



Krai Solutions

# AI-Driven Automation and Advanced IDP Solution

*Empowering Digital Transformation, Securely & Seamlessly*

## Krai Solutions

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**UEI:** MBFGLLJYEQB5

**CAGE Code:** 76QN2

**NAICS Codes:** 541511, 541512, 541519, 518210

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# Agenda

- 1 • Organization Overview
- 2 • Capability Overview
- 3 • AI-Driven Automation and Advanced IDP Solution Demo
- 4 • Q&A

# Our Approach to Problem-Solving

## **AUTOMATION-DRIVEN EFFICIENCY:**

Implementing automation to streamline processes, reduce errors, and improve efficiency.

## **INNOVATIVE THINKING:**

Creative solutions using insights across industries

## **AGILE METHODOLOGY:**

Flexibility and collaboration ensure continuous adaptation to client feedback

## **CLIENT-CENTRIC DISCOVERY:**

Listening first, tailoring solutions to fit unique business needs.

## **CONTINUOUS IMPROVEMENT:**

Monitoring and adapting solutions to evolving requirements.

## **DATA-DRIVEN DECISIONS:**

Making informed decisions based on robust data analysis. Testing hypotheses with prototypes and proof of concepts.



# Organization Overview

## 1 • Organization Overview

- Company Mission
- Company Data and Strategic Partnerships
- Core Competencies and Expertise

## 2 • Capability Overview

## 3 • AI-Driven Automation and Advanced IDP Solution Demo

## 4 • Q&A

# Mission and Vision



## MISSION

- To deliver innovative IT solutions that streamline processes
- Improve cybersecurity
- Drive digital transformation in federal sectors.



## VISION

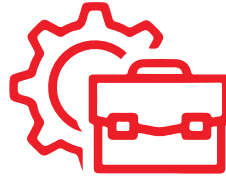
- To be the leading provider of AI-driven automation and digital transformation solutions that enable operational excellence in defense and government agencies.
- Champion the adoption of cutting-edge technologies to create transformative, future-ready solutions.

# Company Data and Strategic Partnerships



## Certifications

- **GSA MAS Contract Holder:** Contract #47QTCA21D00F4 allows streamlined procurement of our IT services.
- **SBA 8(a) Certification:** Valid through 2030, providing small business set-aside opportunities.



## NAICS CODES

- 541511
- 541512
- 541519
- 541330
- 518210



## Strategic Partnerships

- Collaborating with AWS, GCP, and Azure to deliver multi-cloud services to federal clients.

# Core Competencies and Expertise

- **Agile Custom Software Development:** End-to-end software development services focusing on security, scalability, and agility.
- **Cloud Services:** Cloud Transformation & Cloud Migration. Expertise in AWS, GCP, and Azure, ensuring secure and compliant cloud migrations and integrations.
- **AI-Driven Automation:** Leveraging AI/ML to enhance decision-making and automate processes.
- **Cybersecurity Solutions:** Ensuring compliance with DoD RMF, DISA STIGs, and FedRAMP.
- **Operation and Maintenance Support:** Providing continuous operational support through Automation, DevSecOps, and IaC for faster deployment and provision.
- **Data Management:** Expertise in database design, development, and data lake implementations for efficient data storage and retrieval.
- **Systems Integration:** API-First Design approach for seamless systems integration and enhanced data flow.
- **Advanced Search Implementation:** AI-based search capabilities including Relevancy Ranking, enhanced facet navigation, Gen-AI search enhancement



# Capability Overview

1 • Organization Overview

2 • **Capability Overview**

- Custom Software Development
- Cloud Services and Expertise
- AI/ML-Driven Automation
- Cybersecurity and Compliance
- Enhanced Search Engine Implementation
- Unique Differentiators

3 • AI-Driven Automation and Advanced IDP Solution Demo

4 • Q&A



# Custom Software Development



## Technologies

- Microservices architecture, and API-First Design Approach for seamless systems Integration
- Agile methodology, DevSecOps, and Infrastructure as Code (IaC).



