- Completion of initial assessment process for six programs
- Summary report generated and delivered to three programs
  - Included assessment results, recommendations and next steps to support roadmap planning, and captured lessons learned

Assessment process practically applied and successfully demonstrated on multiple acquisition programs

Self-Assessment Product Overview

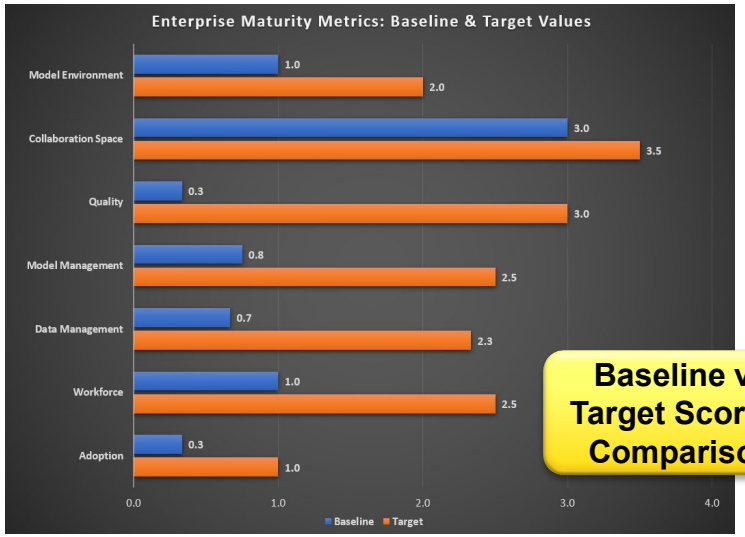
At a glance

Category	Metric	Component
Infrastructure	Model Environment	Tool Access and Governance
		Interoperability
	Collaboration	Capability
		Security
Modeling / Analysis	Quality	Authoritative Sources of Truth (ASOT)
		Metrics
		Model-Based Verification and Validation (V&V)
Process / Policy	Model Management	Digital Management Strategy
		Model-Based Systems Engineering
		Configuration Management
		Process Verification and Validation (V&V)
	Data Management	Innovative Technical Processes
		Technical Management Processes
		Analysis, User Interface (UI) and Visualization
Workforce / Culture	Workforce	Digital User Skills
		Common Digital Understanding
	Adoption	Digital Artifact Use
		Reference Architecture Implementation
		Milestone, Program, and Technical Reviews; Audits

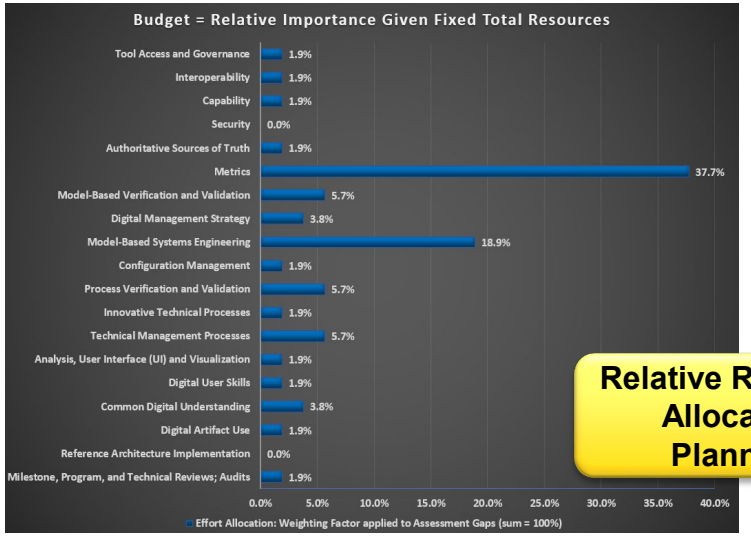
19 DE Maturity Components

Component	Maturity Level Description				
	Level 0	Level 1	Level 2	Level 3	Level 4
Milestone, Program, and Technical Reviews; Audits	Reviews are not model based. Reviews and audits are set by calendar date against a contract event such as contract award. Digital artifacts are not planned for use to satisfy entry/exit criteria.	Enterprise organizations do not coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language). Occasionally models record the acceptance of items through reviews of model content/data in a modeling environment to allow stakeholders to ensure that the review is complete based on exit criteria.	Enterprise organizations infrequently coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language) but they are aware of the requirements of others. Frequently models record the acceptance of items through reviews of model content/data in a modeling environment to allow stakeholders to ensure that the review is complete based on exit criteria.	Enterprise organizations frequently coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language). Models record the acceptance of items through reviews of model content/data in an integrated digital environment to allow stakeholders to ensure that the review is complete based on exit criteria.	Enterprise organizations coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language). Models automatically record acceptance through frequent reviews of model content/data in an integrated digital environment to allow stakeholders to ensure that the review is complete based on criteria.

Component Maturity Level Description Scale



Baseline vs Target Scoring Comparison



Relative Resource Allocation Planning

The Digital Maturity Assessment Matrix is a tool to identify and visualize current and future target capabilities

