



MxD Overview

ORAU

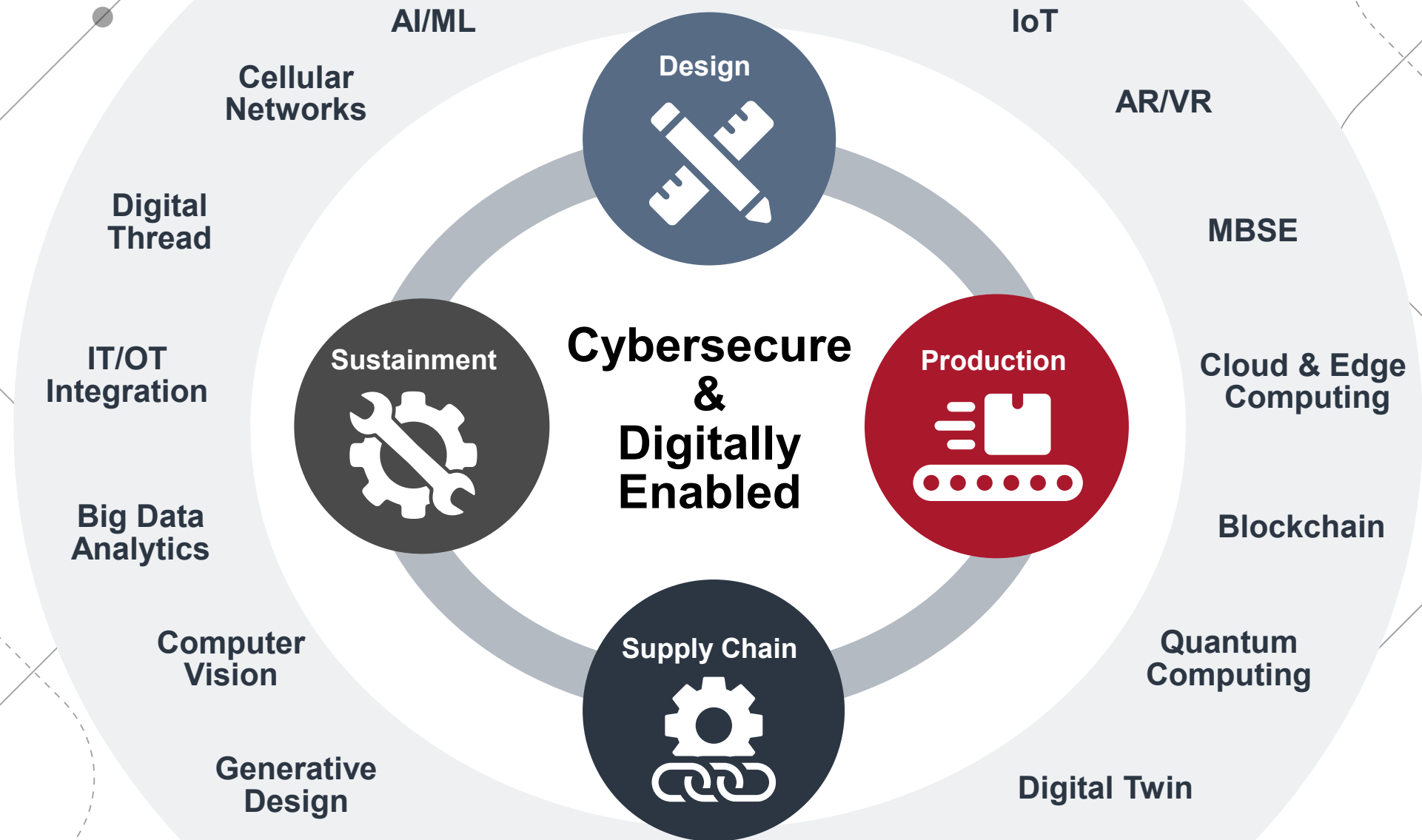
October 22, 2025



The Digital Manufacturing & Cybersecurity Institute

MxD strengthens U.S. economic prosperity and national security by driving digital adoption in manufacturing

Advanced Manufacturing Requires Digital Transformation



MxD Network

Collaborating to Drive Impact



DoD + Other Government

Manufacturers

Solution Providers

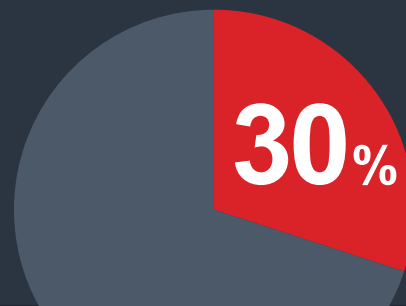
Academics

Non-Profits

Over 350 Members

22

Top Tier Members



30%

Manufacturers

2x

SMM Growth

MxD's TOP-TIER MEMBERS

Tier 1



Tier 2



Convene. Advance. Empower.

Digitally Transform and Secure U.S. Manufacturing

CONVENE the MxD network of members and partners to identify key challenges manufacturers face in modernizing and securing their operations.

