

# Welcome!

## **Agentic Government: Navigating the AI Transformation**

January 21 | 2:00–3:50 PM ET | 2 CPEs | FOS: IT



# Meet Your Moderator and Speakers



## **Sean Ryan - Moderator**

Managing Director and GPS Finance Transformation's Chief Technology Officer, Deloitte Consulting LLP



## **Venu Boppana - Speaker**

Food and Drug Administration, Center for Drug Evaluation & Research Strategy & Innovation Leader



## **Col. Kris Saling - Speaker**

Advisor for People, Experience and Technology, Department of the Army

# Agenda

- Welcome and Context
- Understanding Agentic AI
- Army Government Use Cases
- FDA Government Use Cases
- Fireside Chat
- Open Q&A + Closing Remarks
- Resources



# Understanding Agentic AI

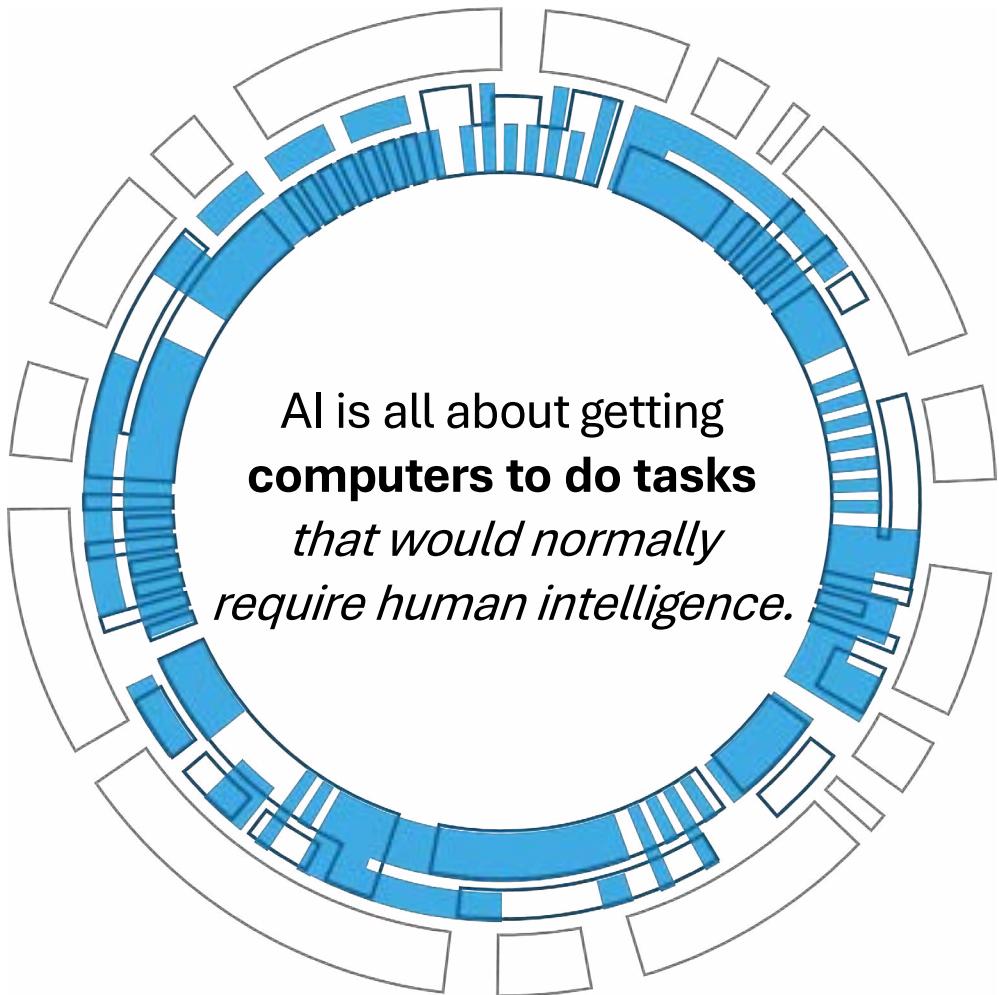
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# What is AI?

## A SIMPLE DEFINITION

Artificial intelligence (AI) is the capability of a computer program, using math and logic, to **simulate human cognitive functions** like:

- ✓ Mimicking human cognitive functions
- ✓ Gathering information and solving problems
- ✓ Using math and logic to simulate reasoning
- ✓ Learning from new information and making decisions
- ✓ Generating new content



# What capabilities can AI deliver

*Predictive analytics to determine project cash outlays*



## Predict

Includes comprehensively analyzing large amounts of detailed data to identify high-impact patterns and trends to generate a series of predicted or possible outcomes.

*Synthesize general ledger details for variance analysis and trends*



## Interpret

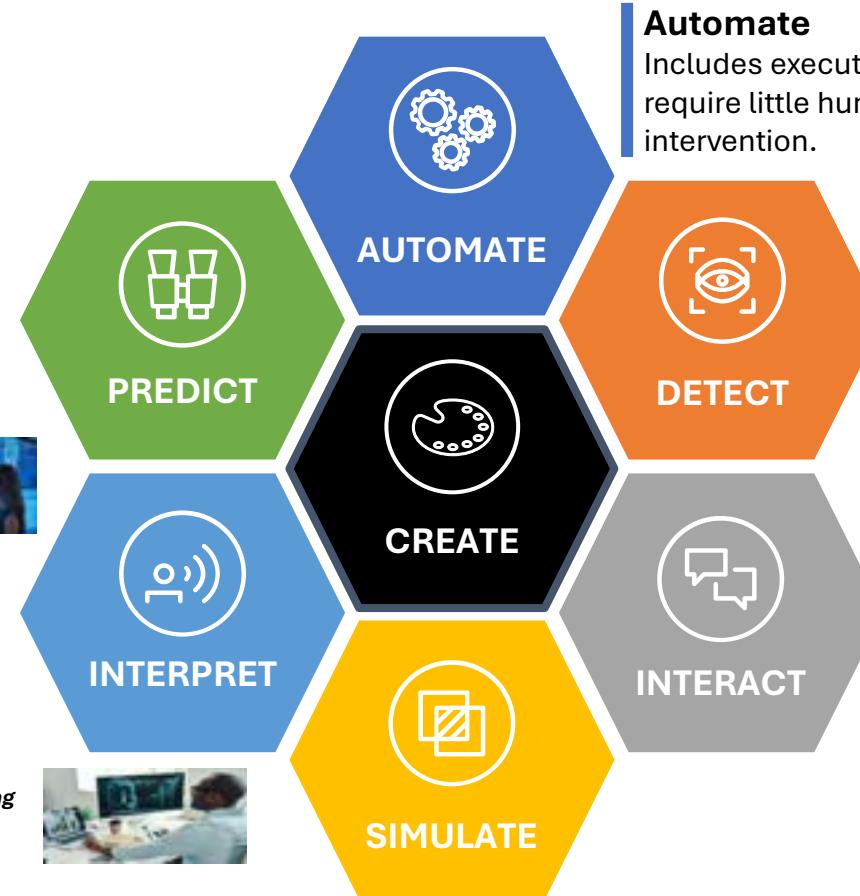
Includes reading documents, converting text and speech into data, and deriving language analysis from that data.

*Digital twin for capital planning scenario comparisons*



## Simulate

Includes creating a virtual representation that serves as a real-time digital counterpart of a physical object or process, a technique called "digital twin."



## Automate

Includes executing processes that require little human judgment or intervention.

*Automate AP processing*



*Detect policy rules in procurement contracts and compare to transactions*



## Detect

Includes identifying objects and patterns through the analysis of documents, pictures, and video streams.

*Use AI chatbot to provide real-time balances based on user role/permission*



## Interact

Includes engaging with humans in real-time, two-way communication, acting as a virtual assistant.

