

SUCCESS STORY
3023.003

Digital Storefront (DSF) enables readily accessible information and search functions available to diverse membership base

DSF enhancements increased performance, stability, and security for both internal and external users



*The America Makes
Digital Storefront logo*

America Makes
DIGITALSTOREFRONT
 IDENTIFY ACCESS CONSUME

PROBLEM

The current state of additive manufacturing (AM)/ 3D printing (3DP) knowledge shared across and between the public and private sectors is via “expert engagements” at conferences, one-on-one meetings, and publications. In the current environment of AM research occurring across the nation, no single source exists to understand prior art, progress, and gaps that remain. An online digital resource of data that offers the ability to share data through a controlled access point is needed. The digital data repository requires up-to-date search and security protocols to ensure data is readily available to America Makes members with the appropriate access rights, permissions, and needs.

OBJECTIVE

The objective of this project was to improve the ability of America Makes members to readily search and access information within a Digital Storefront (DSF), a centralized, secure operating environment, that houses data that is relevant to the needs and interests of members. To access the DSF, key stakeholders were required to: 1) incorporate their Capability Needs, 2) maintain a satisfactory level of completeness of a Capability Need, 3) manage the segregation and compilation of information across roadmaps, 4) define and display the pedigree of the available information assets, 5) generate a Data Rights framework, and 6) increase access control.



**AMERICA MAKES
TECHNOLOGY
DEVELOPMENT
ROADMAP**

This project aligns to:



PROCESS

**ASTM PROCESS
CATEGORY:**
N/A

EQUIPMENT:
N/A

MATERIAL:
N/A

TECHNICAL APPROACH

America Makes established capability needs within the DSF. Visibility into the maturity of technology as it relates to the satisfaction of a capability need is displayed using traditional Technology Readiness Level (TRL) / Manufacturing Readiness Level (MRL) threat assessments developed in Project 2, DoD Roadmap Refresh. The use of well-defined TRL / MRL stage gates increases the confidence the consumer of the data has in the deliverable. The project team updated the DSF with required data attributes, enhanced the relations displayed within the DSF Active Workspace Client (AWC) for a deliverable, and, where necessary, updated existing automated business processes within Teamcenter to enable the capture of pedigree relationships.

ACCOMPLISHMENTS

The project team was able to deliver an enhanced DSF to include improved traceability of "America Makes in-house" project information and data referenced from the concurrent Information Alignment project. It also refined information asset characterization, increased security protocols with varying distribution requirements, and improved web-based data analytics and metrics. The enhancements made to the website meant certain members could utilize all the platform assets, they were user-friendly and relevant to the professional focus of members. Those features defined as beneficial to the entire group, but not intuitive to use, were not implemented.

PROJECT END DATE

October 2019

DELIVERABLES

- Capital asset pedigree configuration
- Configured externally sourced roadmaps
- Enhanced access protocols

FUNDING

\$1,643,601 total project budget

PROJECT PARTICIPANTS

Project Principal:

NCDMM/America Makes

Other Project Participants:

Deloitte
Siemens
Tableau Systems

Public Participants:

U.S. Department of Defense