Driving Innovation at DFAS

Defense Finance and Accounting Service

Mr. Don Means
September 28, 2023

Agenda

- About DFAS
- Robotics Process Automation
- Artificial Intelligence

Foundation

Our Vision...

To be a valued partner in financial management by consistently delivering first-class service and products

Our Mission...

Deliver financial excellence and quality pay services to our customer

Our Core Values...

INTEGRITY
Doing what is right

SERVICE
Remain a trusted financial partner

INNOVATION
Creating new ways to do business

Locations

INDIANAPOLIS, IN
CLEVELAND, OH
COLUMBUS, OH
BRATENAHL, OH
ROME, NY
LIMESTONE, ME
TEXARKANA, TX
ALEXANDRIA, VA
KAISERSLAUTERN, GERMANY
YOKOTA AIR BASE, JAPAN

Customers

All DoD military personnel, retirees, annuitants and civilian personnel

Defense Agencies and the Office of Secretary of Defense

Major DoD Contractors and Vendors

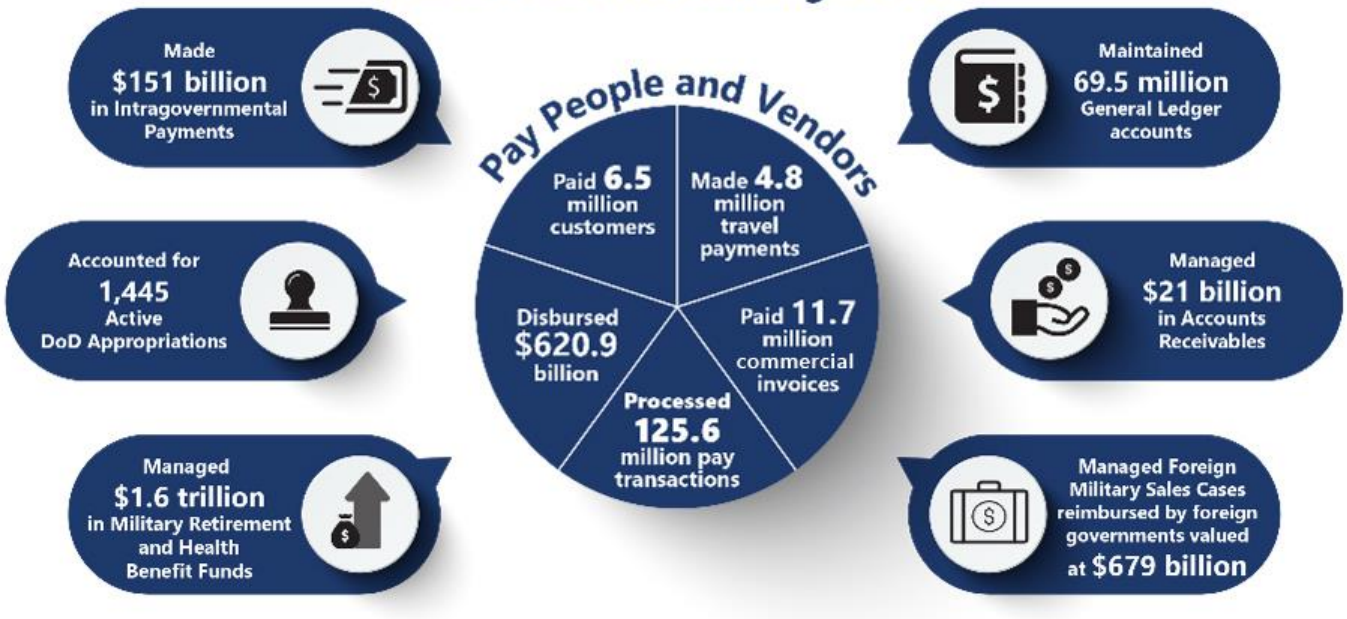
Customers outside the DoD

Executive Office of the President
Department of Energy
Department of Veterans Affairs
Department of Health & Human Services
US Agency for Global Media
Foreign partners

