

The logo for EmpowerAI features the word "Empower" in a dark blue, sans-serif font. The "AI" portion is enclosed in a light green square with rounded corners, with the letters "AI" in white. A white circle partially overlaps the left side of the "Empower" text.

EmpowerAI

Elevate the Mission

**Authority to Operate
(ATO) Reciprocity**

White Paper

ATO Reciprocity

The Importance of ATO Reciprocity to Quickly Implement Critical New AI/ML Innovations Across the Department of Defense

In accordance with Department of Defense (DoD) instruction 8510.01 enclosure 5, reciprocity is “an essential element in ensuring IT capabilities are developed and fielded rapidly and efficiently across the DoD Information Enterprise. Applied appropriately, reciprocity reduces redundant testing, assessing and documentation, and the associated costs in time and resources. The DoD Risk Management Framework (RMF) presumes acceptance of existing test and assessment results and authorization documentation.”

Applying principles of reciprocity to system authorization decisions for critical new innovations, such as the implementation of artificial intelligence (AI) and machine learning (ML), will allow the DoD to test, assess, document, and deploy needed operational technologies with greater speed. As typical ATO processes can take upwards of 18 months, using reciprocity can reduce the time to achieve an ATO to less than 180 days.

Accessing existing artifacts and work done by associated agencies from eMASS allows Authorizing Official's (AO) to reuse that data to make decisions quicker, saving the approving agency time and money, and ensuring critical new technologies can be deployed.

The DoD is investing billions of dollars to develop and integrate AI/ML into its defense systems and networks. The types of investments include a full range of categories such as operations and maintenance functions, support/help desk support, knowledge management, drones, sensors, image analysis, etc. The cost for developing, testing, and assessing these capabilities is a large expense for the DoD, and leveraging reciprocity can reduce some of that burden when assessing technologies that have already been approved with an ATO for different DoD commands. Empower AI Inc. has developed an AI platform, the Empower AI Platform®, that has just that, an ATO with a command and all of its documentation in eMASS, which the DoD can leverage at any time.

Empower AI Overview

On June 7, 2022, NCI Information Systems evolved to become Empower AI to showcase our expertise in AI for the federal government and DoD. We began to change the focus of our company to AI and ML in 2016 soon became a true early adopter of and leader in AI. Since that change in focus, we have successfully developed, the Empower AI Platform. We built this platform because every mission deserves the power of AI. The Empower AI Platform was designed specifically for the unique challenges the government has and the special ways that government works, with security baked into its development from the beginning. Our decades of experience in understanding customer missions, AI solutions, and problem solving has been the driving factor in our development success.

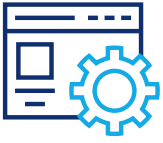


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Today, over 75% of our programs are enabled with AI. AI is improving the productivity and effectiveness of all our programs by equipping mission leaders with a true path to digital transformation, while enhancing staff capabilities and improving performance. And now more than ever we have found our AI platform is able to help our customers maintain, and increase, their level of productivity in the post-COVID world where it has become harder and harder to find and retain staff.

The Empower AI Platform is an open-architecture platform that provides secure, containerized access to deploy our AI solutions to make improvements, expand capabilities, and gain efficiencies. This containerized architecture allows us to deploy without disruption to current infrastructure, make better use of system resources, be more efficient with faster releases and patching, increase flexibility in development options, deliver more consistent operations, and improve security. We built our platform on our philosophy of empowering humans with AI and allowing them to accelerate the scale of workflows and do more with what they have. Our solution will provide customers with the tools necessary to help identify workflows and processes that can be automated or enhanced by AI.

Empower AI Platform Enablement Descriptions and Benefits of 100% U.S.-Developed Code

**Empower AI WORKS**

Robotic process automation (RPA) that delivers automated data collection, transformation, ingestion, and presentation; Can be combined with ML to provide enhanced capabilities and efficiencies for true hyper-automation.

- Increases the capacity of the workforce by automating the routine tasks with orchestration.
- No changes necessary to existing infrastructure.
- Continual Improvement (with ML).

**Empower AI ADVISES**

Personalized desktop AI Assistant delivering necessary data and recommendations from the vast amounts of data available to provide more efficient and accurate human-in-the-loop decision-making.

- Provides needed information in real-time.
- Intuitive view of your data with alerts when new information is available.
- No changes necessary to existing infrastructure.

**Empower AI LEADS**

Enterprise level AI management solution, equipping mission leaders to make better, faster decisions and achieve meaningful digital transformation; includes the methodology, governance, and visual displays to see the total impact of change.

- Provides tailored guidance in a convenient and easy-to-use visual dashboard tool.
- Continually assesses and advances your AI operations with real-time performance awareness.
- Receives customized ROI and ROV analysis to see the impact of the deployed AI.
- Graphically displays data and cost analysis eliminating cumbersome and time-consuming analysis.

