**AM Data Management**

**For the DOD Guidebook**

**King for a Day**

***AM Data Management***

**These represent objectives which we intend to solve through the topics above:**

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| **Categories** | **Topic** | **Goal / Statement** |
| Encourage good, sufficiently consistent data best practices (FAIR) |  | Encourage a culture of data and adoption of good data practices that is significantly wider than AM |
| Continued research and development of infrastructure and standards | Infrastructure Development (edge, cyber, IIOT) | Standardize security and classification protocols, Minimum Viable Data Package, consistency in terminology across DoD |
| Data traceability and providence for management |
| Minimum viable data packages |
| Data access restrictions |
| Linking with data security group |
| CDEF begin and complete standardization | Begin or complete development of common data dictionary, common data exchange format, data quality indicators |
| Automated data acquisition |
| CDD standard completion |
| Data quality indicators |
| Demonstration Projects | Schema validation as a service | Moon Shot Project: A large audacious project to accelerate AM deployment and accelerate qual/cert through the facile sharing of AM data across organizations (gov. indus. Academia). Schema validation and use of common data standards. |
| Use Common AM specifications and standards | Develop, verify, & validate CDD and CEF across a federate set of data sources and organizations. |
| Workforce Development of incumbent and new workforce | Incumbent: Education to standards | Develop an education & training program tailored to organizational roles.  Education/Training: Large data management and IOT stacks. |
| Increased education in data science |
| Focus on data use | Cross industry value chain mapping | Mandate use of common data dictionary and common data exchange format to data suppliers including AM equipment manufacturers, automated data acquisition |
| Encouragement of Data practices | Encouraging supply chain use of data formats |  |
| Encouraging supply chain to widen access to data |
| Encourage use of CDD and FAIR principles |
| DOD 5000 with respect to data |
| Requirements on data providence (data lifecycle management) |
| Contracting data requirements |
| Data audits as part of funded work |
| Require that data is purchased |
| Maintaining consistency with other mfg processes |  |  |
| Constant Improvement |  |  |

Reference

SPECIFICATIONS AND STANDARDS.

The OSD, MILDEPs, and Defense Agencies will:

a) Resource the development of common AM specifications and standards, and military specifications only as necessary to

meet specific DoD requirements.

b) Use common AM specifications and standards to the greatest extent practical.

c) In the absence of a common AM specification or standard, encourage the use of approved AM instructions/standards/specs

of other MILDEPs, and other U.S. Government agencies.