

#### OBJECTIVE

DLIR uses digital technologies and tools to improve the quality, security, and interoperability of logistics data, transform DLA business processes and sub-processes, enable advanced manufacturing, and support the Defense Industrial Base (DIB).





PROCESS MINING Identify and prioritize areas to

improve operational outcomes and efficiency across core business cycles/process.



SUPPORT THE DIB Invest in advanced manufacturing and Al-driven Large Language Models (LLMs) to foster a resilient DIB.



INDUSTRY 4.0 Industry 4.0 research to assist Micro, Small and Medium Manufacturers (MSMMs).

## **INNOVATION & TECHNOLOGY**

- Prototype remote inspection and product testing for Clothing and Textile (C&T) goods.
- Use static digital twin process mining technology to support Digital-Business Transformation (DBX) efforts.
- Leverage LLMs to discover new manufacturing pathways for items critical to national security.
- Spread awareness of challenges faced by DoD OEMs and their supply chains.

## STRATEGIC THRUSTS



Develop remote expert capabilities using AR/VR



Improve cyber hygiene across the DIB



Develop supplier database and identify new sources of supply

# Research & Development DLIR

A 21<sup>ST</sup> CENTURY

FOR AMERICA

eshore more of our Industrial

ase and supply chains to the

United States and to

iles, starting with iicroelectronics, and restore

r shipbuilding base

Industrial Capabilities Report January 2021

Build a modern manufacturin

and engineering workforce

velopment (R&D) base

and research and

CREATING A ROBUST, RESILIENT, SECURE, & INNOVATIVE INDUSTRIAL BASE

The Industrial Base is the key to preserving and extending U.S. competitive military dominance in the coming

nce that will keep America

DLIR Supports the DoD Defense Industrial Strategy



# THE CHALLENGE

Recent unexpected disruptions to the global supply network have underscored the inherent fragility of our nation's manufacturing base. Regrettably, these disruptions have compounded two longstanding challenges that have plagued the readiness of the DoD for decades: Diminishing Manufacturing Sources and Material Shortages (DMSMS) and the dwindling number of Micro, Small and Medium Manufacturers (MSMMs) within the Defense Industrial Base (DIB).



**DEFENSE INDUSTRIAL STRATEGY** 

ns safe and keep the peace

Find new ways to partr

private sector innovation wit

. public sector resources and

Continue to modernize the

fit 21st century realities

se acquisition process to

# WARFIGHTER READINESS

# THE BENEFITS

Invest in advanced manufacturing and AI-driven Large Language Models (LLM) to foster a resilient DIB:

- Enhance database of DLA suppliers with ample technical data and process flows
- Improve supplier discovery and evaluation processes
- Increase visibility into the DIB, leading to potential new supplier partnerships
- Enhance readiness/responsiveness in sourcing critical parts
- Strengthen relationships with suppliers through improved data sharing
- Continue Industry 4.0 and workforce development research to assist MSMMs



- MILITARY SERVICESDLA MAJOR
- SUBORDINATE COMMANDS (MSC)

DLA J3, J6, J7

JDMC/JDMTP

 OFFICE OF THE SECRETARY OF DEFENSE (OSD)
MANUFACTURING INNOVATION INSTITUTES



https://www.dla.mil/Information-Operations/Research-And-Development/

## **ACCOMPLISHMENTS & ONGOING EFFORTS**

- Transition of Digital Sustainment Platform (DSP): Transitioned DSP to DLA J62 operations in support of TDMT efforts. With DSP, DLA will be able to connect seamlessly the digital technical data received from the military services to the supplier side 'as manufactured' data digitally.

Transition of FLIS Data Cleansing: DLA J3 contracted with LMI to transition the execution of the data changes delivered to DLA as part of the R&D project. J3 requires continued analytics as a service to monitor data health and generate cleansing actions as data is prepared for migration to the new catalog environment.

Completed the Paladin Digital Modernization project; provided BCA with recommendations.