Research & Development

LOGISTICS TECHNOLOGY RESEARCH (LTR)

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OBJECTIVE

Support DLA business functional units through applied research of advanced technologies to improve business processes and operational methods. Leverage the application of leading-edge logistics "out-of-the box" concepts using business tools driven by disruptive technology to provide global logistics support.
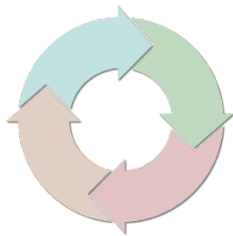
BUSINESS PROCESSES

DLA's processes are often inefficient due to manual processes and outdated technologies. Key decision points such as planning inventory levels, on-boarding vendors, and accepting in-coming material may have errors or inefficiencies that disrupt the supply chain

SUPPLY CHAIN RISKS

DLA is challenged daily to identify and mitigate risks to the supply chain – everything from diminishing manufacturing sources for older weapon systems to poorly managed vendors providing sub-standard parts or bad actors providing counterfeits
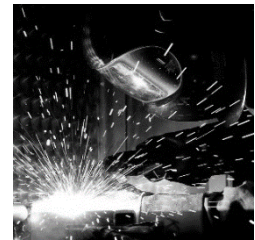
COMMERCIAL INDUSTRY OPPORTUNITIES

DLA needs to incorporate advances in commercial best practices. Leveraging existing commercial capabilities will enable rapid process transition upon full scale implementation

INNOVATION & TECHNOLOGY

- Data quality and governance
- Artificial intelligence / machine learning : business use cases
- Distributed ledger technology – sharing data across DLA and vendors. Currently developing use cases.
- Supply chain risk management – risk information and analysis
- COTS, SAAS, PAAS, AAAS business solutions
- Digital Twins

STRATEGIC THRUSTS

Applied research for incorporating emerging technologies across DLA core business processes

RISK
Identify and mitigate risks across the supply chain

Leverage commercial best practices

THE CHALLENGE

The challenge is to balance the need to sustain legacy systems to maintain the supply chain and continue support to the business functional areas, while transitioning to new technologies.

THE SOLUTION

The LTR program leverages advanced technologies to shape business process and ensure supply chain security across the DLA network.

WARFIGHTER READINESS

THE BENEFITS

- Ensure Warfighter safety and weapon system performance through reliability of DLA provided parts and a secure supply chain.

- Anticipate Warfighter requirements by combining big data, predictive analytics, and automation.

INDUSTRY AND WHOLE OF GOVERNMENT PARTNERSHIPS

- **Commercial Industries**

- **Federally Funded Research and Development Centerers (FRDCS)**

- **University Affiliated Research Centers (UARCS)**

- **Services and Federal Agencies**

- **Naval Research Laboratories**

- **Academia**

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

ACCOMPLISHMENTS & ONGOING EFFORTS

- Digital platforms to automate and secure key business processes that capture vendor data
- Supply chain risk data identification and applications
- Artificial Intelligence / machine learning projects to improve demand forecasting, lead time estimation, and backorder prediction use case development
- Distributed ledger technology applications
- Quantum computing capability assessment and planning for the future.
- Emergent Anti-Counterfeiting technologies
- Metadata management and data quality platforms