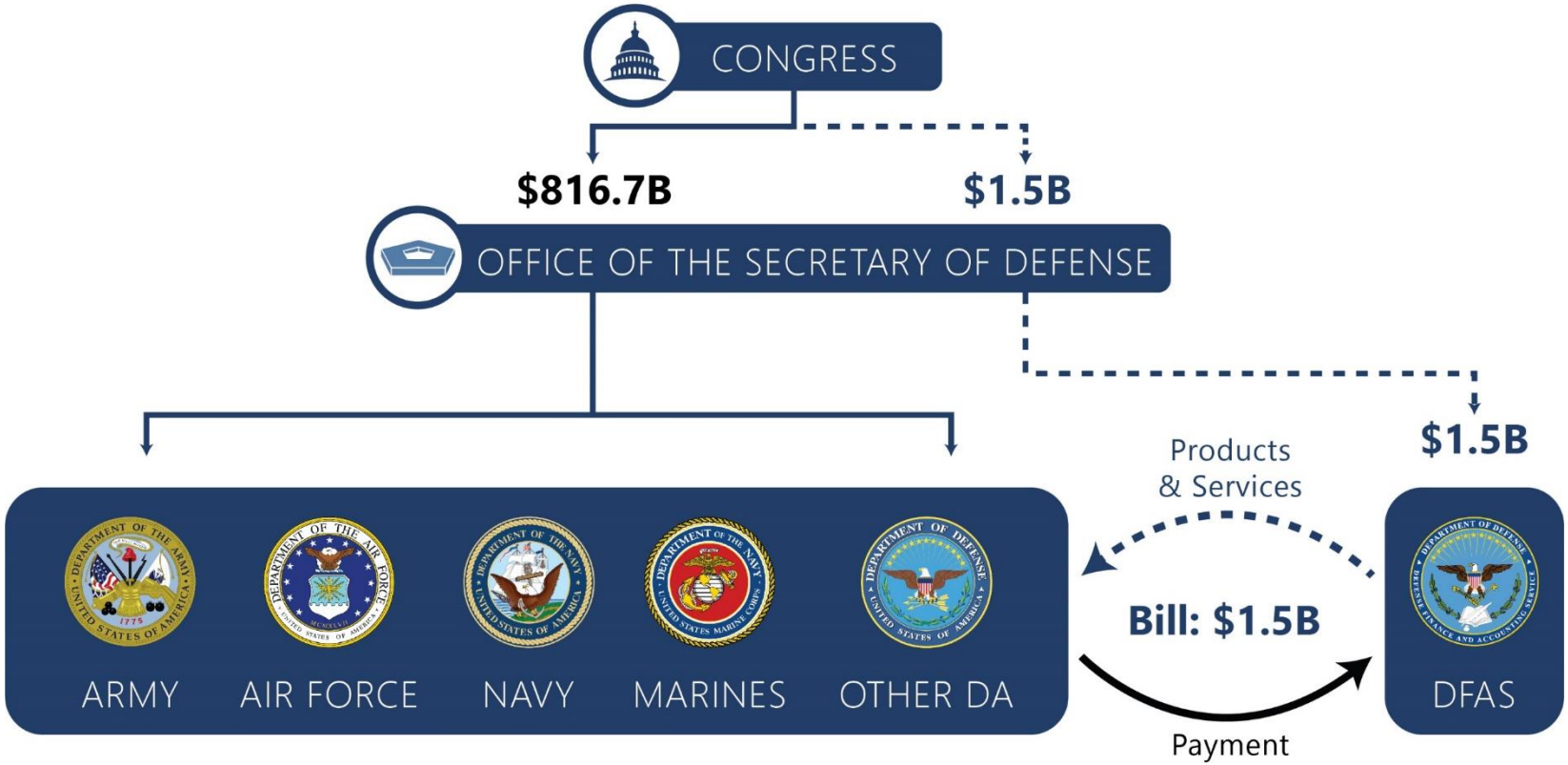
What We Do

DFAS is responsible for the **consolidation**, **standardization**, and **integration** of finance and accounting regulations, functions, procedures and assigned information systems within the DoD, while ensuring their proper relationship with other DoD functional areas such as budget, personnel, logistics and acquisition.