**Empower AI DEVELOPS**

An AI solution set to give government technology leaders the power to swiftly transform existing systems into future-ready frameworks. It leverages natural language processing (NLP) and automation to rapidly analyze and define the current state of systems, advise the best path forward, and accelerate accurate and secure development with AI in an immersive experience that augments and enhances human developers.

- **Code Analyzer:** Uses NLP, machine learning and a set of proprietary algorithms to perform a code analysis of any existing code.
- **Code Programmer:** Employs Code Analyzer to review and ingest any existing codebase in the DevSecOps and CI/CD pipeline. Once the code base has been evaluated and documented, the AI Code Programmer tools generate refactored, object-oriented code and/or entirely new code from natural language function descriptions.
- **Infrastructure Developer:** Creates code with seamless integration into the CI/CD pipeline, allowing for connections into help desk applications, as well as DevSecOps components and other CI/CD pipeline software while integrating approved static and variable security tools.

2x⁺Return on
Investment

90% savings

on staff time
and resources

5x

Faster than
human work

98%

Productivity increase
and improved security

The Empower AI Platform was developed specifically for use by the U.S. government and DoD using DevSecOps secure coding principles outlined in the DoD CIO DevSecOps Playbook and in accordance with Defense Information Systems Agency (DISA) Application Security Development Security Technical Implementation Guide (STIG) and Security Requirements Guide (SRG). We scan all our static code at commit for security findings and use our own RPA to deduplicate and validate these findings. We use dynamic code analysis and penetration testing at each installation and at major version upgrades. Moreover, Empower AI scans specific process automations before deployment into production, in accordance with industry best practices.

CURRENT ATO STATUS

DISA Joint Service Program (JSP)

The Empower AI Platform has been issued an Authority to Operate (ATO) from DISA for use as JSP-Scaling Humans with AI (SHAI) (former name of the Empower AI Platform) (ATO granted June 28, 2022). The ATO is a crucial declaration authorizing the use of the Empower AI Platform on the DISA enterprise. We are excited to fully implement our AI platform in advance of DISA's mission to provide command and control capabilities and enterprise infrastructure to continuously operate and assure a global net-centric enterprise in direct support to joint warfighters, national-level leaders, and other mission and coalition partners across the full spectrum of operations.



Previously, SHAI software was on the DISA Secure Products List (SPL) (# 12560) and added to an existing ATO (JSP-U) through the "Assess Only" RMF process. New guidance (RMF Best Practices for RPA) was published by DoD-CIO which recommends that all unattended bots, intelligent RPA, or RPA supervisor tools should have their own standalone ATO, which caused the DISA AO and J223 (Cyber Management) to recant this initial direction of Assess Only and provided new direction (in late September 2021) for us to get a full ATO package.

CMS Comprehensive Error Rate Testing (CERT)

SHAI (former name of Empower AI Platform) has been included in the approved CMS CERT ATO through the DHA Assess Only Process. All components of the Empower AI Platform operate in the production environment within the CMS CERT network enclave and have been assessed as part of an Independent Security Controls Assessment as part of the full A&A process. No independent authorization for Empower AI was required by the DHA AO.

GSA Digital Innovation for GSA's Infrastructure Technologies (DIGIT)

In October 2021, the entire Empower AI Platform was granted an LATO to operate on the GSA enterprise network and subsequent one year Provisional ATO on March 22, 2022. We have 22 automations currently approved and running in the GSA Enterprise production environment with over 30 planned, including animated personas and chat bot AI.

For each bot deployed on GSA networks, they require a detailed API document detailing consumer and producer responsibility, equating to 84 NIST controls, a security questionnaire, and an architectural diagram including details on bot functionality, process flows, interconnections, and more. This information is provided to the GSA Information Security team, so they have clear insight into what the bots are doing, the associated access, how they are connecting, and what they are doing with the information they touch.

Army Enterprise IT as a Service (EITaaS)

For the Army EITaaS program, we pursued an Army ATO on NIPR. We were successful in getting an IATT, however, the program was canceled before we were able to fully get through the full ATO process.



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FUTURE ATO PLANS

■ FedRAMP Authorization

We are working on getting our Empower AI Platform to be FedRAMP approved for future development plans, however the platform in its current state, does not run exclusively in the cloud as a service to be offered, and therefore does not require FedRAMP authorization. We deliver our solution to include our technical staff to assist in the development/deployment of our platform, and the continuous improvement, and not that we offer an exclusively cloud service product. Our products can work and operate in the cloud just as any other virtualized system or application would.