*Create models to test potential effects of proposed policies before implementation*



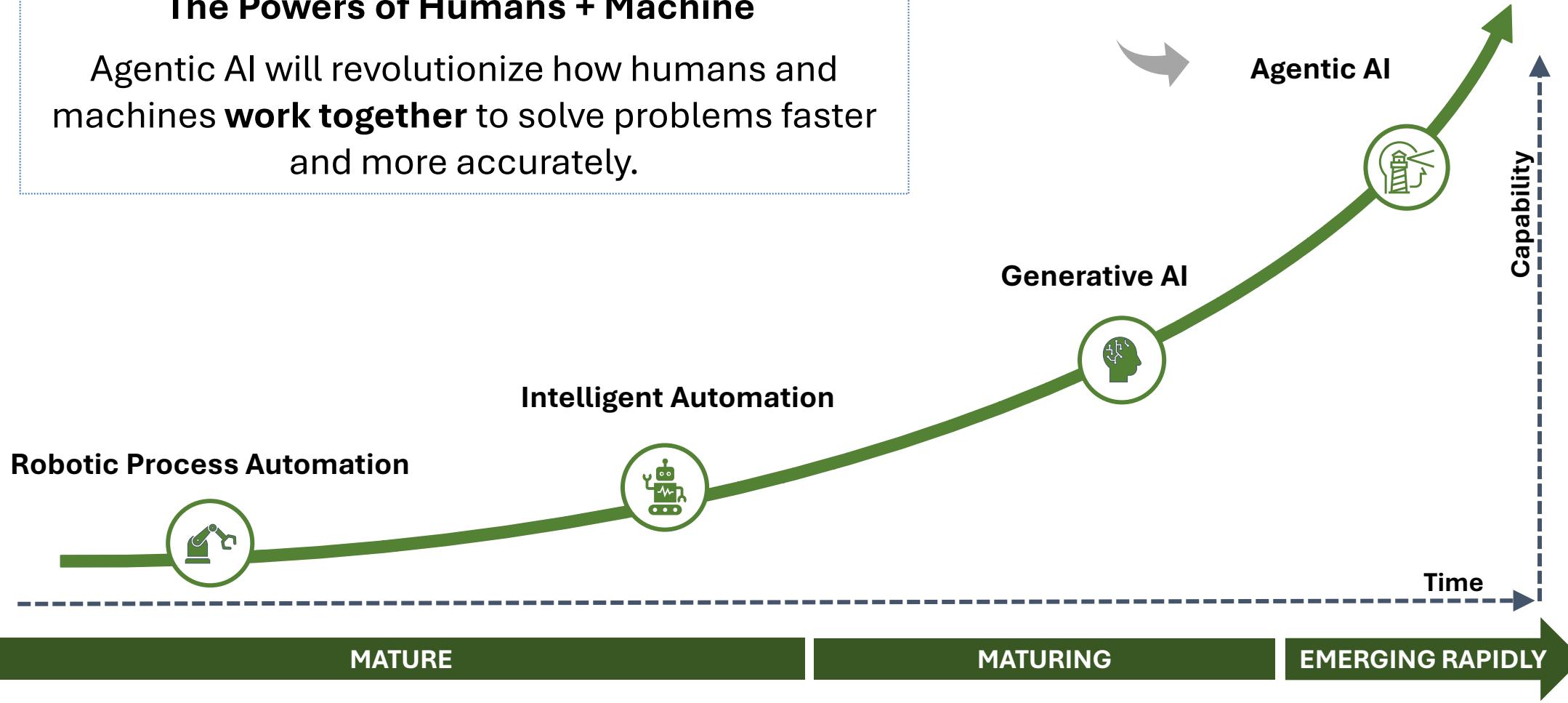
## Create

Includes generative capabilities to create new content in text, images, audio, videos, and simulations.

# AI is Evolving Exponentially

## The Powers of Humans + Machine

Agentic AI will revolutionize how humans and machines **work together** to solve problems faster and more accurately.



# An Overview of Agentic AI

Agentic AI refers to LLM (large language model)-based agents that autonomously navigate complex problems and leverage tools to execute tasks using reasoning, planning, and memory

## WHAT IS AN AI AGENT?

An AI agent is an autonomous entity designed to **perform tasks, make decisions, and interact with its environment** or users to achieve specific goals.

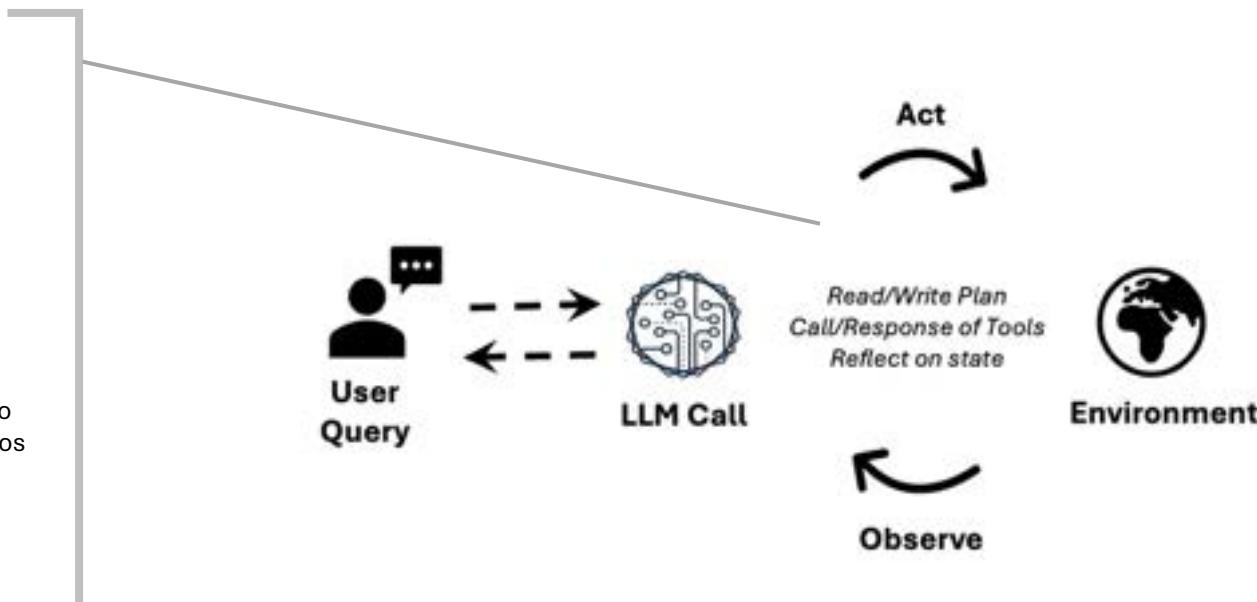
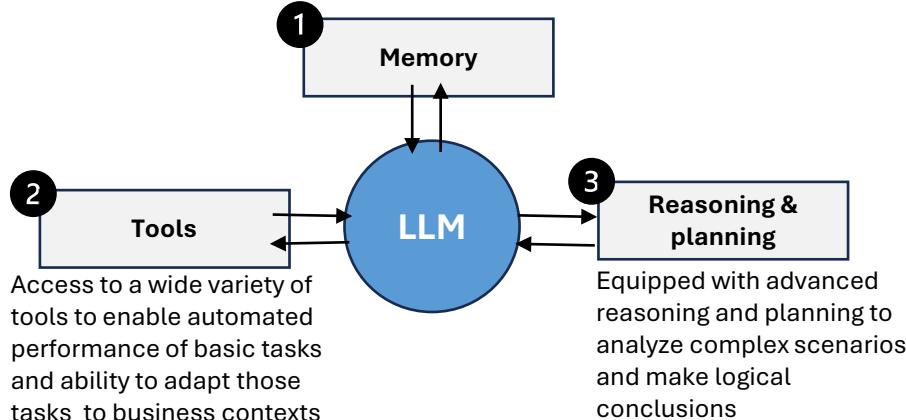
✓ Operates independently with/without human interaction

✓ Uses algorithms with input data/LLMs to make decisions

✓ Capable of learning over time

AI Agents use an LLM to act as a thin layer of orchestration, to **take actions in an environment by making plans and using tools (inc. memory)**. It can reflect on the returned observations to iteratively improve outputs over time.

Agents are designed with a memory system that can store, recall, and process larger amounts of information in real time, enhancing decision making



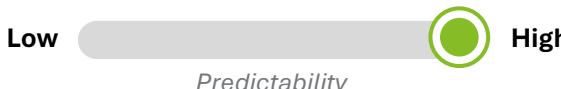
# What Makes AI Agents Different from RPA and Typical LLM Solutions?

To grasp the potential value of AI agents and their role in expanding the automation horizon, it is important to understand how they differ from RPA and language model applications familiar to business leaders today

## Robotic Process Automation (RPA)

A type of technology using software robots, or “bots” to automate rule based, repetitive tasks.

- ✓ Rules-based & deterministic tasks
- ✓ Data entry, transaction processing
- ✓ Routine administrative tasks



### Example

RPA can be used **to automate tasks such as invoice processing** by automatically inputting invoices into an accounting system.

## Large Language Models (LLMs)

AI model capable of understanding, creating, and manipulating human language.

- ✓ Natural language understanding and generation tasks
- ✓ Content creation, summarization, translation, and conversational interfaces



### Example

LLMs (like Chat-GPT4) can be used to **answer questions like “what is the status of my grant application?”**. The LLM answers based on the data it was trained on.

## Agentic

Uses LLMs to enable autonomous decision making and adaptive learning to different situations.