Finance and Accounting Services



Operations


CONGRESS
$816.7B
$1.5B
OFFICE OF THE SECRETARY OF DEFENSE
$1.5B
Products
& Services
Bill: $1.5B
Payment
ARMY
AIR FORCE
NAVY
MARINES
OTHER DA
DFAS

Our Story

CONSOLIDATION - STANDARDIZATION - INTEGRATION

THEN	NOW
1994 BUDGET*	2023 BUDGET*
DoD $502.0B	DoD $816.7B (+62.7%)
DFAS $3.5B	DFAS $1.5B (-56.1%)
300 sites	10 sites
28K PEOPLE	11K PEOPLE
300+ SYSTEMS	74 SYSTEMS
Early Audit Support: Limited Financial Statement Audits and Testing of Controls	Audit Support: 8 Statements on Standards for Attestation Engagements; Support 27 Customer Audits and DoD-Wide Consolidated Audit

*FY23 constant year dollars

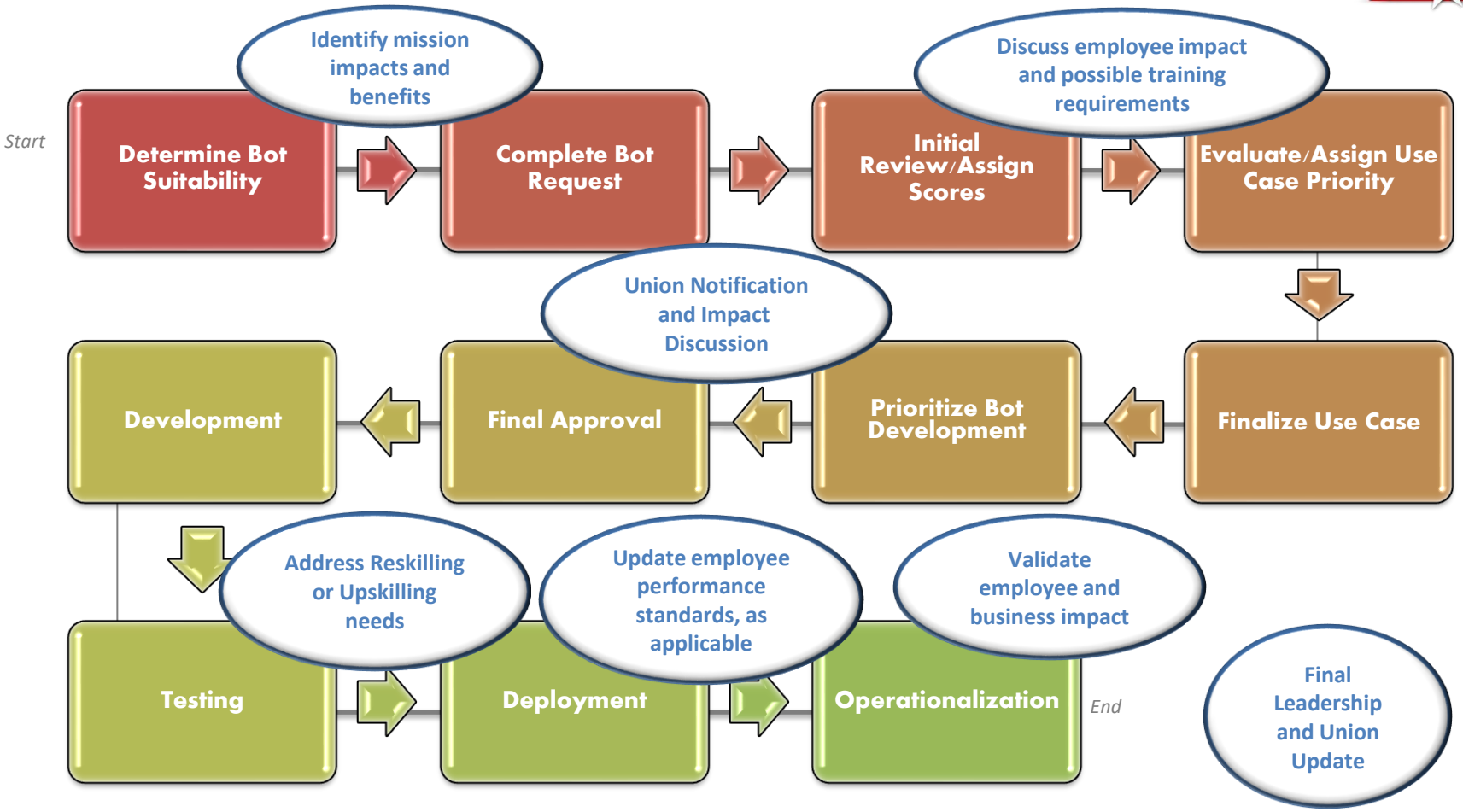
Robotics Process Automation (RPA)