Self-Assessment Facilitation Overview

Step-by-step instructions

Facilitation can be internally or externally guided

Facilitation Team Steps

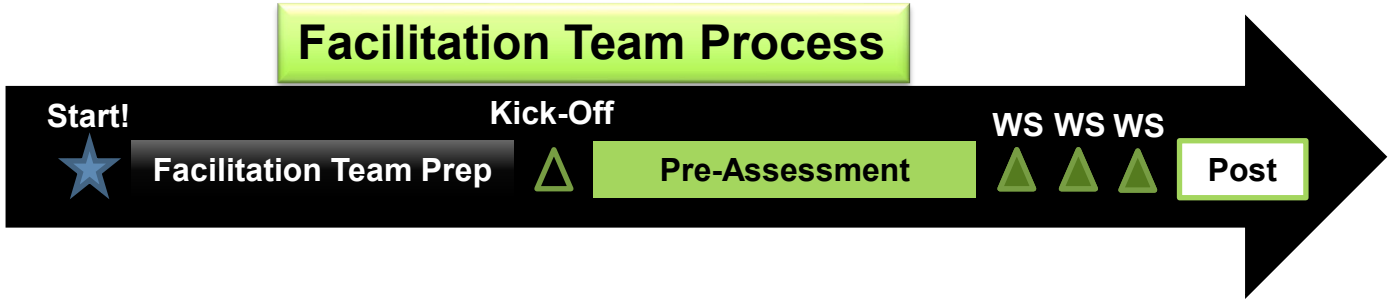
1. Assemble **Facilitation Team**
2. **Familiarize** with Materials
3. Prepare **Tailored** Materials
4. Coordinate and **Conduct** Assessment