- OIB Workshops
- Manufacturing x Digital Summit
- GenAI Summit
- Quantum Summit
- Metaverse Event
- NIST MBE & QIF Summit
- DIB Supply Chain

Over 10k Visitors Annually

ADVANCE technology innovation and secure digital adoption by addressing barriers across the manufacturing supply chain.

- Digital Twin
- Digital Thread
- AI and Data Analytics
- Supply Chain
- Cybersecurity
- Edge & Cloud Computing
- IIoT / MxD Sensor Kit

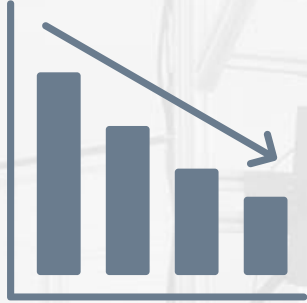
\$415M+ Public-Private Funding

EMPOWER the workforce with resources that support skill development necessary to meet industry's current and future needs.

- MxD Learn Hiring Guides
- CAPITAL - Certification-based workforce training programs
- MxD Learn Virtual Training Center
- MxD Learn Lab Recording Studio
- OIB WFD Project with LIFT and ARM

Over 300K Learners Engaged

Manufacturing Industrial Base Is Facing Challenges



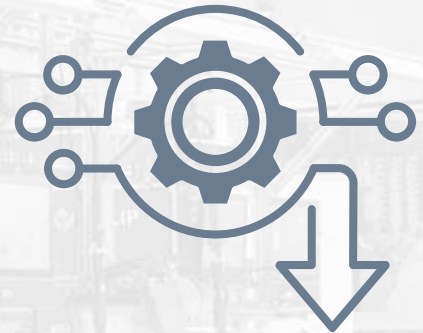
≈20k Lost

Industrial base is shrinking
with **11% of the Smallest
Manufacturers lost**
in 10 years



#1 Target

Since 2021, manufacturing is
the **top cybersecurity
attacked industry**



2.1M Gap

U.S. manufacturing jobs
expected to go **unfilled by
2030** due to a skills shortage

MxD Cyber Resource Hub

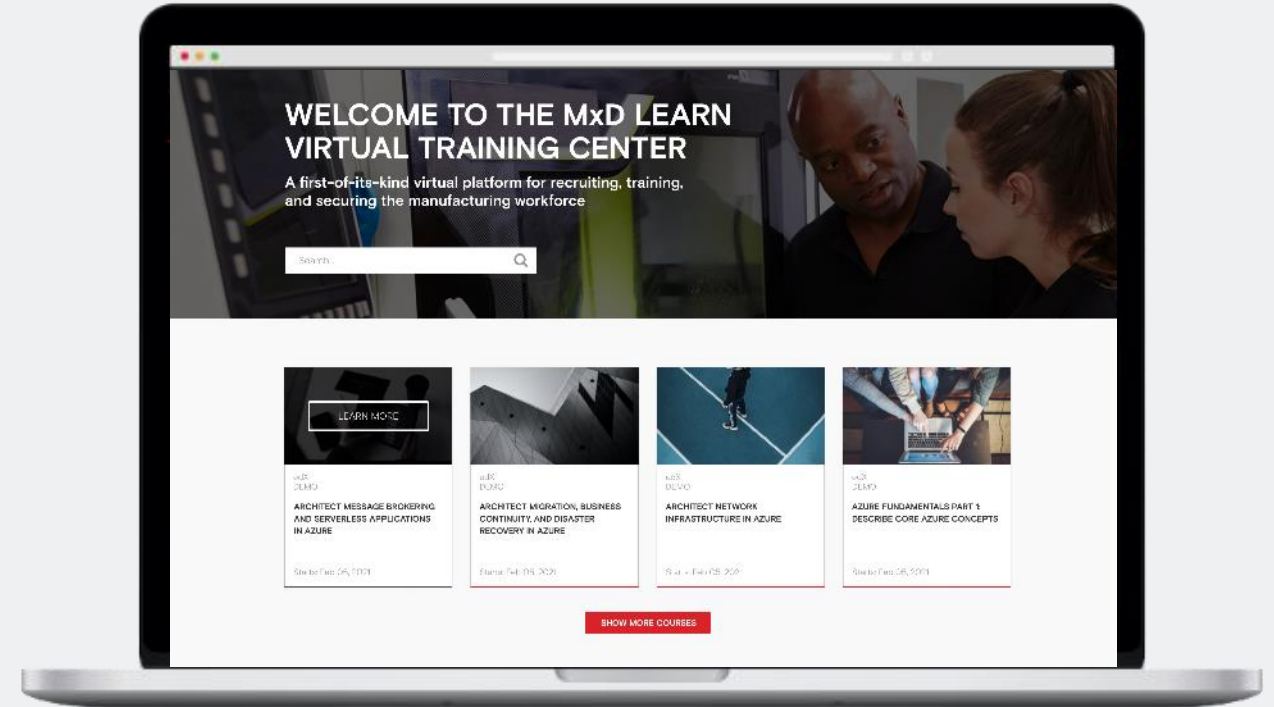
One-stop Resource for
Cyber Content & Tools