DFAS Robotics Program

- ***Our Goal:*** Deliver robotic process automations that complement the DFAS employee, support performance improvement, and increases job satisfaction

- ***Our Vision:*** A mature robotics program that complements DFAS employee efforts in driving greater efficiencies

Human Impact Planning



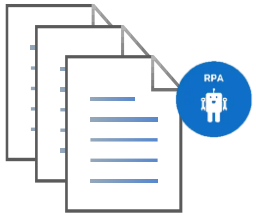
Keys to Success

- Identification of impacted employees
- Consistent, open communication with impacted employees
- Opportunities for employee feedback

Robotics Process Automation in Action

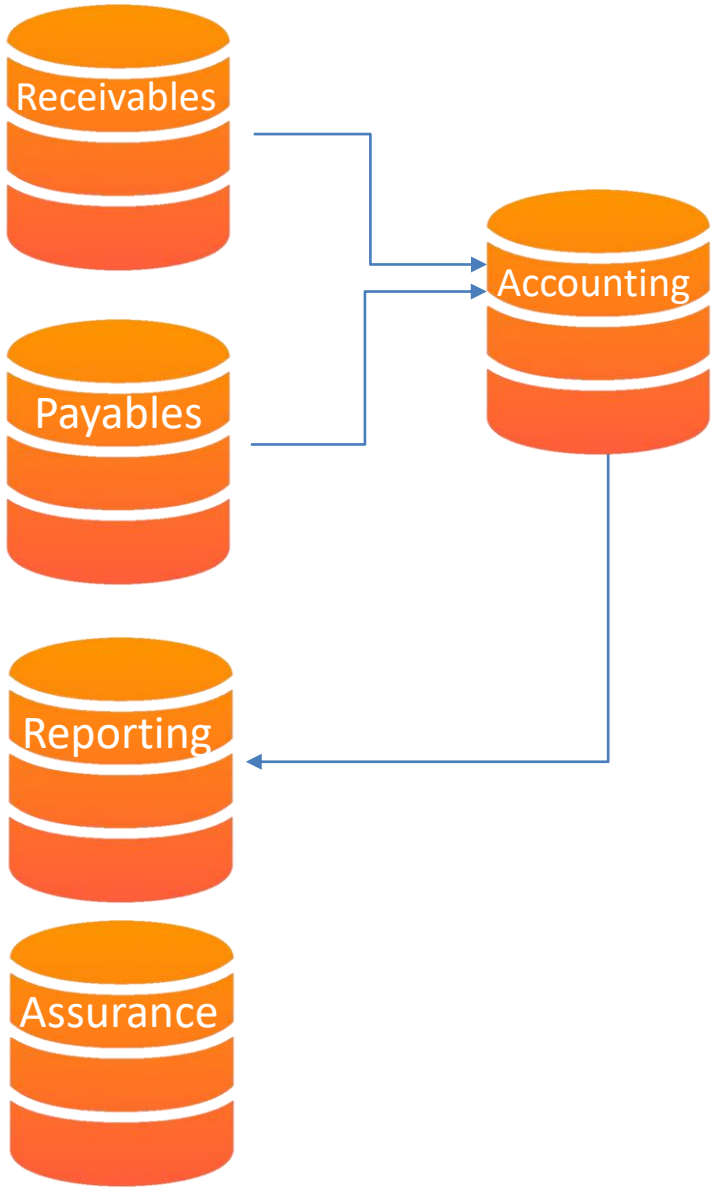
- Receive and Record Payments
- Send invoices to customers

- Receive/post invoices
- Prepare and send payments



- Produce Management Reports

- Timely Support Audit Samples/PBCs



Partnerships

NAVSUP
NAVAL SUPPLY SYSTEMS COMMAND

USMC
Technology Services Organization

DAI

DEFENSE LOGISTICS AGENCY

DARPA

U.S. DEPARTMENT OF THE TREASURY
GTAS & Intragovernmental Reporting
May 8, 2014
BUREAU OF THE Fiscal Service
U.S. DEPARTMENT OF THE TREASURY