- ✓ Semi/Full/Autonomous decision-making and adaptive learning tasks
- ✓ Ability to connect with existing solutions, data sources, for complex processes



### Example

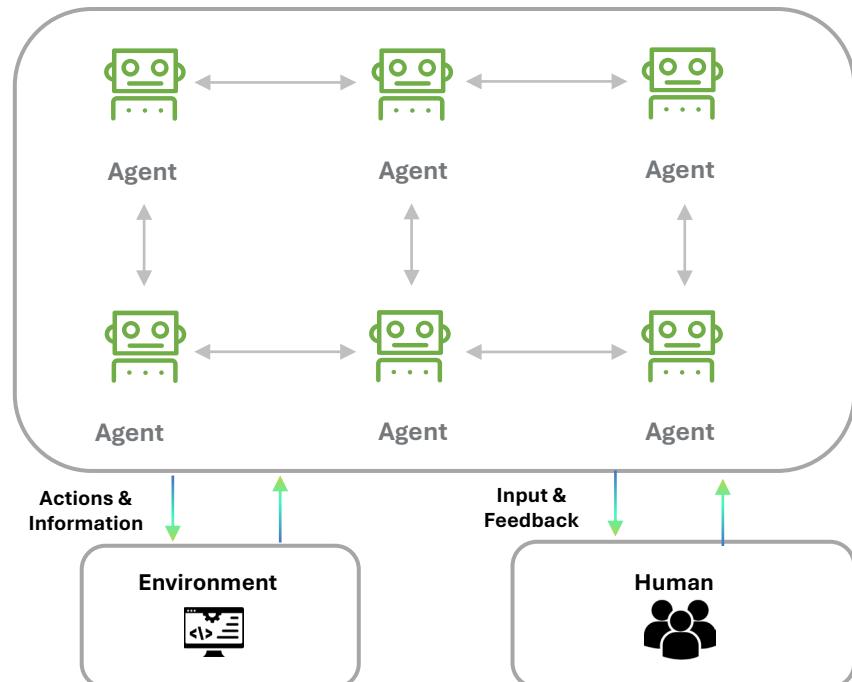
Agentic AI can be used to **automate complaints management** by ingesting a complaint, sending emails based on its contents, and resolving the complaint automatically.

# Multi-Agent Systems

A multi-agent system combines multiple agents by leveraging their individual capabilities and coordinating their actions to complete a certain process.

## Why build a multi-agent system?

A multi-agent flow can be advantageous over a single AI-powered agent because it allows for **distributed problem solving** and can handle **more complex, dynamic environments** due to the interaction between agents.



## Considerations for a multi-agent system:



**Types of Agents:** Multi-agent systems can be comprised of the same type of agents or a variety, including both AI-powered agents and rule-based agents.



**Orchestrator /manager agent:** An orchestrator/manager agent is often a part of a multi-agent flow to control the flow of the agents and decide when they are called to perform their specific tasks.



**Smart Collaboration:** Agents work together, sharing insights with one another and building the overall memory of the multi-agent system.

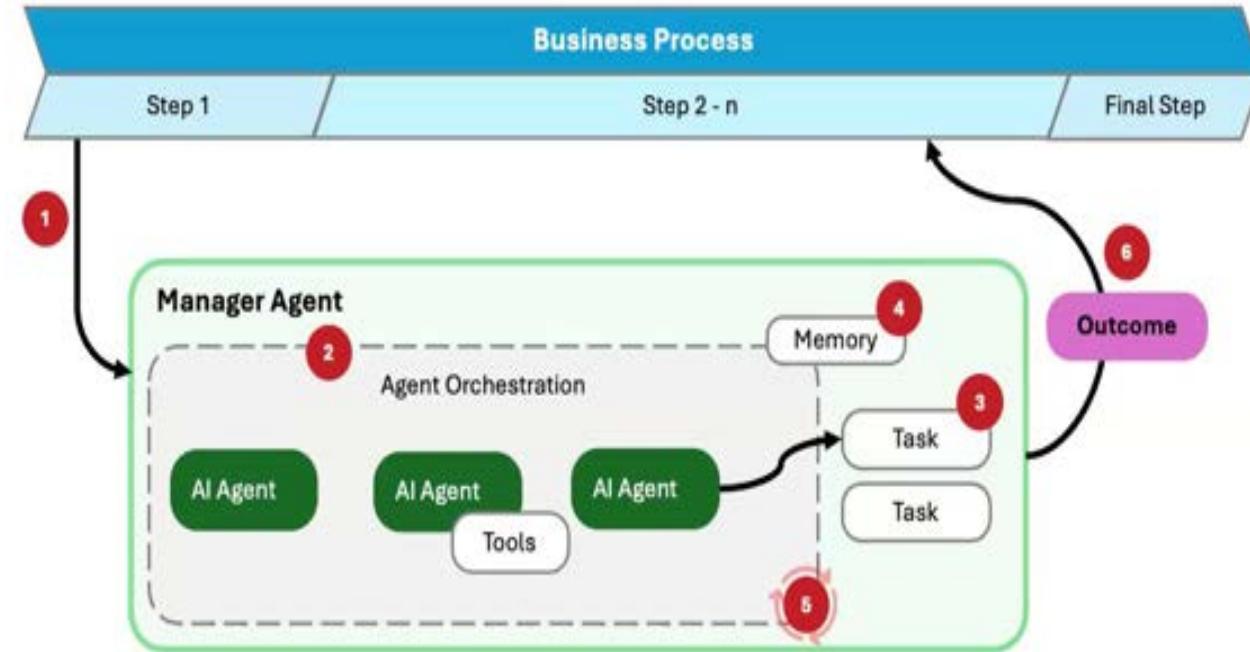


**Human in the loop:** In most multi-agent systems, there is a feature to route complex tasks or failed queries to a human for intervention/resolution.

# Example Multi-Agent Flow

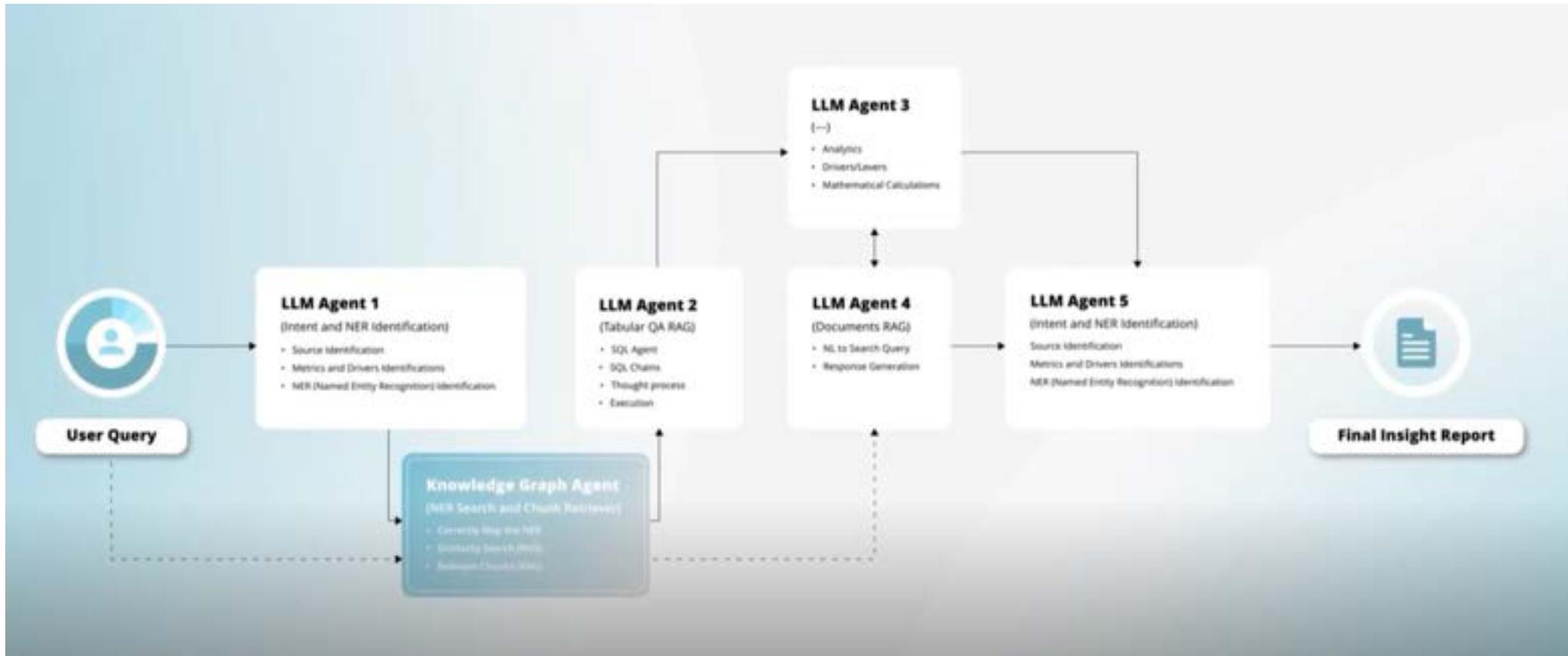
Multi-agents allow better performance on complex tasks using self-contained agents with solution complexity

- 1 Manager agent receives and processes the request
- 2 Manager agent uses reasoning to disaggregate the request to reason & plan its execution
- 3 Manager Agent keeps track of actions and results through memory, ensuring smooth collaboration
- 4 Manager and AI Agents dynamically react and reflect to iterate on results
- 5 Tasks are completed by the agents in their predefined order to achieve the goal.
- 6 The outcome of the multi-agent flow is fed back to the human controlling the business process.