Assessment matrix & guide

Program-specific context

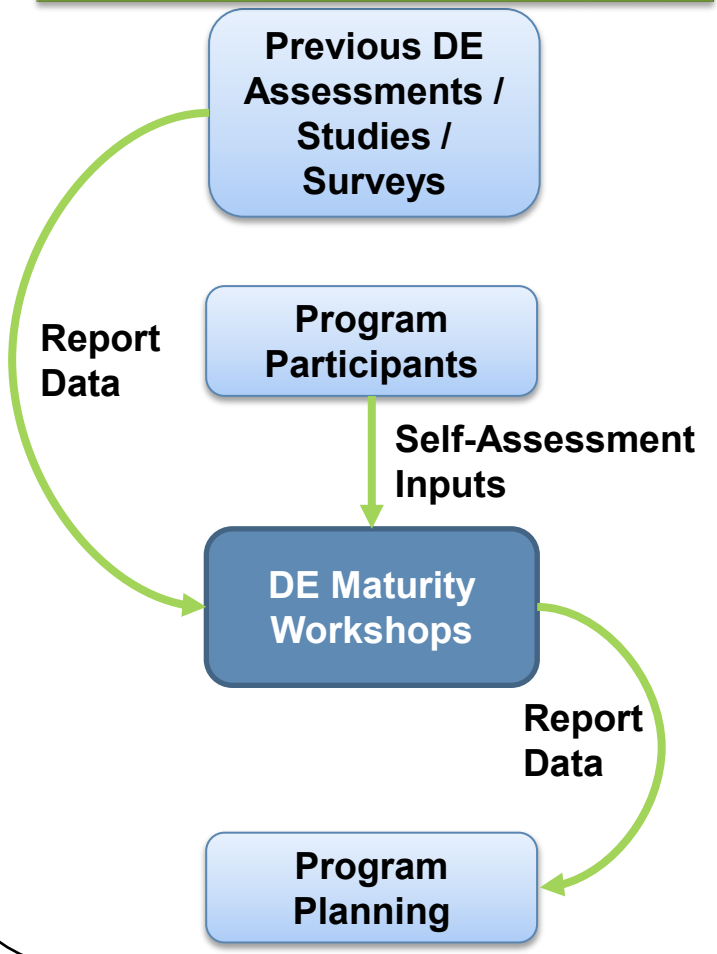
DE/MBSE terminology

Facilitation Team Process



WS = Workshop Session

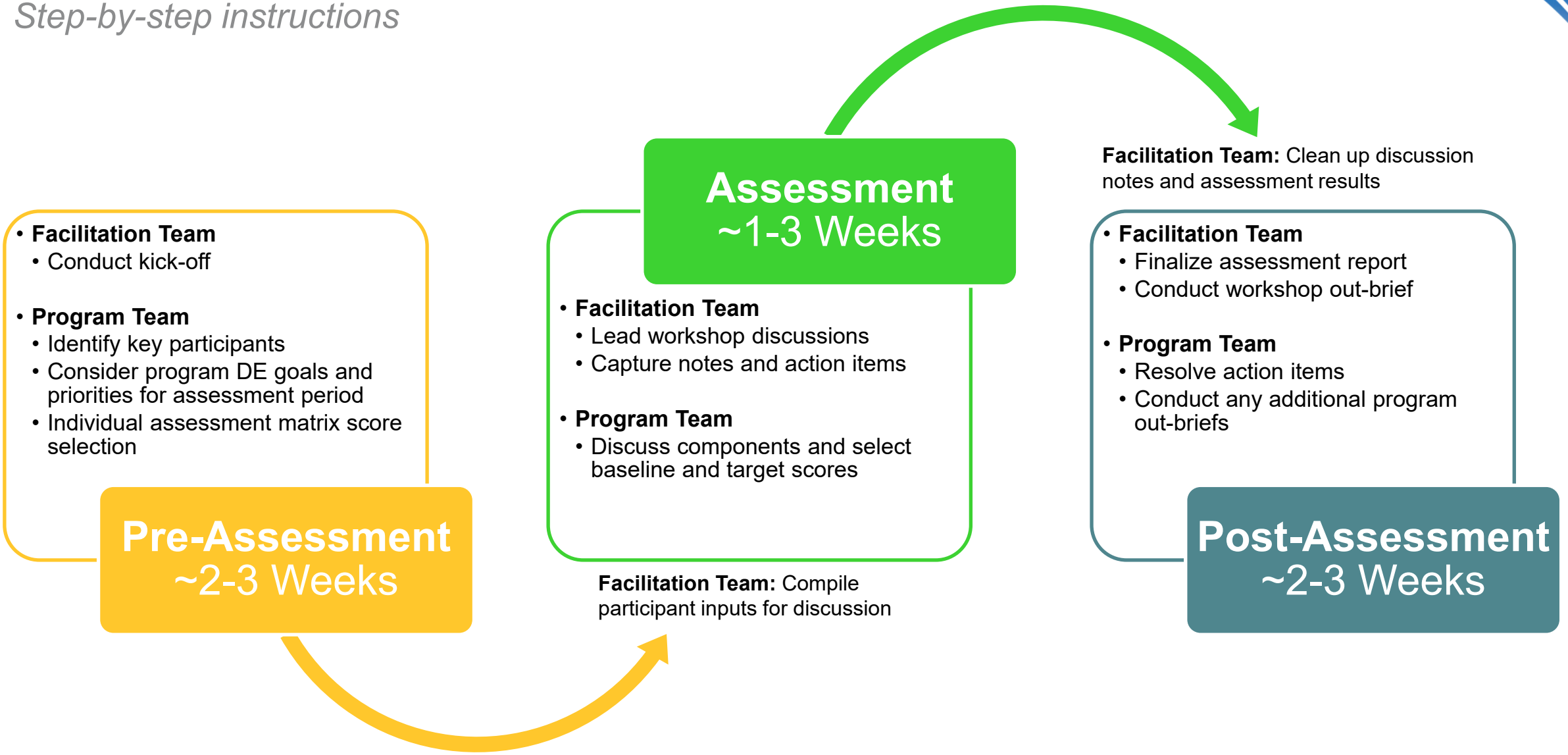
Facilitation Team Data Flow



Assembling and preparing a facilitation team sets up the organization for a well-coordinated assessment process

Self-Assessment Process Overview

Step-by-step instructions



Critical team member participation is required to achieve comprehensive and useful self-assessment results

Self-Assessment Best Practices

For best result…

Tips On Efficient Assessment Execution:
Planning and Preparation

Allocate sufficient total **workshop session duration**

~4-6 hours depending on DE scope and complexity

Work in manageable bite-sized chunks.

Group components into logical categories to organize discussions

Define initial set of **starting parameters**, e.g., initial ground rules and assumptions, workshop scoring cadence,…

Self-Assessment Best Practices

For best result…

Tips On Efficient Assessment Execution:
Participant Engagement

Obtain **senior management buy-in** to set the tone on the importance of DE development and assessment to support organizational goals

Identify overarching technical lead(s) to drive score selection from the perspective of the organization as a whole

Include participants **beyond DE specialists** as appropriate

(Chief engineers, technical directors, etc.)

Self-Assessment Best Practices

For best result…

Tips On Efficient Assessment Execution:
Kick-Off Meeting and Homework Assignment

Discuss and decide on **key ground rules and assumptions** during kick-off meeting (e.g., target score timeline, key term definitions)

Pre-workshop **homework assignments** ensure participants are prepared for effective discussions

For larger quantities of participant inputs, **create a compiled listing** in a filterable format to reference during the workshop discussions

Self-Assessment Best Practices

For best result…

Tips On Efficient Assessment Execution: **Workshop Sessions**

Provide context for participants joining mid-workshop: Include time in each session to **re-cap** at the beginning and **wrap up** at the end

Leverage contractors/partners with inherent higher maturity levels for potential program target score selection

Define **workshop cadence**. E.g., 10 minutes per component: introduce component, select scores, discuss, capture final scores and rationale

Self-Assessment Best Practices

For best result…

Tips On Efficient Assessment Execution: **Assessment Outputs**

Capture **scoring rationale** and any **tailored interpretation**:
Score rationale/outliers, specific criteria for target (not just number score)

Use **score weighting** feature to highlight highest priority next steps

Generate **summary report**, including key assumptions, assessment results, baseline/target state descriptions, next steps

Self-Assessment Warnings

Pitfalls to avoid

1: Unstructured workshop sessions without leadership guidance

- Effective workshop facilitation and leadership can maintain focus during discussions and keep assessment progress on track

2: Globally selecting target scores of level 4 for all components

- Level 4 maturity may not apply in all cases
- Selecting target scores aligned to a predetermined timeline (e.g., 1 year from the assessment date) is more likely to produce assessment results that will effectively support DE development planning with realistic and implementable goals with measurable progress

3: Associating low scores with negativity (*score-shaming*)

- Workshop participants may be more open to sharing thoughts and perspectives in a supportive and collaborative discussion environment
- Assessment results are intended to be used as a planning tool by characterizing the gap between current reality and achievable near-future goals

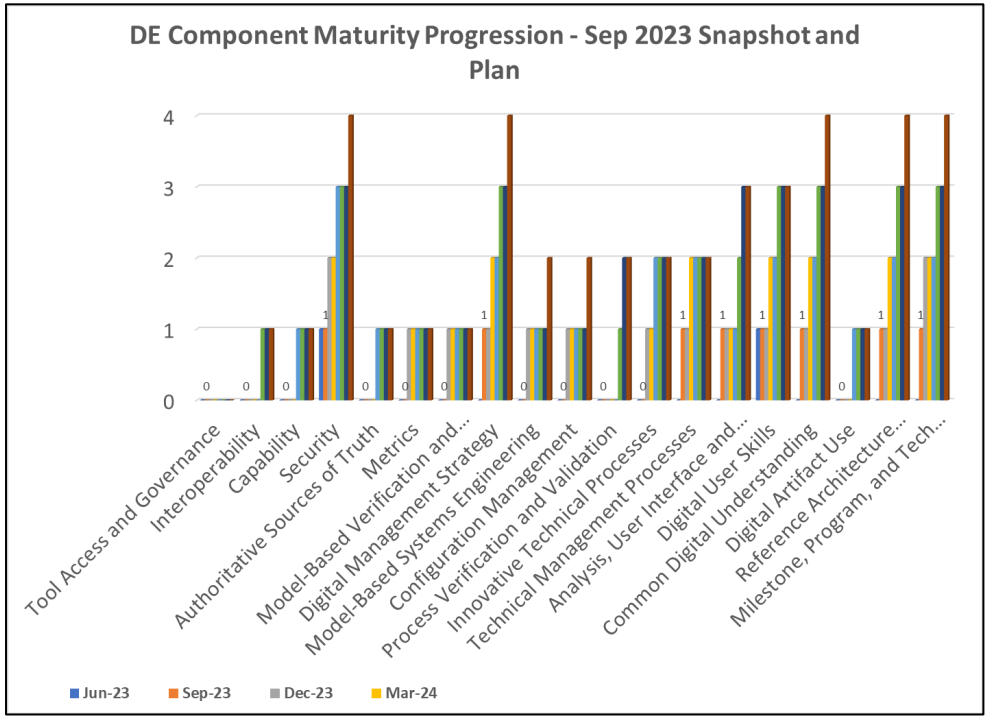
<u>WARNING: Failure to follow these precautions could result in…</u>