## Case Studies

- NIH e-GOS modernization, where Krai Solutions reduced deployment times by 30% through Agile methodologies and secure cloud integration.
- Code Creator SaaS, where Krai Solutions implemented an AI-driven document Management system that enhances efficiency by automating document organization, extraction, and retrieval, enabling users to quickly find relevant information, streamline workflows, and make real-time data-driven decisions.



## Benefits

- Secure, scalable applications tailored to defense and government environments.

# Cloud Services and Expertise



## Focus Points

- Technologies refresh and legacy applications migration
- FedRAMP compliance and scalable, secure cloud architecture



## Case Studies

- Successful migration of legacy systems for a federal agency to AWS, improving availability and reducing costs by 40%.
- NIH e-GOS technologies refresh and systems modernization, where Krai Solutions reduced deployment times by 30% through Agile methodologies and secure cloud integration.



## Platforms

- AWS, Azure for multi-cloud flexibility, compliance, and security.

# AI/ML-Driven Automation



## Capabilities

- AI and ML for predictive analytics, process automation, and real-time decision-making and DevSecOps enhancement
- Enhanced Search Engine Implementation with Generative AI



## Tools

- AWS Textract and Comprehend for document processing (**Tagging, Categorization, and entity recognition**) and **NLP** tools for data extraction.
- OpenAI for Compound Queries analysis, Summarization, and Semantics search



## Impact

- Enhanced search Experience, Advanced data tagging and classification, and Reduced document processing time by 70% for clients.

# Cybersecurity and Compliance



## Focus Points

- Technologies refresh and legacy applications migration
- FedRAMP compliance and scalable, secure cloud architecture



## Case Studies

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## Platforms

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# AI-Driven Enhanced Search Engine Implementation



## Capabilities

- Leverages machine learning and generative AI to enhance search accuracy, relevance, and user experience. Automates document classification, tagging and indexing, content extraction, and predictive search functionalities.



## Case Studies

- Implemented an AI-driven search with Elastic Search for real-time document retrieval, improving information accuracy for defense-related data management systems.'
- Integrated search engine with e-commerce sites for NIH NITAAC, American Red Cross, Schneider Electric, and Teleflora



## Tools

- **Apache Solr** (NIH NITAAC)
- **Endeca** (Schneider Electric and Teleflora)
- **Google Search Appliance** (American Red Cross)
- **Elasticsearch** (IDP System)



# Unique Differentiators



## AI-Driven Automation

- Our solutions optimize operations for complex client environments
- Data Classification and Tagging for superior data management for critical decision making



## Multi-Cloud Security

- Expertise in SAML/OpenID, zero-trust (Authentication, Authorization, least-privileged, SSL, Data Encryption)
- Secure multi-cloud architecture