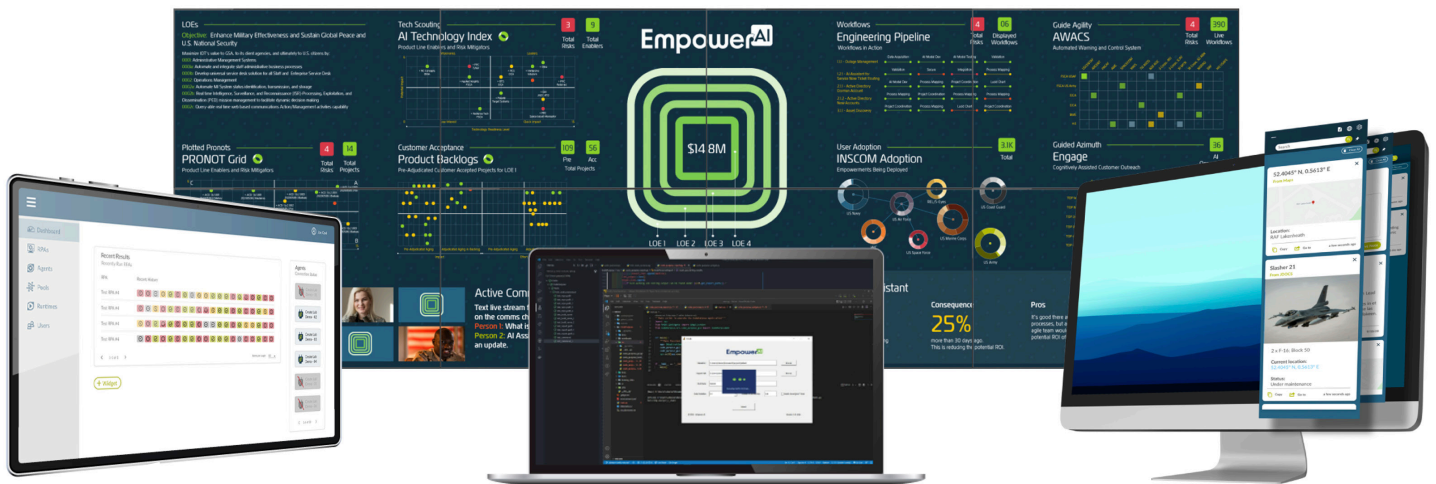
■ XVIII Airborne Corps

For the XVIII Airborne Corps we are actively seeking an ATO for our Empower AI Works and Advises products of the Empower AI Platform on SIPR. We are also seeking two IATTs for the same products for upcoming training events by creating a “Sync and Reconcile” feature for the XVIII Airborne Corps located in Fort Bragg, N.C. We plan to attend Project Convergence 2022 (PC22) in October, hosted by Camp Pendleton, CA. The IATT for PC22 will be a limited time IATT, only for the event dates. We have submitted all paperwork required to be included in this IATT including system description, network diagram, data flow diagram, hardware/software list, Application and Security Development (ASD) STIG, Plan of Action & Milestone (POAM), and our Ports, Services, and Protocols (PPS). Inclusion into the existing IATT will allow us the opportunity to demonstrate our capabilities during PC22.

The second IATT we are pursuing is to work directly with the XVIII Airborne Corps to build the “Sync and Reconcile” feature and to interact with other existing systems in their Tactical SIPR environment. This IATT will allow a six-month test period to build sequences and participate in other tactical exercises with the XVIII Airborne Corps. The anticipated timeframe of this IATT is October 2022. After much discussion, it was decided that DEVCOM C5ISR would be the supporting command for the eMASS package.

LEVERAGING RECIPROCITY FOR EMPOWER AI PLATFORM

Leveraging DISA ATO tests and assessments, including the multitude of eMASS artifacts, tests, documents, and control findings for DISA, XVIII Airborne, and the Army, we believe that we can coordinate system security requirements between these organizations as both the receiving and issuing contractor supporting these enclaves and organizations. This ensures compliance with DoD Instruction 8510.01 and gives the AO important information to make a much more informed decision, while saving the DoD and Federal government money by not having to redo work already done. Upon the AOs decision to use reciprocity and make use of the existing data, any gaps identified will be addressed to ensure our platform meets all customer security requirements.



Prior to June 1, 2022, Empower AI's name was NCI Information Systems, Inc. (“NCI”). Effective June 1, NCI changed its name under Virginia law to Empower AI. Only NCI's name changed—Empower AI is the same company formerly known as NCI and possesses all of the assets and resources possessed by the company when it was called NCI. On June 6, 2022, Empower AI requested that the contracting officers for all open contracts execute a change-of-name agreement reflecting the name change pursuant to FAR 42.1205. In accordance with direction from the Administrative Contracting Officer responsible for processing the change of name agreement, Empower AI will not update its registration in SAM to reflect the name change until the change-of-name agreement has been executed.