[*mxdusa.org/cyber*](https://mxdusa.org/cyber)

MxD Learn Virtual Training Center (VTC) Platform

Improving Access to Learning



[***mxdusa.org/vtc***](https://mxdusa.org/vtc)

Workforce Development Impact

Define



Develop

36
Courses

across digital manufacturing
and cybersecurity

Including:
Digital Design
Data Analytics
Cybersecurity for AI
Machine Learning

CAPITAL **CyMOT**
coursera

Deliver

300,000
Learners

supported through MxD's
portfolio of workforce training
programs over the last 5 years



The MxD CAPITAL Program

5 free, self-paced, virtual role-based programs for manufacturing workers at different stages of their career.

Extensive research identifies these as jobs needed for manufacturing's future.

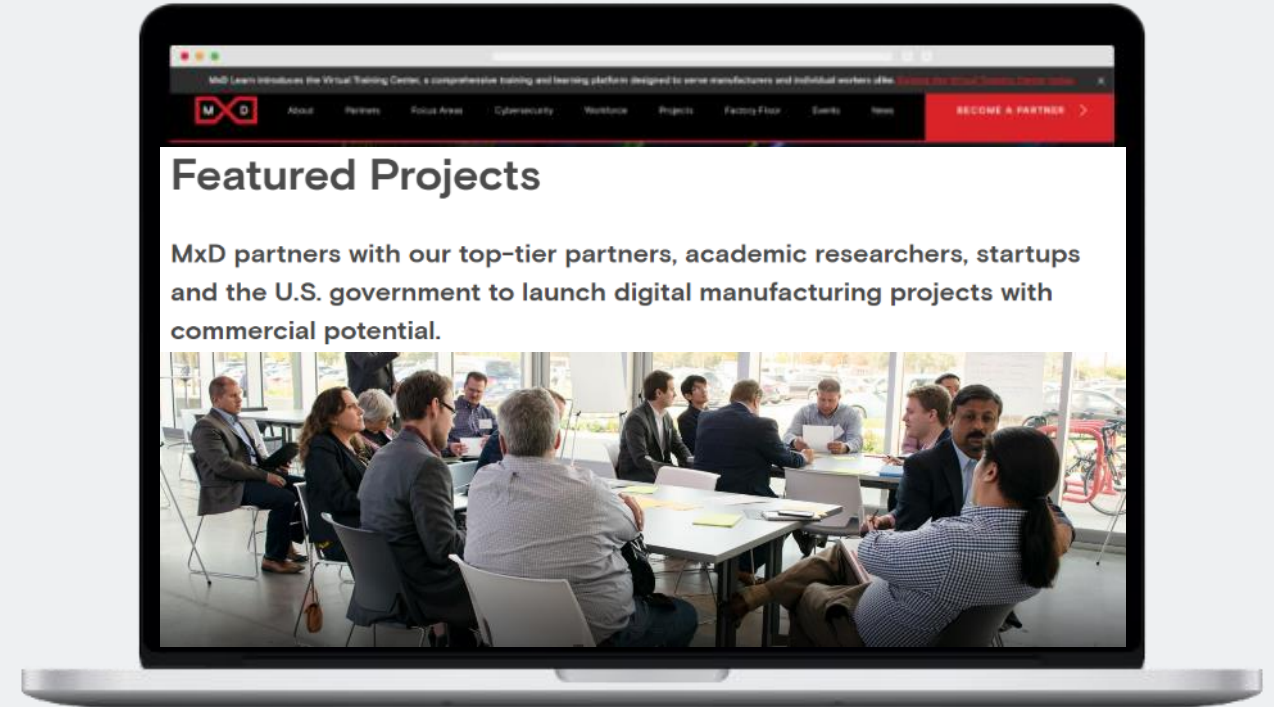
Manufacturing requires a skilled workforce that uses **critical technologies**.

Manufacturing offers **job security** and roles that pay well for workers with in-demand skills.

With the right training and skills, workers can **advance faster**.

MxD Projects

Collaborating with
Members to Address
Industry Needs



mxdusa.org/projects



**10 YEAR
ANNIVERSARY**
CONVENING. ADVANCING. EMPOWERING.

PUBLIC + PRIVATE FUNDING

\$415M

PROJECTS

190+

LEARNERS ENGAGED

300K +

**650
Members**
Over 10 years

**10K+
visitors
annually**

"MxD, a beacon of progress in equipping US factories with the digital tools, cybersecurity measures, and workforce expertise that is necessary in the modern era"

Ms. Heidi Shyu, Under Secretary of Defense for Research and Engineering

Why MxD



**Know the
Challenges**



**Trusted and
Neutral**



**Speed and
Scale**

Point of Contact:

Tony Papke
Sr. Director Business Development
tony.papke@mxdusa.org