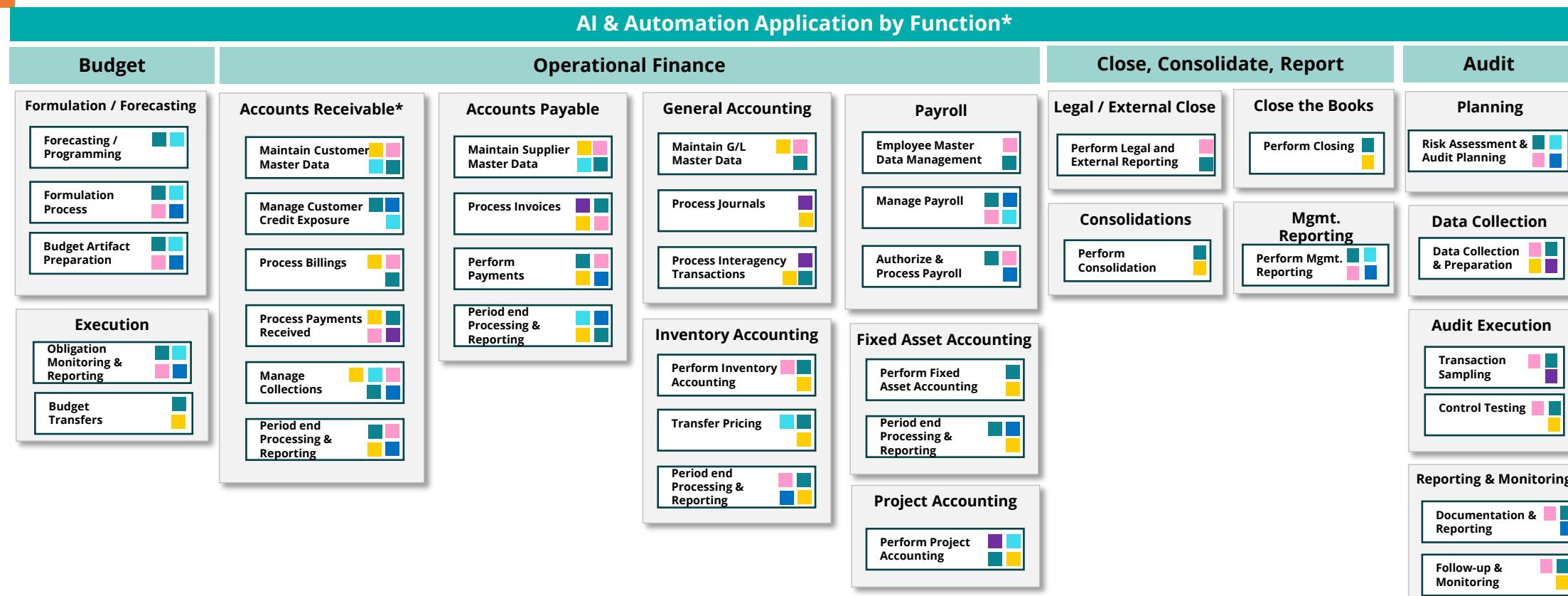


# Illustrative Agentic Demo

The architecture below illustrates a multi-agent approach for financial analysis use cases – one that includes a Knowledge Graph Agent for structured data, in combination with an agent for unstructured data



# Agentic AI in Public Sector Finance & Budget



Technology					
Agentic AI	Generative AI	Robotic Process Automation	Computer Vision	Predictive Analytics	Data Visualization
Autonomous LLM powered Agents; rapid parallel processing	LLM powered applications that understand human language and process multi-modal data efficiently	Follows established rules; follows predetermined paths; deterministic outputs	Rule-based conversion of images, documents or handwriting into machine encoded text	ML model driven analysis; utilizes historical data to predict future trends and outcomes	Transforms complex data sets into visual representations to highlight trends and outliers

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\*Heatmap is non-exhaustive; variations in finance organization structure may influence applicability of each technology

# Why Do We Care? The Value of Agentic in the Public Sector

The value proposition is centered around helping public sector organizations better meet the needs of constituents, employees, and stakeholders to drive efficiency and experience

<u>VALUE CREATION</u>	Program Delivery	Workforce Experience	Operating Effectiveness
	Enhances personalization, accessibility, and responsiveness of services using technologies and data-driven decisions, resulting in real-time, tailored solutions that improve user experience and satisfaction	Provides tools for decision support, reduces mundane tasks, and promotes higher-value, strategic activities, boosting productivity, job fulfillment, work-life balance, continuous learning, collaboration, and innovation	Optimizes resource allocation, streamlines processes, and creates a dynamic operating environment, leading to cost savings, improved service delivery, risk management, and stakeholder engagement
Areas to Apply Agentic	<ul style="list-style-type: none"><li>Customer Engagement</li><li>Constituent Services</li><li>Mission Support</li></ul>	<ul style="list-style-type: none"><li>Training &amp; Development</li><li>Business Operations</li><li>Program Governance</li></ul>	<ul style="list-style-type: none"><li>IT Operations</li><li>Enterprise Performance</li><li>Finance</li></ul>

Agentic AI **drives efficiency and boosts productivity** for government finance and budget organizations by allowing options to automate a string of processes typically performed by humans. This could free up valuable human time to focus on higher-value and more complex tasks.



# AI Integration In Army HR

JAN 2026



U.S. ARMY

# The United States Army By the Numbers

- ❑ **TOTAL ARMY PERSONNEL:** 1,005,000 Soldiers + 265,000 Civilians = 1.23M Personnel
- ❑ **Active Component:** 453,000
- ❑ **Army National Guard:** 328,000
- ❑ **US Army Reserve:** 188,700
- ❑ **Headquarters, Department of the Army (HQDA):** 2800
- ❑ **US Army G-1 and ASA(M&RA) (Chiefs of Personnel):** 800
- ❑ **Data Scientists:** ~100

# Mission: Providing Agent-Driven, Soldier-Centered Tier-Zero ADMINISTRATIVE Service

## **Empowering Soldiers**

The mission focuses on giving soldiers immediate access to essential HR services, enhancing their autonomy.

## **Intelligent Agent Platform**

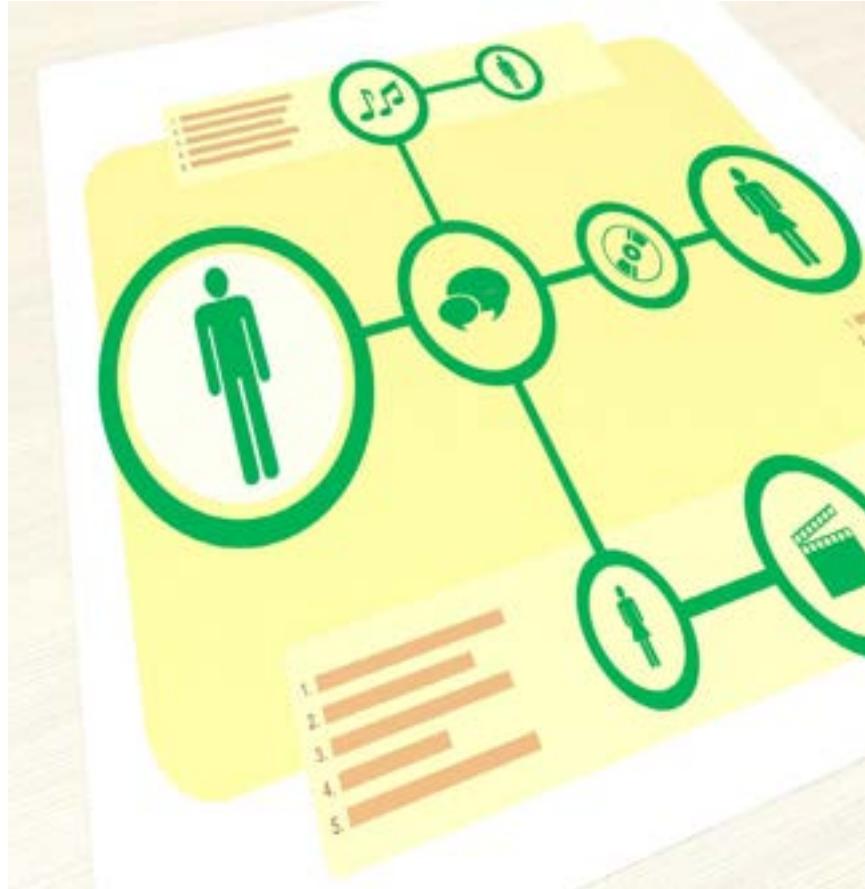
An intuitive AI-driven platform provides seamless HR information and transaction support without delays.

