

# Manufacturing Division

## Technology Committee

*October 19, 2016*

*"Winning the Future with Innovative Defense Manufacturing"*

# Our Participants

- Jesse Bonfeld
- Bob Erickson
- Kevin Fischer
- Mike Lemon
- Justin Rothwell

# Agenda

- JDMTP AME Taxonomy Alignment and Portfolio Review capability
  - Review Taxonomy construction and definitions of AME taxonomy
  - Provide comment and feedback on coverage and organization
  - Identify manufacturing technology gaps that need to be overcome in order to enable ManTech “joint pursuits”
  - Discuss opportunities to share the message

New

How can DMSMS community collaborate with Technology committee on improving awareness and promoting greater application of technology advances for more cost effective resolution of DMSMS issues?

- DMSMS Commonality Assessment
  - What are the technologies to consider?
- How can industry be incentivized to be more proactive?

# JDMTP AME Project



## Portfolio Comparison Initial Objectives



- Identify Gaps, Trends and Opportunities
  - ✓ – Define Methods to Understand and Document:
    - Similarities Between Projects in the AME Portfolio
    - Relationship of Projects to Various Thrust Areas
  - ✓ – Prototype Visualization of Results
    - Verify Methodology with Stakeholders
    - Provide Recommendations for Systemization

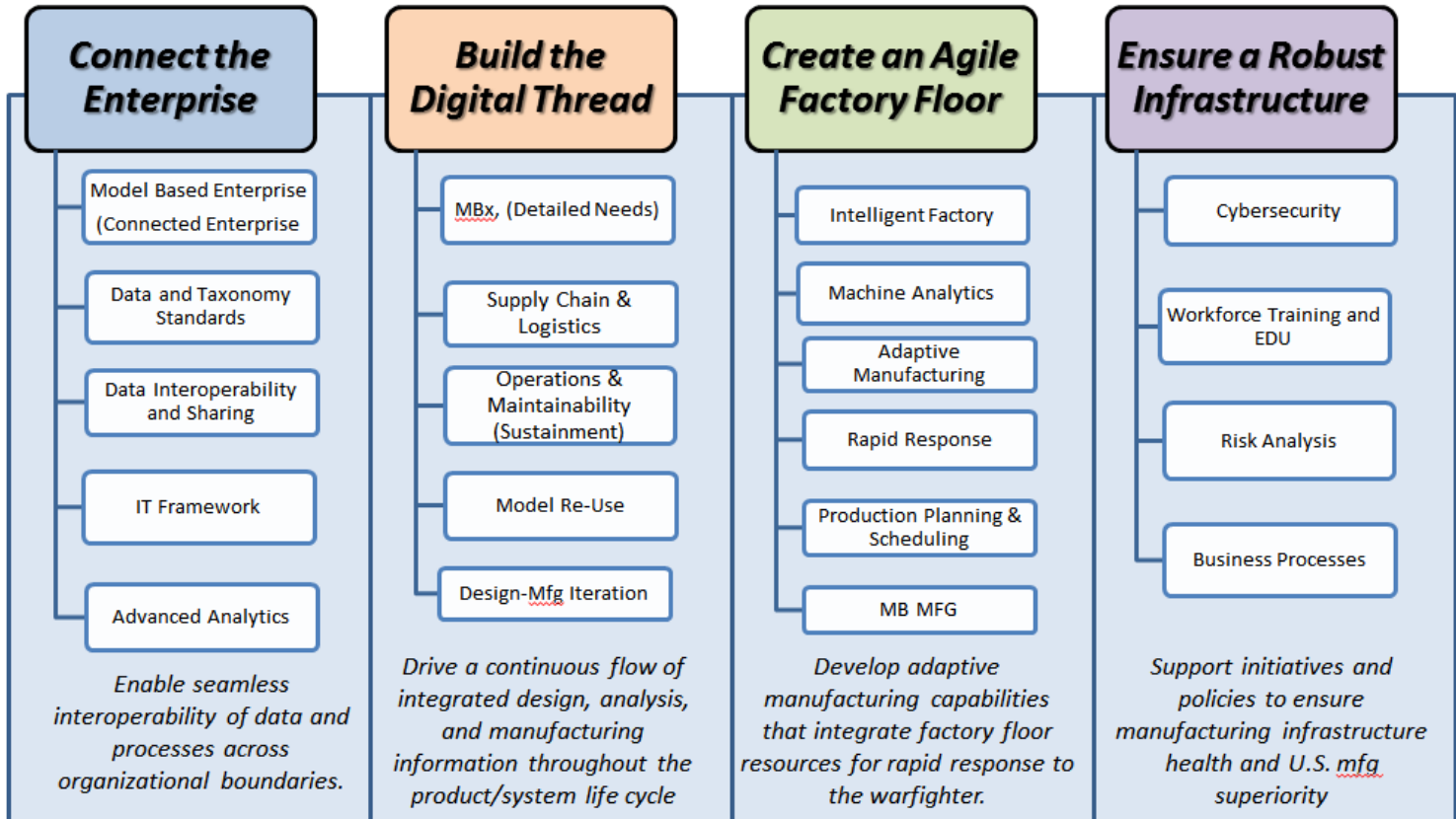
During Portfolio Reviews, it is apparent many projects are addressing similar issues and fall within one or more of the same thrust areas. While individual projects are so documented, the aggregate relationships are not so easy to visualize and understand