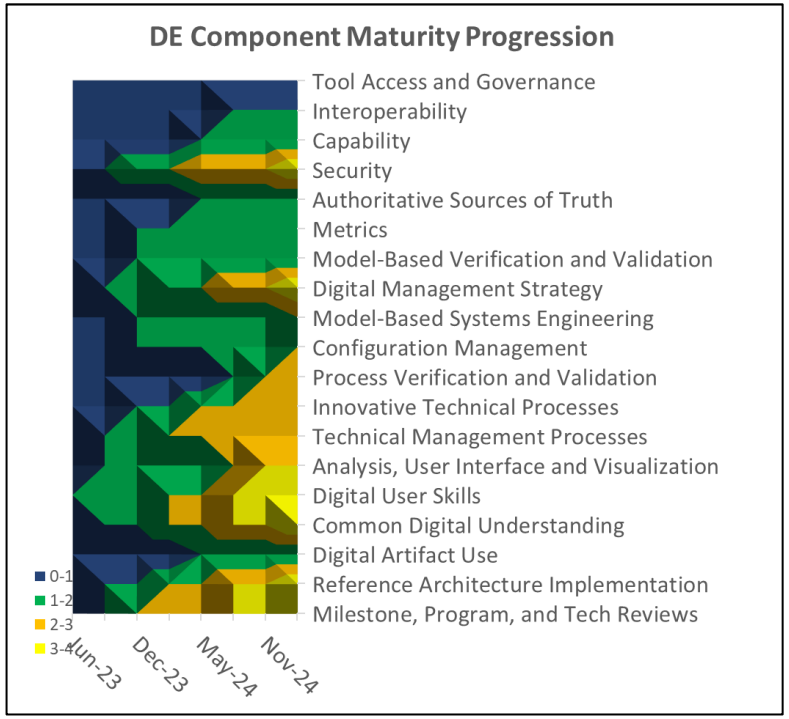
- **Incomplete assessment**
- **Sub-optimal assessment output: uncertainty on how to achieve target maturity levels**
- **Defensive participants or confrontational workshop session discussions**

Continued Assessment Use

Maintenance and repairs

- **Digital maturity can be planned out and trended over time**



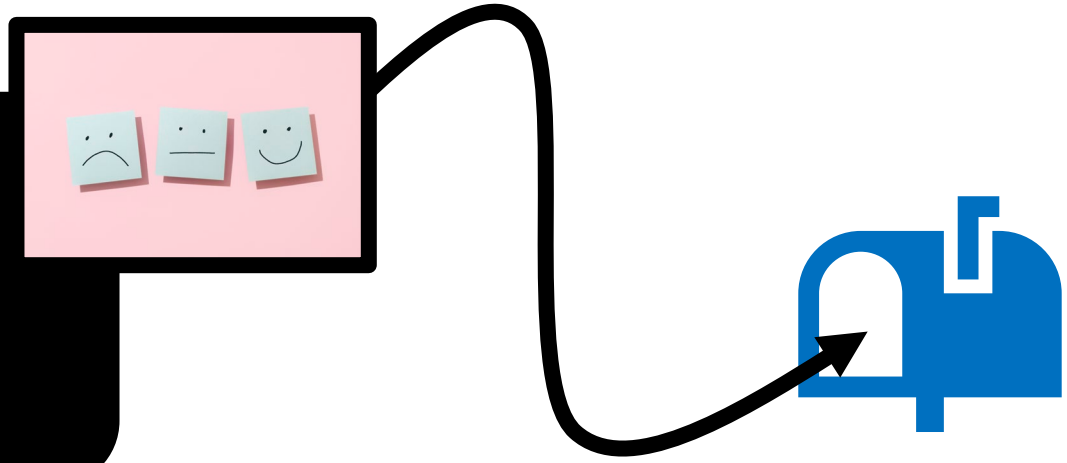


- **Benefits of regular re-assessments**
  - *Sets DE development goals and timelines*
  - *Ability to visualize measurable progress as DE capabilities mature*

Periodic re-assessments can be used to re-vector plans and roadmaps

Product Update Recommendations

Suggestion box



Recommendations*

- Clarify Terminology
- Clarify Component Maturity Descriptions
- Point to the INCOSE MBCM for MBSE follow-up

Example: Clarify Terminology – Utilization of a Reference Architecture

For a reference architecture to be considered “utilized” it should include appropriate use by a contractor of a provided reference architecture, as well as use by the customer for evaluation of contractor design and contract compliance

Example: Clarify Component Maturity Descriptions – Add Examples

Description of assessment components and their maturity levels can be supplemented with examples