## Proven Success

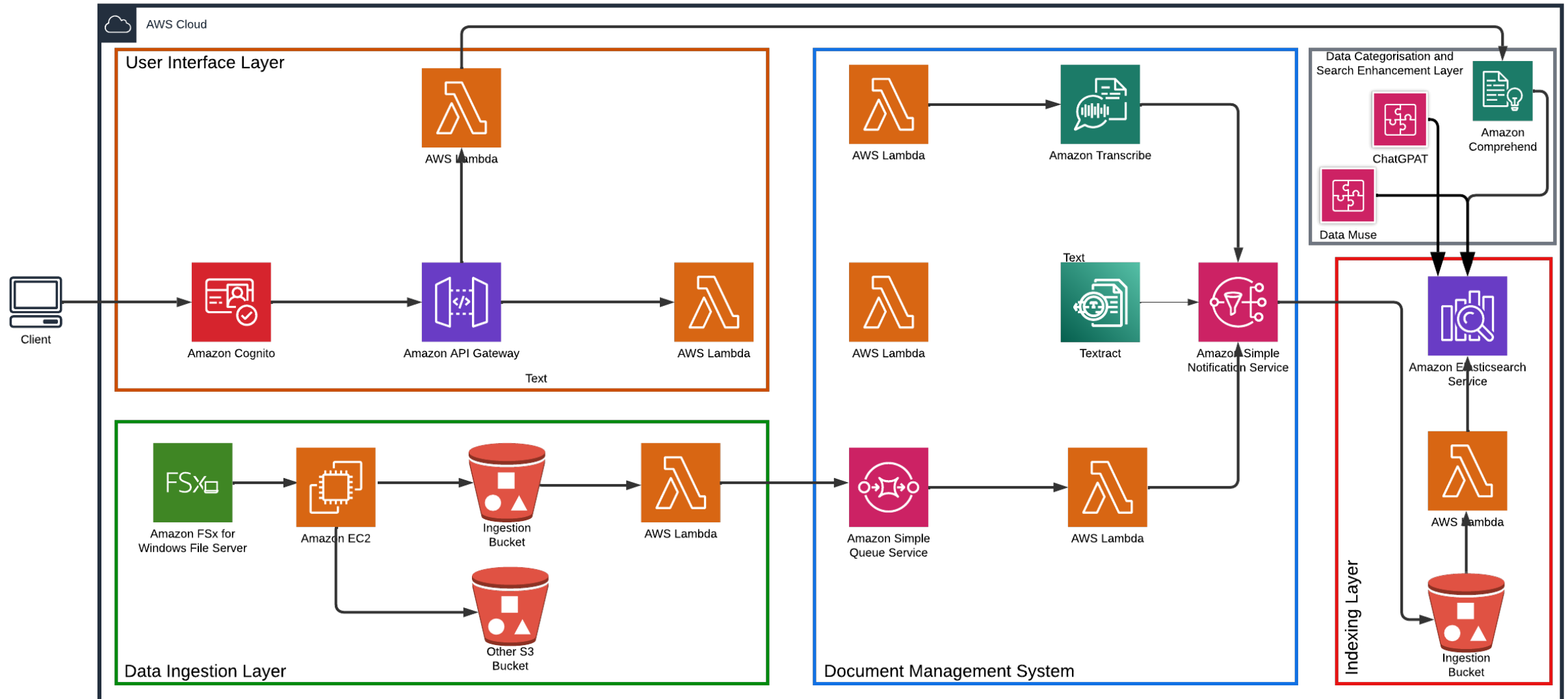
- Demonstrated results with Federal and commercial clients, improving operational efficiency and reducing costs

# AI-Driven Automation and Advanced IDP Solution Demo

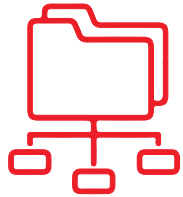
- 1 • Organization Overview
- 2 • Capability Overview
- 3 • AI-Driven Automation and Advanced IDP Solution Demo**
  - System Architecture
  - Features
  - Live Demo
- 4 • Q&A



# System Architecture



# Features



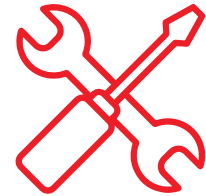
## Data Classification

- AWS Comprehend for entity detection: keywords, authors, locations, departments, and dates.
- Use AI/ML Models for data Classification and Tagging



## Search

- Relevancy Ranking
- Auto Complete
- Facets
- Query Expansion
- Synonyms
- Compound Queries
- Conversation and Suggestions
- Concepts Search
- Concept Search
- Documents Summarization



## Tools

- AWS Comprehend, AWS Transcribe, AWS Textract, OpenAI, Data Muse

idpweb.optick.io/Sigout

Sign In

Create Account

Email

Password

☐

Sign in

[Forgot your password?](#)

idpweb.optick.io/upload

## Document Management System

Dashboard Upload Search Settings Sign Out

### Upload Document

Browse...

No file selected.

Upload

## Document Management System

Dashboard Upload Search Settings Sign Out

### Search Results

Select Search Option: 

Default



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## Q&A

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