## **Eliminating Intermediary Delays**

The platform removes intermediaries to streamline HR service delivery, ensuring quick and efficient responses.



# Scope: Coverage of Regulations, HR Transactions, TRAINING, LEARNING, and the Overall Soldier Experience



## Up-to-Date Regulations

The platform provides the latest regulations to ensure compliance and informed decision-making within administrative management lanes.

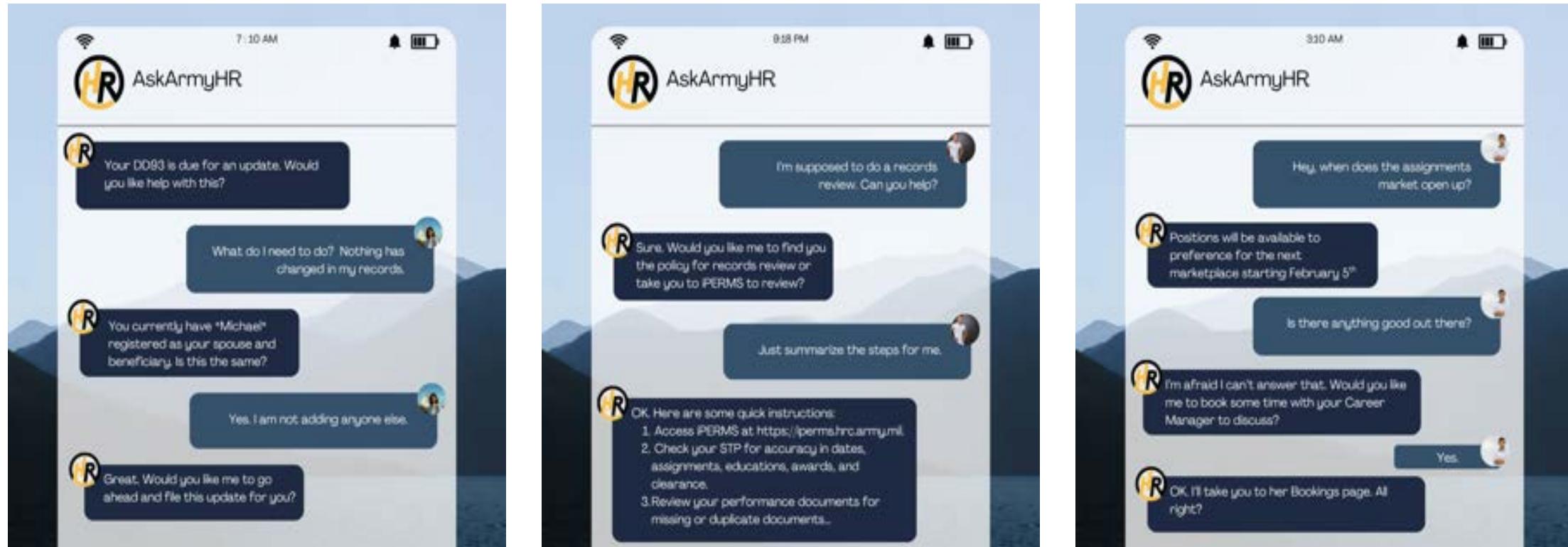
## End-to-End Transactions

Supports comprehensive processing of all Soldier transactions across manpower and personnel domains to streamline administrative tasks efficiently; a necessity with multiple commands, multiple systems, and multiple decision authorities.

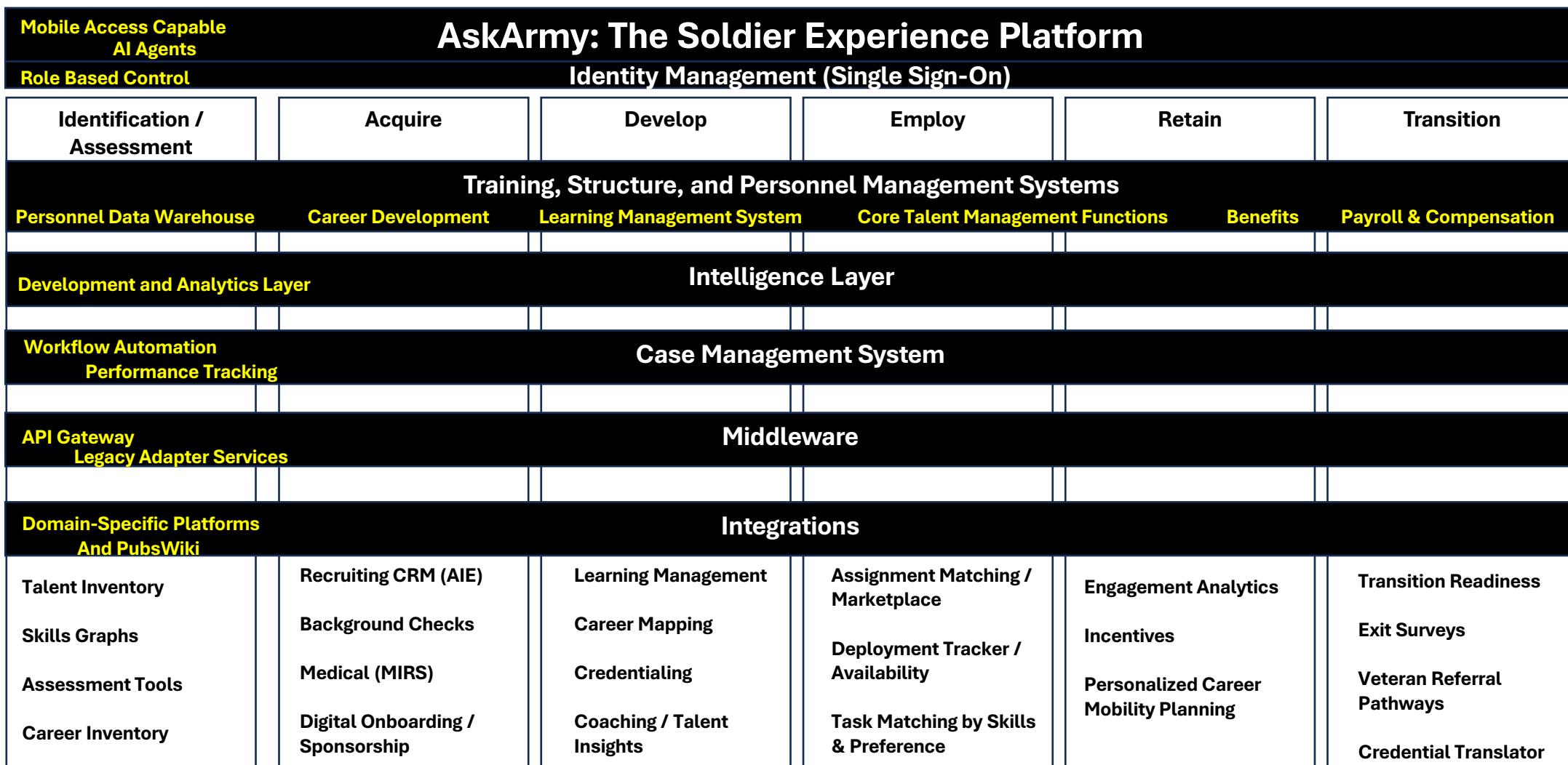
## Enhanced Soldier Experience

Focuses on improving the overall Soldier Experience by providing accessible, comprehensive information and agentic services tailored to their needs.