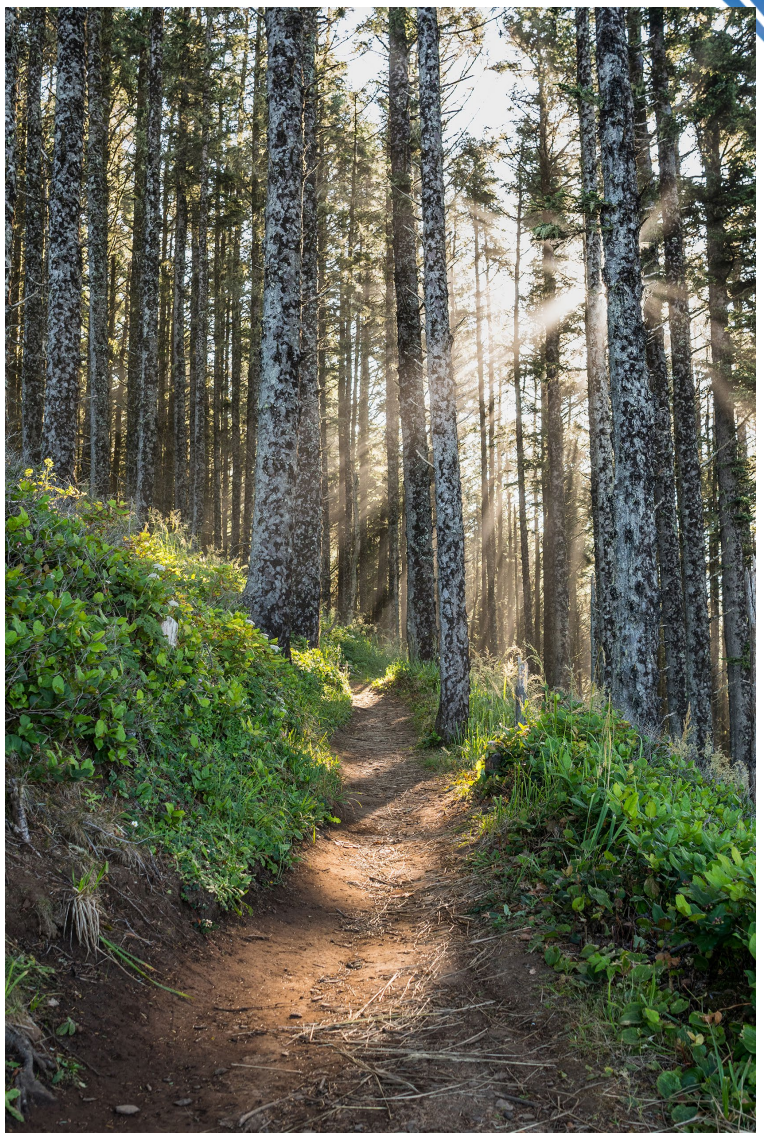
*Note: refer to backup for complete list of recommendations

Recommendations collected by the facilitation team for improvement of the assessment materials

Conclusions

Digital Maturity Self-Assessment process summary

- **Why assess digital maturity?**
  - *To improve digital fluency and awareness*
  - *To develop DE development roadmaps*
  - *To prioritize decisions on program investments and planning*
  - *To effectively communicate DE status and progress to others*
- **How to get started?**
  - *Download assessment materials from Air Force Digital Transformation website*
  - *Assemble a facilitation team and identify key participants*
  - *Follow the assessment process*
- **Key take-aways**
  - *Tailor assessment materials for your specific organization, define context, terminology, and timeline for target scoring*
  - *Plan out assessment preparation and workshops*
  - *Engage key participants and leadership*
  - *Capture specific rationale, not just number scores*
  - *Avoid score-shaming*



Enables an organization to plan and implement targeted, value-based digital engineering strategy

Acknowledgements

For contributions and reviews

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  - *Phil Cojanis*
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  - *Leonard Brownlow*
  - *Jason Shimabukuro*

Questions?

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Backup

Product Update Recommendations

Suggestion box

Num	Recommendation	Comment
1	**Clarify Terminology – Digital Twin**	Uncertainty of definition for digital twin caused difficulties with scoring the “innovative technical processes” component. Referencing a published definition would help standardize the interpretation of these maturity descriptions. In addition, having defined levels of comprehensiveness of a digital twin may also be helpful to establish a shared conceptual understanding of the desired scope of a digital twin without having to walk through all of the detailed criteria anew for each mission
2	**Clarify Terminology – Reference Architecture Incorporation**	Is this component referring to the delivery of a reference architecture model to a contractor for use, or to the application of standards to development of a reference architecture model? Or both? Discussion and elaboration is needed
3	**Clarify Terminology – Utilization of a Reference Architecture**	For a reference architecture to be considered “utilized” it should include appropriate use by a contractor of a provided reference architecture, as well as use by the customer for evaluation of contractor design and contract compliance

While exercising the Digital Maturity Assessment process, the facilitation team collected recommendations for improvement of the assessment materials

Product Update Recommendations

Suggestion box

Num	Recommendation	Comment
4	**Clarify Component Maturity Descriptions – Reduce Overlaps**	Reduce component overlaps. E.g., Integrated Digital Environment is a key maturity criteria listed for multiple components; “access and governance” and “security” as components are not distinct
5	**Clarify Component Maturity Descriptions – ASOT**	Data architecture for the “authoritative source of truth” component should include process of data synchronization across the enterprise technical baseline
6	**Clarify Component Maturity Descriptions – Add Examples**	Description of assessment components and their maturity levels can be supplemented with examples
7	**Reference the INCOSE MBCM**	Detailed MBSE maturity assessment is not sufficiently covered by this assessment. Recommend providing reference to INCOSE MBCM for deep-dive focus on MBSE capability. E.g., maturity for MBSE modeling language/profile would indicate that it has been selected, is in use with proper implementation, and in compliance with language/profile specifications

While exercising the Digital Maturity Assessment process, the facilitation team collected recommendations for improvement of the assessment materials

Workshop Materials

Assessment_Orig | Cheat Sheet | DE Capabilities | Assumptions | Rollup | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | Budget Chart | Components Chart | Metrics Chart