DCAA

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT

DEAMS
Defense Enterprise Accounting and Management System

AIR FORCE PERSONNEL CENTER

GFEBS
General Fund Enterprise Business Systems

Artificial Intelligence

Artificial Intelligence Center of Excellence

- **Mission Statement:** To be the leader in Artificial Intelligence throughout the Department of Defense for Financial Management

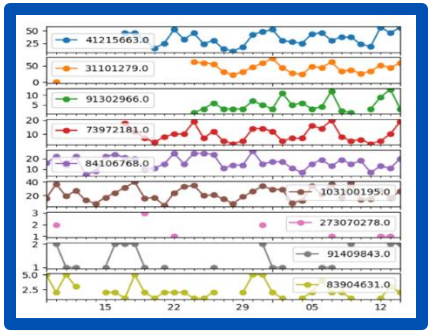
- **Vision Statement**: Transform DFAS by accelerating the adoption and delivery of AI-enabled capabilities such as Machine Learning (ML); promote a leading AI workforce that solves large and complex problems through trustworthy AI/ML strategies to meet customer needs; create and expand public and private partnerships to help support AI innovation throughout the Department of Defense

Fraud Detection: ALERT

- **Business Need/Goal** – To develop an AI application that can proactively detect and prevent fraudulent transactions from processing rather than reacting to reported fraud

- **Action Taken** – Developed multiple AI Strategies to make predictions
  - Decision Tree supervised Machine Learning is used to classify or categorize transactions as either legitimate or potentially fraudulent
  - Neural Networks are also used for deep learning through a hidden layer of connected artificial neurons to make predictions of fraud based on 45 different variables

✓ **Results –** ALERT analyzes over 50 variables daily to detect patterns in previously identified fraud transactions.



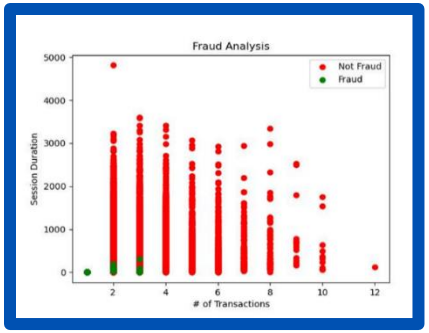
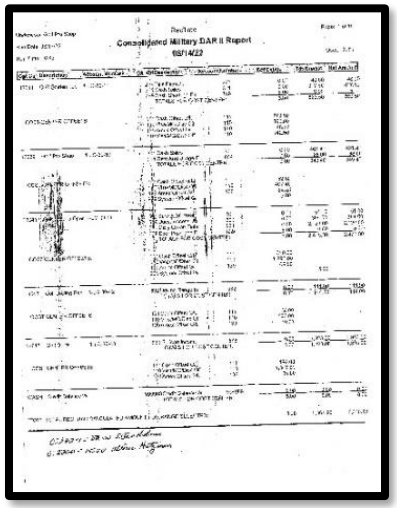


Image Recognition: VISION

- **Business Need/Goal** –To streamline and automate the time-consuming process of handling various documents, reducing manual effort and increasing operational efficiency

- **Action Taken** – Developed a comprehensive document processing tool utilizing advanced AI strategies for processing and recognizing images
  - Developed human-in-the-loop process for end to end handling of the Daily Activity Report

✓ **Results –** Reduce manual workload and potential errors from manual input into the accounting system. Allow faster customer availability of data



VISION

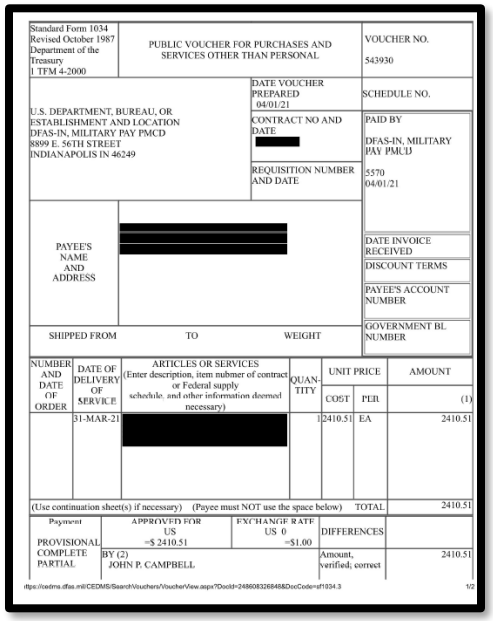
Report_Category_content
DAR for Period:Bank Deposit Slips (USD)
G/L Summary Distribution / GL Distribution - Detail Line Items
Credit Card Deposit Report Summary and Smart Cards
DA Form 4082 - Daily Cashier's Record
Cash Journal / End-of-Shift Report / Shift Report
Cash Receipt Voucher (DA Form 1992)
Tip Sheets, if applicable
Return Checks, if applicable
Contracts: Party contracts or similar items, if applicable
Vending/Amusement Mach Collections - DA Form 4083-R, if appli
Ticket Commission Report / MTV Tickets (copy), if applicable
Tour Vouchers / Reservation Receipts for ITR, if applicable
Form 5069 - Employee Meal Register, if applicable
Other:Pass G/L Report
Other:Draft Reconciliation Summary
Other:Ice
TOTAL PAGES SCANNED (including transmittal cover)