# Examples Illustrating Soldier Use Cases

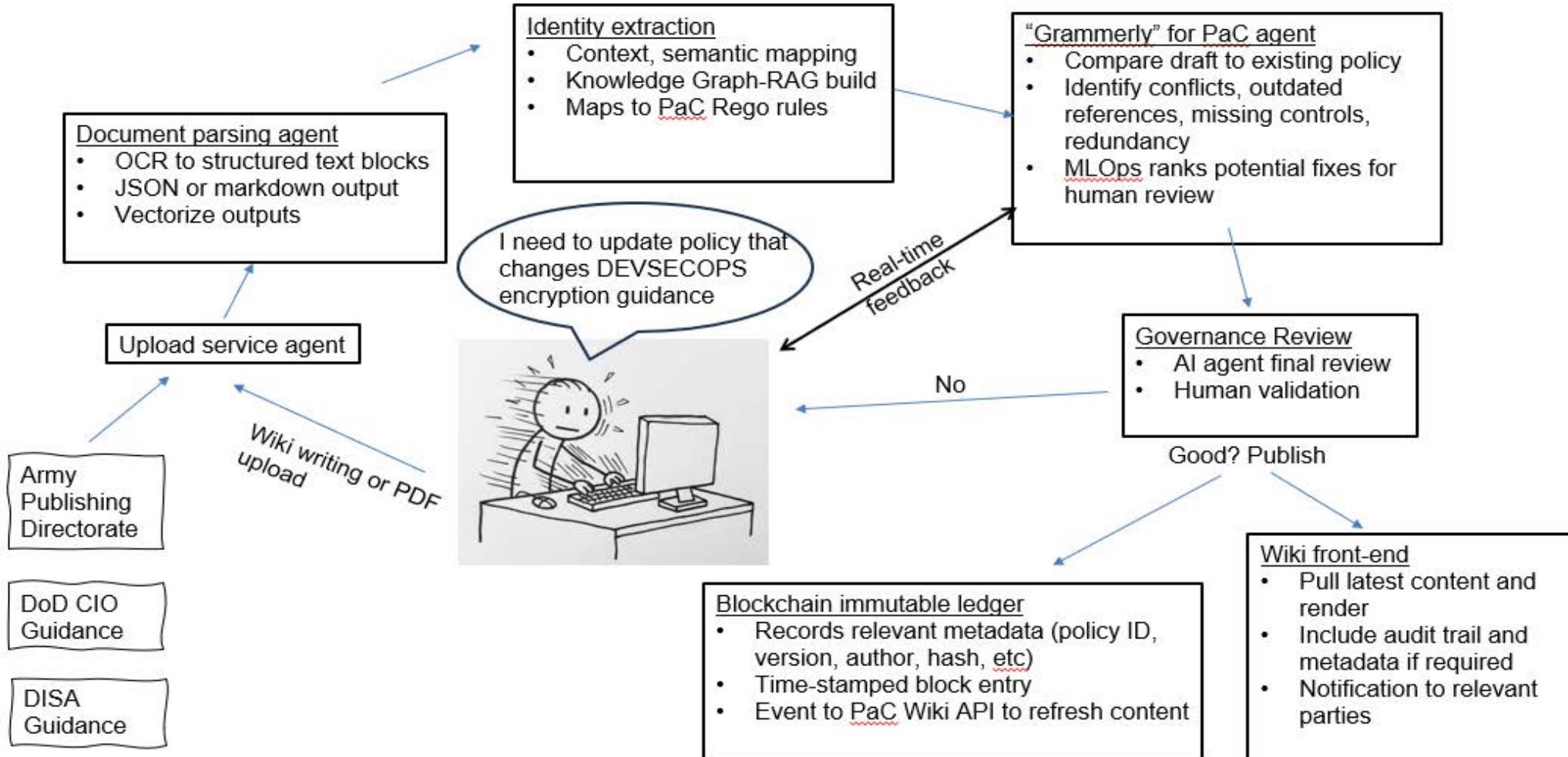


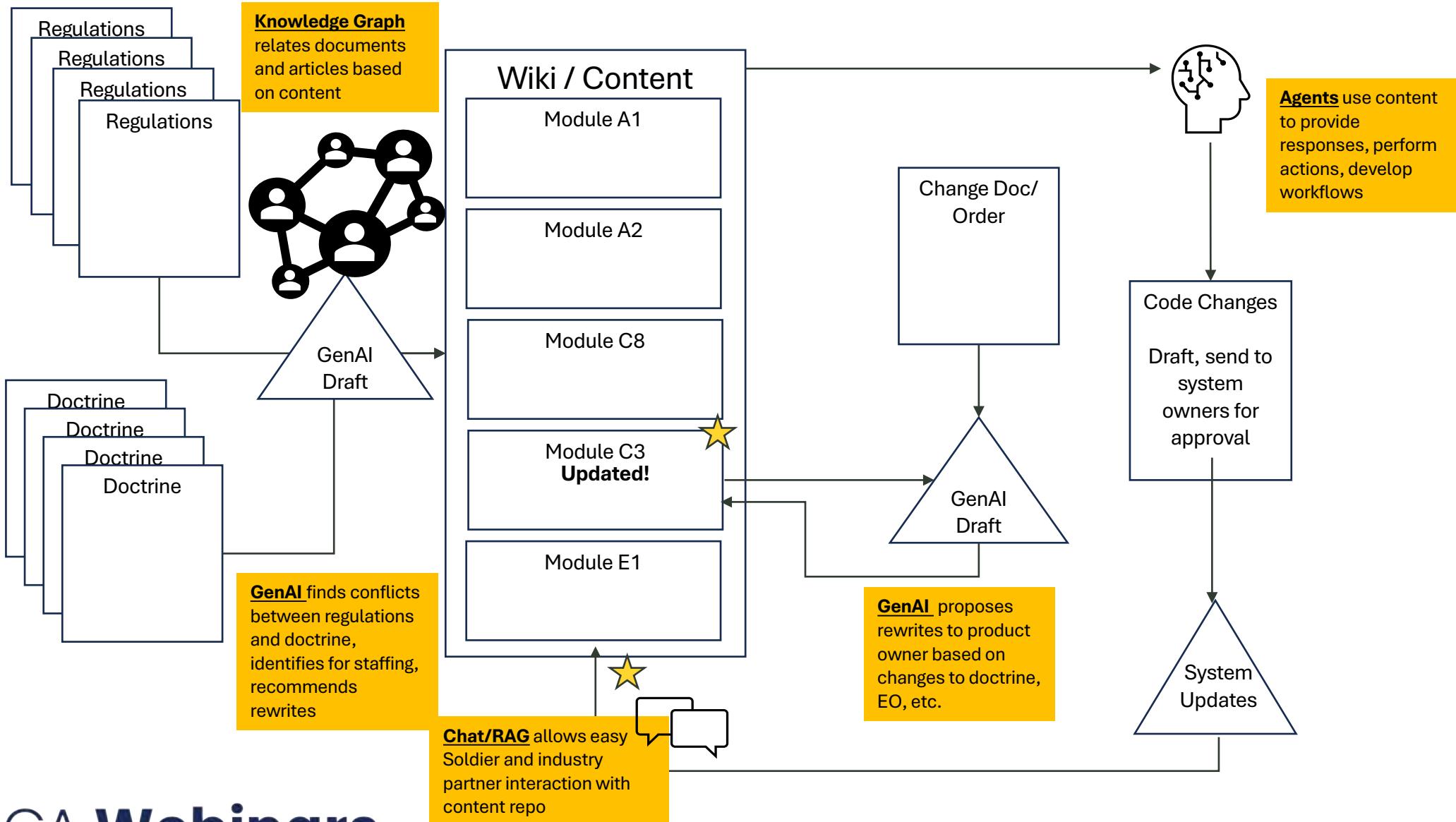
# Notional Solider Experience Tech Stack



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# Policy as Code (PaC) Workflow Use Case





# Eliminate, Simplify, Automate, or Elevate

## ✓ Zone of Genius: Human in the Lead

This is where you should spend the majority of your time in your role. AI should buy you back the time and clarity to focus here.

## ✓ Zone of Excellence: Augment and Co-Pilot

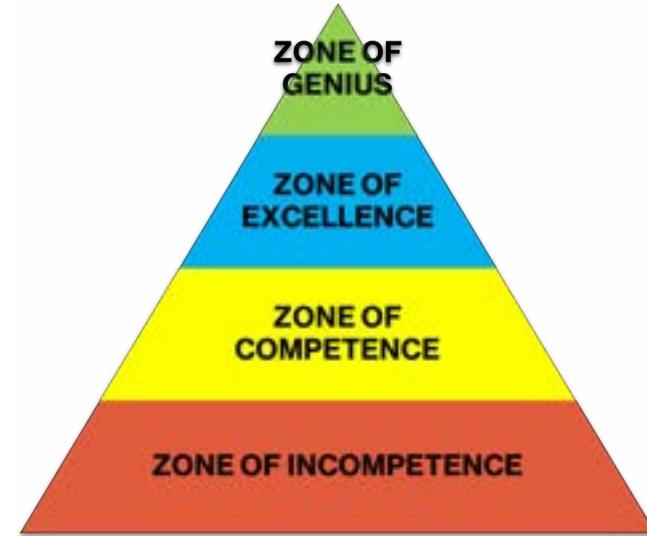
AI can be your ally here by helping you scale your skills or cut down the time it takes to do these tasks. You're still involved, but not in a grinding, repetitive way.

## ✓ Zone of Competence: Automate with Oversight

These are all repeatable, rules-based tasks that AI can do quite well—often faster, and at scale. But because they may still require a layer of human context or judgment, we shouldn't eliminate them entirely. Instead, we should use AI to automate and then do quality checks with humans.

## ✓ Zone of Incompetence: Eliminate and/or Simplify Tasks

Use AI here to eliminate waste and reduce risk. If humans aren't good at it, and the work itself isn't adding strategic value, it's a perfect place for machines to step in.



■ **Zone of Genius** – Work that is uniquely yours to do, where your natural talent and deep passion intersect.