Original AFMC Digital Campaign Assessment Matrix
Included for reference

Category	Metric	Component	If no answer, set Weight (Column O) to zero	Level 0 Description	Level 1 Description	Level 2 Description	Level 3 Description	Level 4 Description	Component Baseline	Component Target	Weight (1-10 with 10 most important)	Relative Importance	Weighted Effort Needed
Infrastructure	Modeling Environment	Access and Governance	"N/A" or "Not capable of responding."	Limited access and governance plans or policies in place.	Users have limited access to tools necessary for digital processes across the lifecycle. Tool access and governance plans and policies are in the process of being defined.	Users have limited access to tools necessary for digital processes across the lifecycle. Tool access and governance policies and procedures are generic.	Users have appropriately controlled access to tools necessary for digital processes across the lifecycle. Tool access and governance policies and procedures are defined by the program/organization, understood, and partially applied across the enterprise.	Users have appropriately controlled access to tools necessary for digital processes across the lifecycle. Tool access and governance policies and procedures are defined by the program/organization, understood, and uniformly applied across the enterprise via an integrated digital environment.	1	3	1	1%	2%
		Interoperability	"N/A" or "Not capable of responding."	Data/tool independences are not considered and data is partially resident in the tool or tool directed default directories. Databases/tools are independent.	Data/tool independences are considered and enhancements for data independence from tools are planned. Inter-database/tool data item associations defined.	Data/tool implementation independences are managed to allow data to be independent from tools. Limited inter-database/tool data item associations defined, captured, managed.	Data/tool implementations independences are managed to allow data to be independent from tools and allow import/export to foster data portability. Highly utilized tools are interoperable; supporting tools interact through file transfer. Inter-database/tool data item associations among all data items defined, captured, managed, and traceable.	Tools are interoperable and used for distributed decision-making via an integrated digital environment. Data is interchanged among and independent from tools. Inter-database/tool data item associations among all data items defined, captured, managed, and traceable where changes in one data source notifies custodians of other data sources of required.	2	2	10	8%	0%
	Collaboration	Capability	"N/A" or "Not capable of responding."	Collaboration only by business tool applications (e.g. email, telecommunications).	Collaborations occur asynchronously and inconsistently amongst the majority of distributed teams of the enterprise.	On-line, real-time collaboration amongst the majority of distributed teams of the enterprise.	On-line, real-time collaboration amongst the majority of distributed teams; limited interactions via an integrated digital environment.	On-line, real-time collaboration amongst distributed teams actively interacting via an integrated digital environment.	1	3	8	6%	13%
		Security	"N/A" or "Not capable of responding."	Limited number of models or data have restrictions.	Models and data across the enterprise are secured by user authentication only. Access is ad hoc.	Models and data across the enterprise are secured by user authentication only. Users only have access to data they need.	Models and data across the enterprise are secured, apply applicable Intellectual Property (IP) policies, and support all classification levels defined by the program.	Models and data across the enterprise are secured, monitored, and controlled; apply applicable Intellectual Property (IP) policies; and support all classification levels defined by the program.	2	4	0	0%	0%
Modeling / Analysis	Quality	Authoritative Sources of Truth (ASOT)	"N/A" or "Not capable of responding."	Data and information have not been identified to contribute to the ASOT.	ASOT with defined 'total lifecycle' data architectures are planned.	ASOT with defined 'total lifecycle' data architectures are planned and being executed. A revision control strategy has been implemented.	Digital threads and digital twins with defined 'total lifecycle' data architectures have been established to contribute to the ASOT for an enterprise. Model-based definitions are utilized and maintained (revision control).	Digital threads and digital twins with defined 'total lifecycle' data architectures have been established contributing to the ASOT for an enterprise. Model-based definitions exist that automatically update when associated models are changed. (Conformance to VAULT principles – Visible, Accessible, Understandable, Linked, Trustworthy)	0	1	9	7%	7%
		Metrics	"N/A" or "Not capable of responding."	Metrics are not used to manage the model development, quality, or effectiveness.	Limited model metrics have been defined.	Limited model metrics have been implemented and monitored (e.g. compliance with model style guides, extent of authoritative data use, etc.).	Model metrics development is complete. Metrics are well known, understood, and are appropriate as defined by the program. (e.g. compliance with model style guides, extent of authoritative data use, etc.)	Model metrics are well known, understood, and are appropriate as defined by the program. Metrics are systematically used, reported, and continuously used to ensure quality.	1	2	10	8%	8%
		Model-Based Verification and Validation (V&V)	"N/A" or "Not capable of responding."	No model-based system V&V strategy.	Model development processes have been identified and mapped; standard V&V procedures and programs have been identified for future model-based implementation across the enterprise.	Model development processes have been partially established; modeling patterns, styles, and standards have been identified; and standard V&V procedures and programs have been selected for future model-based implementation across the enterprise.	Model development processes have been established; modeling patterns, styles, and standards are partially defined; and standard model-based V&V procedures and programs have been partially implemented across the enterprise. (including associated automated scripts and tools)	Model development processes have been established; modeling patterns, styles, and standards have been defined; and standard model-based V&V procedures and programs have been implemented across the enterprise. (including associated automated scripts and tools)	2	3	9	7%	7%

Workshop Materials

Assessment_Orig | Cheat Sheet | DE Capabilities | Assumptions | Rollup | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | Budget Chart | Components Chart | Metrics Chart

Assessment Component Cheat Sheet
Easy-to-view descriptions of key aspects for each DE maturity assessment component

Category	Metric	Component	Key Aspects
Infrastructure	Modeling Environment	Access and Governance	Controlled access to DE tools in IDE Tool access/governance policies & procedures
		Interoperability	Data independence & portability Tool interoperability in IDE Dependency tracing between tools
	Collaboration	Capability	Online collaboration in IDE Real-time collaboration
		Security	User authentication IP policies Classification levels Models/data secured, monitored, controlled
Modeling / Analysis	Quality	Authoritative Sources of Truth (ASOT)	Data architecture Revision control
		Metrics	Definition, implementation, monitoring Continuous use