# JDMTP AME Taxonomy



## AME Subpanel Taxonomy

*AME is a set of robust Manufacturing Strategies & Integrated Capabilities that Enable Productivity Growth and a Highly Connected & Collaborative Enterprise*



# Compare and Associate Projects in MANTECH Portfolio to Technologies and Best Practices



## AME Portfolio vs. Thrust Areas/Technologies

Group Identified Strong, Med, Weak Relationships



Projects →  
↓  
AME Thrust Areas:  
Key Enabling  
Technology  
Domains

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
Projects	End-to-End Assembly Automation Migration	Secure Factory Workload Planning	Smart Manufacturing - Solstice	AMR/AGV/AMR	Rock Island Assembly	FCM/AME Phase 2	MSDC/Office Resource Planning	Space-Ready Material Logistics with CMM/Per ADP	Dynamic Change Assessment	GAME Architecture for 3d/4d/5d Flow as Req	Shipyard Capacity Planning	MT Connect	DDO Digital Storyboarding	Modular Celling (The Charged Grid)	Capacity Planning Assessment	Trade (Flexibly) Localizing Dimensional Techniques	DDO (Digital Manufacturing) Work Package Develop	AM/AMR	→ JULY → AUG →	IT Enablement Processes (ITC)	IT Enablement Processes (IT/Lean/Win)	Free-Content Data Capture for Real-Time-Accessible	AMR/AGV Capabilities for Free-Content Measurement	Securement Data Analytics CRADA	Manufacturing Process (Drive Design)	Security Work	Measurement Replicable (Open/AMR)	Process Work	Modeling/Competing for Manufacturing Headlines	Repeatable/Continuous/Modularity (Measurement/IT)	Advanced Automation for Agile Aerospace Applications	Power-Optimized Digital Work Instructions (Augmented AR)	IT/AMR/AGV Supply Chain	Platform Interoperability		
Connect the Enterprise	+																																			
MSX (Connected Systems)	+	+	+	+	+																															
Data and Economy Standards																																				
Data (Integration) Interoperability and Sharing	+	+	+	+	+																															
IT Framework																																				
Advanced Analytics																																				
Build the Digital Thread																																				
MR (Detailed Needs)	+	+	+	+	+																															
Supply Chain and Logistics																																				
Operations & Maintenance (Sustainability)																																				
Model Re-Use																																				
Design-Manufacturing Iteration																																				
Create an Agile Factory Floor																																				
Intelligent Factory																																				
Machine Analytics																																				
Adaptive Manufacturing																																				
Rapid Response																																				
Production Planning and Scheduling																																				
Model-Based Manufacturing																																				
Secure a Robust Infrastructure																																				
Cyber Security																																				
Work Force Education and Training																																				
Risk Analysis																																				
Business Processes																																				

**Standard 9-3-1**

Strong + 2.0  
Moderate + 1.0  
Weak 0 1.0



# Back-up Slides

# Participants (name, org, email)

Name	Organization	Email Address
Jesse Bonfeld	Next Level Solutions	jmbonfeld@gmail.com
Bob Erickson	Raytheon	rderickson@raytheon.com
Kevin Fischer	Rockwell Collins	kevin.fischer@rockwellcollins.com
Mike Lemon	ITI	mike_l@iti-global.com
Justin Rothwell	ProAxion	justin@proxion.io