PII Redaction

- **Business Need/Goal** – Decrease the time to deliver Key Supporting Documents for Audit Request

- **Action Taken** – Developed an AI-enabled application that automatically redacts PII from ten different forms without human intervention

✓ **Results –** Decrease manual time spent reviewing audit packages, reduce deviation of Provided by Client (PBC) turnaround time, increase audit packages supported (mission area avoidance), standardize processes/procedures



Standard Form 1034
Revised October 1987
Department of the Treasury
I TFM 4-2000

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

VOUCHER NO. 543930

DATE VOUCHER PREPARED 04/01/21

SCHEDULE NO.

U.S. DEPARTMENT, BUREAU, OR ESTABLISHMENT AND LOCATION
DFAS-IN, MILITARY PAY PMCD
8899 E. 56TH STREET
INDIANAPOLIS IN 46249

CONTRACT NO AND DATE [redacted]

PAID BY
DFAS-IN, MILITARY PAY PMCD

REQUISITION NUMBER AND DATE 5570 04/01/21

PAYEE'S NAME AND ADDRESS [redacted]

DATE INVOICE RECEIVED

DISCOUNT TERMS

PAYEE'S ACCOUNT NUMBER

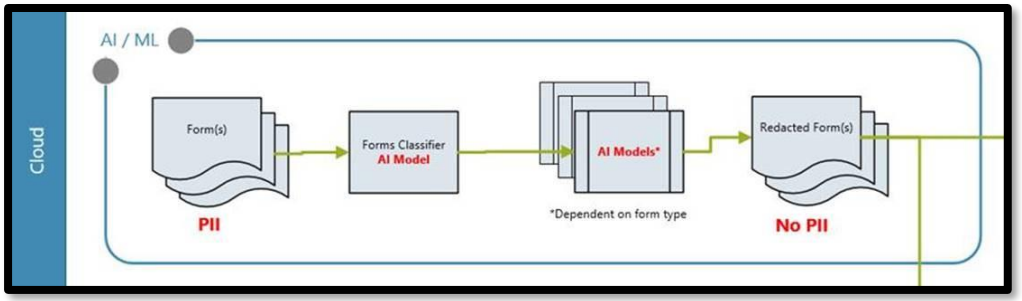
SHIPPED FROM | TO | WEIGHT

GOVERNMENT BL NUMBER

NUMBER AND DATE OF ORDER	DATE OF DELIVERY OF SERVICE	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary)	QUANTITY	UNIT PRICE COST	UNIT PRICE PER	AMOUNT (1)
	31-MAR-21	[redacted]		2410.51	EA	2410.51

(Use continuation sheet(s) if necessary) (Payee must NOT use the space below) TOTAL 2410.51

Payment: PROVISIONAL / COMPLETE / PARTIAL
APPROVED FOR US =$ 2410.51
EXCHANGE RATE US 0 =$1.00
DIFFERENCES
BY (2) JOHN P. CAMPBELL
Amount, verified; correct 2410.51



Where We Are Going

- Exploring Generative AI and Large Language Models for use at DFAS

- Build an Implementation Strategy based on five strategic Pillars to include:
  - ✓ Risk Considerations
  - ✓ Technology Selection
  - ✓ Architecture and Design
  - ✓ Impact to People
  - ✓ Business Impact

- Identifying Use Cases within four main categories
  1) Worker Augmentation
  2) Talent Optimization
  3) Process Improvement
  4) Risk Mitigation

Questions