Workshop Materials

Assessment_Orig | Cheat Sheet | DE Capabilities | Assumptions | Rollup | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | Budget Chart | Components Chart | Metrics Chart

Digital Engineering Capabilities
Template to populate identified DE tools currently being utilized by program. Tool categories and examples provided for reference

Existing Digital Capabilities
<list specific DE capabilities: tools, processes, training, etc currently established>
•
•
•

Digital Engineering Tools & Environments

Categories & Examples

DE Infrastructure	High Performance Computing	PlatformOne CloudOne	Commercial Cloud
System Engineering, Architecture & Design	Cameo	Sparx EA	DOORS / DOORS Next Jama
Analysis, Modeling & Simulation	Matlab Simulink	Excel link budgets Capacity analyses	CAD STK
Digital Twin	AR/VR Simulations Ansys Twin Builder	Azure Digital Twins Satellite flight SW sim	User planning & monitoring
Collaboration	Jira / Confluence File share repositories	Aerospace Technical Review Manager	DOORS Next / Jama Collaborator / Web EA
Business Process & Dashboards	Risk management TPMs	Status / EV reporting Trello	Microsoft Project
Product/Application Lifecycle Management	Teamcenter ENOVIA	Jira Windchill	Trello

Workshop Materials

Ground Rules and Assumptions
Template to capture rules and assumptions that guide selection of assessment scores

Assessment Ground Rules and Assumptions:
<list ground rules and assumptions used in selection of assessment scores>
Note: Any inputs will be compiled and discussed at the beginning of the workshop to ensure assumptions are understood
•
•
•

- Example Ground Rules and Assumptions:
  - *Target selections were based on desired program digital maturity state to be achieved by <Month Year>, driven by <event> completion*
  - *Scores reflect digital maturity as implemented within the <Program Name> program office context*
  - *In order for a given assessment level to be selected, all aspects of the level description must be satisfied. Partial satisfaction of assessment levels is described in the rationale*
  - *Enterprise: for purposes of discussion, defined to be scope of program control, to include <segments/organizations/etc> <x>, <y>, and <z>*
  - *Weighting factors were not applied so the results reflect uniform priority across all assessment components*

Workshop Materials

Assessment_Orig | Cheat Sheet | DE Capabilities | Assumptions | Rollup | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | Budget Chart | Components Chart | Metrics Chart

Results Summary Roll-Up
Overview matrix displaying baseline, target, and weighted effort of all assessment components

Category	Metric	Component	Component Baseline	Component Target	Weight (1-10, 10 = most important, 0 for N/A)	Weighted Effort Needed
Infrastructure	Modeling Environment	Access and Governance	2	3	1	2%
		Interoperability	0	1	1	2%
	Collaboration	Capability	3	4	1	2%
		Security	3	3	1	0%
Modeling / Analysis	Quality	Authoritative Sources of Truth (ASOT)	1	2	1	2%
		Metrics	0	4	5	38%
		Model-Based Verification and Validation (V&V)	0	3	1	6%
Process / Policy	Model Management	Digital Management Strategy	1	3	1	4%
		Model-Based Systems Engineering	0	1	10	19%
		Configuration Management	2	3	1	2%
		Process Verification and Validation (V&V)	0	3	1	6%
	Data Management	Innovative Technical Processes	0	1	1	2%
		Technical Management Processes	1	4	1	6%
		Analysis, User Interface (UI) and Visualization	1	2	1	2%
Workforce / Culture	Workforce	Digital User Skills	2	3	1	2%
		Common Digital Understanding	0	2	1	4%
	Adoption	Digital Artifact Use	1	2	1	2%
		Reference Architecture Incorporation	0	0	1	0%
		Milestone, Program, and Technical Reviews; Audits	0	1	1	2%

Workshop Materials

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Detailed Discussion Tabs

Worksheets for discussion and scoring of small subsets of assessment components. Includes level descriptions, discussion questions, examples, and template fields to capture notes and rationale

Topic: Reviews & Artifacts

Category	Metric	Component	Level 0	Level 1	Level 2	Level 3	Level 4	Component Baseline	Component Target	Rationale
Workforce / Culture	Adoption	Digital Artifact Use	Hardcopy or business application (e.g., MS Word) generated documents are not based on digital artifacts.	Isolated processes across the enterprise use digital artifacts and data.	The majority of enterprise processes and decision-making relies on digital artifacts and data.	Enterprise decision making is based on digital artifacts and data. Consistent institutional approach and continual improvement is partially driven by policy, practices, and methods via an integrated digital environment.	Enterprise decision making is based on digital artifacts and data. Consistent institutional approach and continual improvement is driven by policy, practices, and/or automation via an integrated digital environment.	1	2	
Workforce / Culture	Adoption	Milestone, Program, and Technical Reviews; Audits	Reviews are not model based. Reviews and audits are set by calendar date against a contract event such as contract award. Digital artifacts are not planned for use to satisfy entry/exit criteria.	Enterprise organizations do not coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language). Occasionally models record the acceptance of items through reviews of model content/data in a modeling environment to allow stakeholders to ensure that the review is complete based on exit criteria.	Enterprise organizations infrequently coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language) but they are aware of the requirements of others. Frequently models record the acceptance of items through reviews of model content/data in a modeling environment to allow stakeholders to ensure that the review is complete based on exit criteria.	Enterprise organizations frequently coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language). Models record the acceptance of items through reviews of model content/data in an integrated digital environment to allow stakeholders to ensure that the review is complete based on exit criteria.	Enterprise organizations coordinate on common review criteria application and tailoring, and the use of digital artifacts as deliverables (via contract language). Models automatically record acceptance through frequent reviews of model content/data in an integrated digital environment to allow stakeholders to ensure that the review is complete based on criteria.	0	1	

Discussion Questions
- Do digital artifacts inform program decisions?
- Does contract language reflect use of digital artifacts as deliverables?
- Are reviews conducted via IDE?
- Are reviews event-centric or frequent/continuous?