■ **Zone of Excellence** – You're good at it, and others recognize it, but it may not energize you.

■ **Zone of Competence** – You can do it, but it's not special or unique to you.

■ **Zone of Incompetence** – You're not good at it, and others can do it better.

# Measuring Success: Key Areas

## COST REDUCTION

Direct savings from using AI to automate tasks, streamline workflows, or reduce manual labor — saving time, money, and manpower.

## COST AVOIDANCE

Prevents future expenses by eliminating errors, rework, or delays — reducing the time leaders and staff spend troubleshooting avoidable problems.

## PRODUCTIVITY GAINS

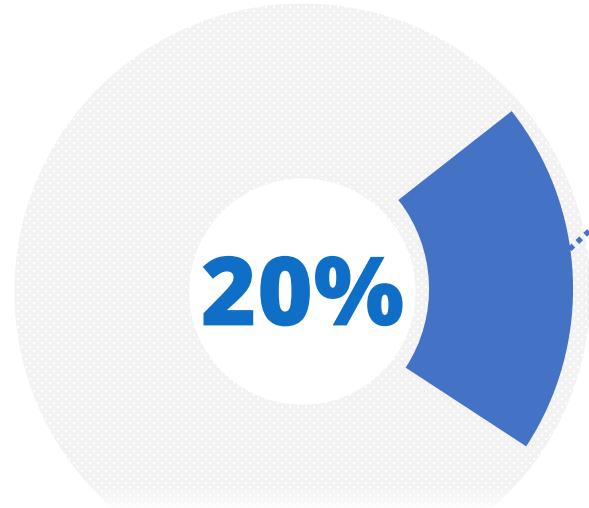
Translates time saved into dollarized value — quantifying the increased output or improved decision speed enabled by AI-enhanced processes.

# Agentic AI at FDA

Venu Boppana, FDA CDER Strategy & Innovation Leader

The views and opinions presented here represent those of the speaker and should not be considered to represent advice or guidance on behalf of the U.S. Food and Drug Administration

# FDA At A Glance



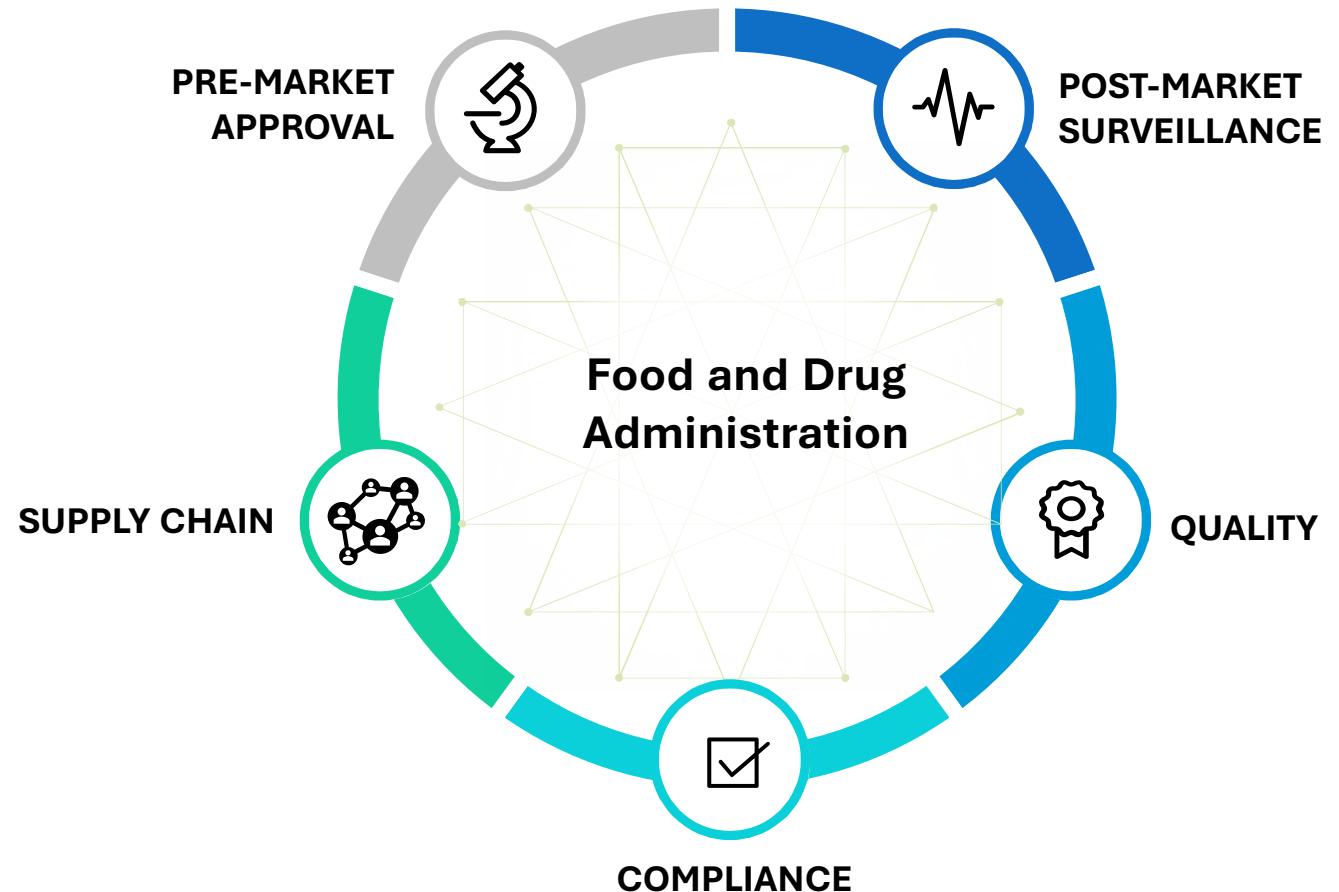
of U.S. consumer spending is on  
**products that FDA regulates**

FOOD  
DRUGS  
BIOLOGICAL PRODUCTS  
MEDICAL DEVICES  
COSMETICS  
TOBACCO  
ANIMAL HEALTH  
INSPECTION & ENFORCEMENT



# FDA's Mission

*FDA protects and advances public health by ensuring the safety, efficacy, and security of medical products, food, and other regulated commodities while fostering innovation and providing science-based information to consumers.*

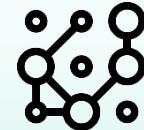


# Growing Challenges

Challenges that impacted across business areas necessitated **improved data & analytics modernization at an enterprise level** to replace the legacy siloed on-prem systems