Example Products & Topics
- Model-based reviews
- Digital artifact deliveries
- Model exports
- Statement of Work

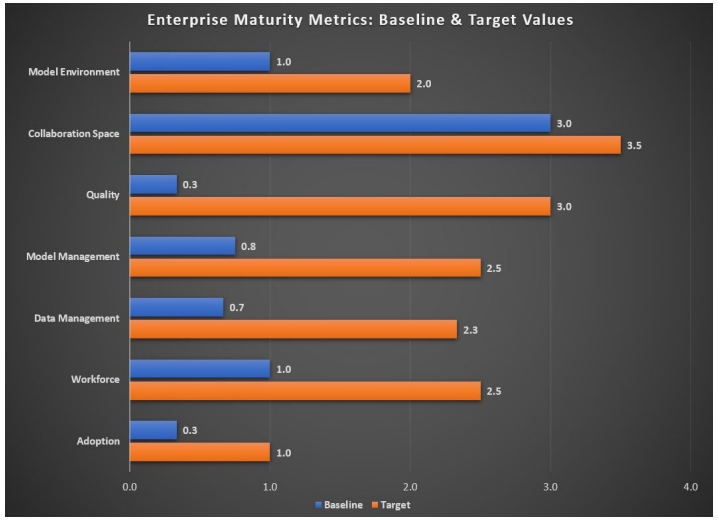
Relevant Tool Categories
- SysML MBSE (Cameo, Sparx...)
- Collaborative tools (ATRM, Jama, DOORS Next...)

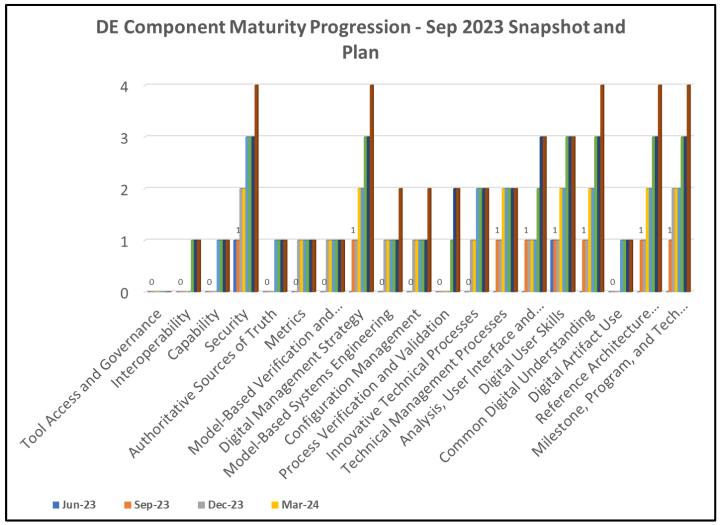
Additional Notes
<Capture key assumptions & discussion points>

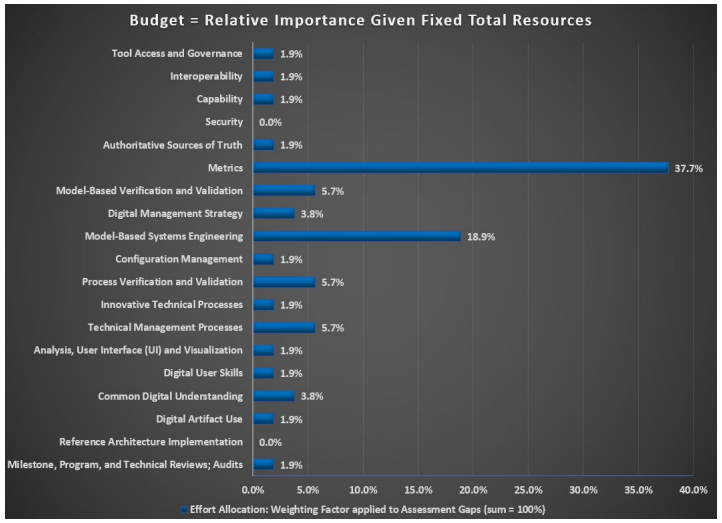
Opportunities & Benefits:

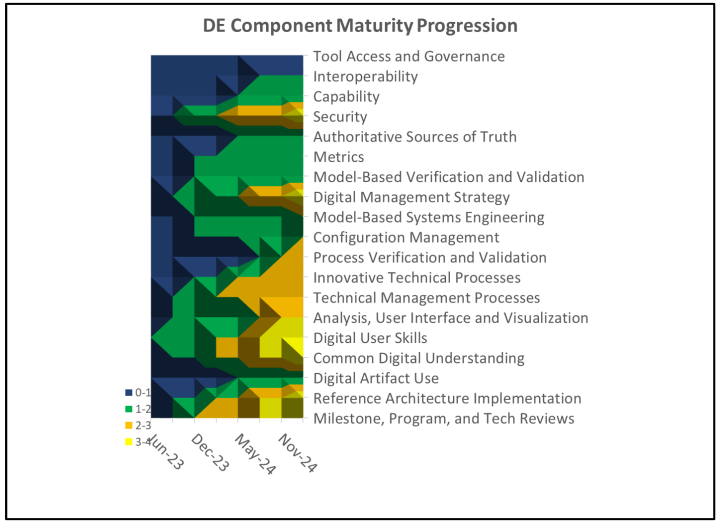
Workshop Materials

Assessment_Orig | Cheat Sheet | DE Capabilities | Assumptions | Rollup | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | Budget Chart | Components Chart | Metrics Chart









Output Visualization Charts
Graphical representations of assessment scoring results