Increased Number of Submissions



Growing Regulatory Complexity



Siloed Data

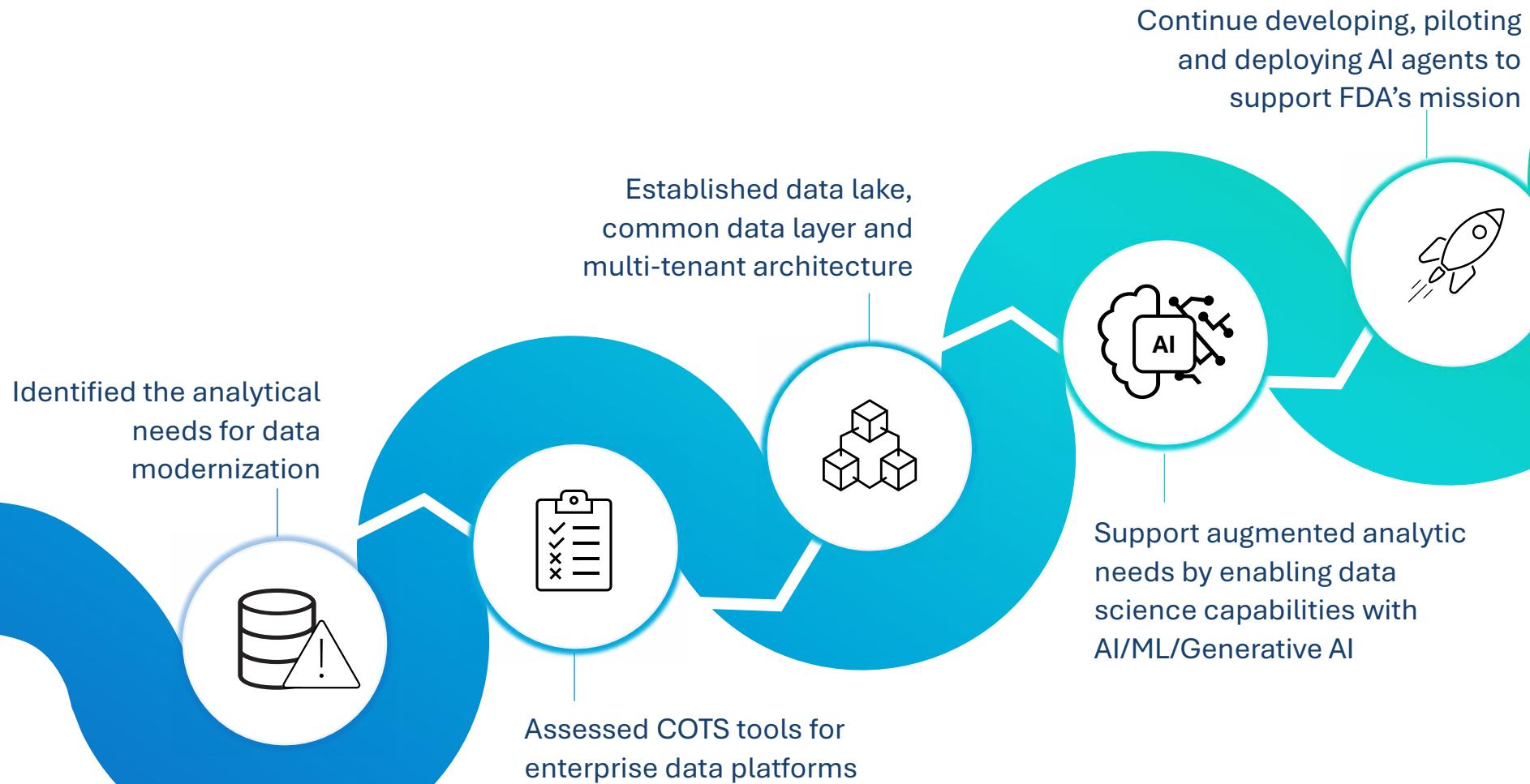


Need for self service capabilities

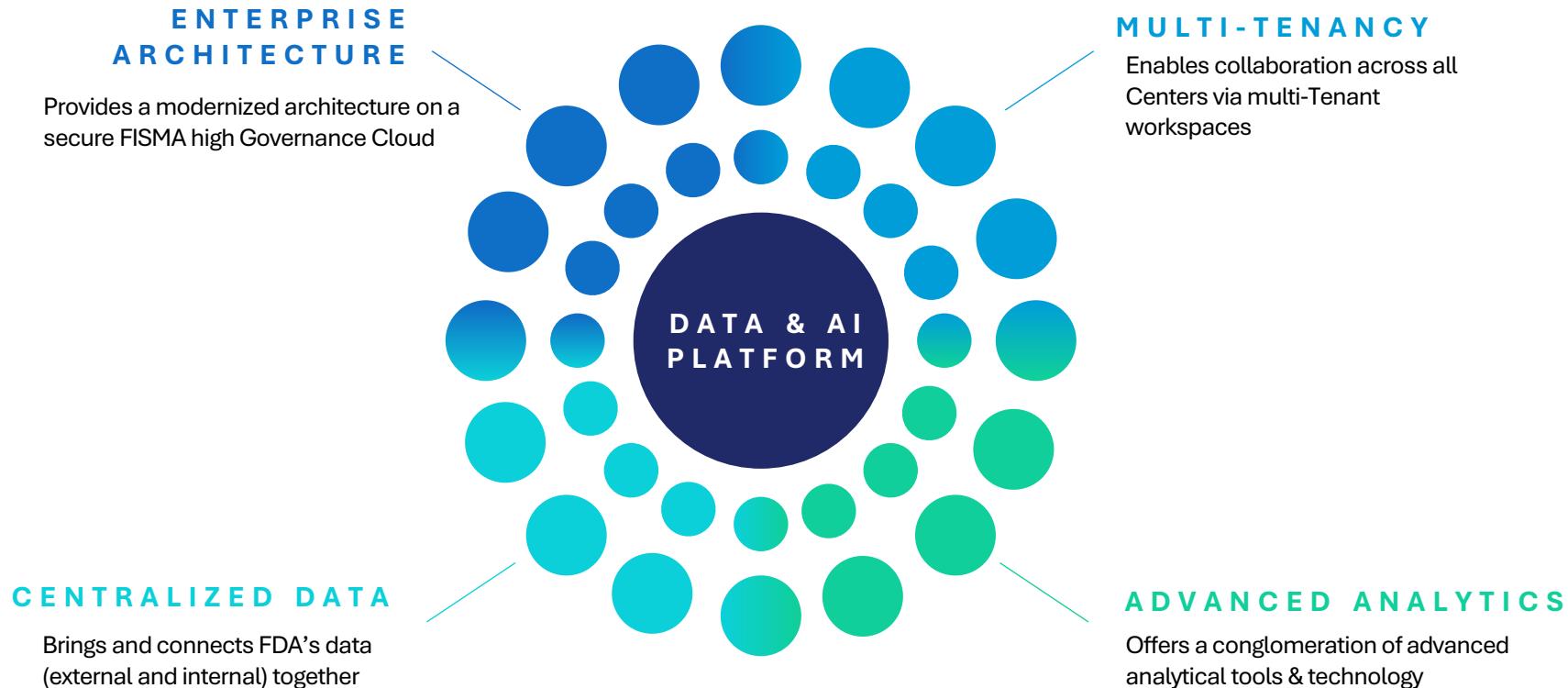


Need for AI capabilities

# FDA's Journey

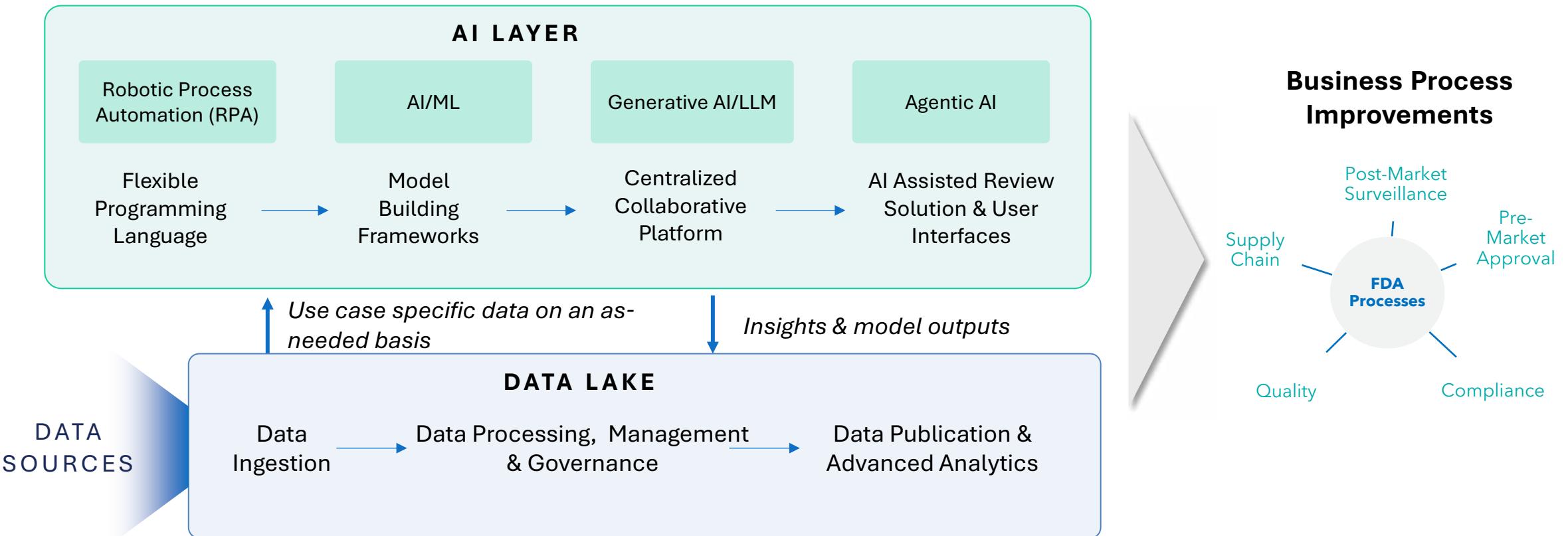


# Data and AI Platform



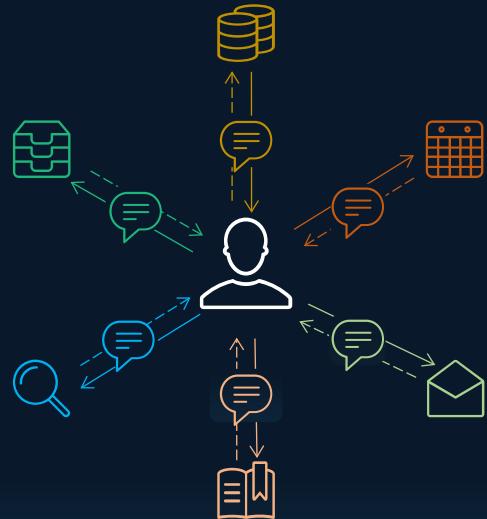
# Data Lake and AI Layer

The AI layer, built on top of the data layer, encompasses the tools and technologies that are made available to data scientists.



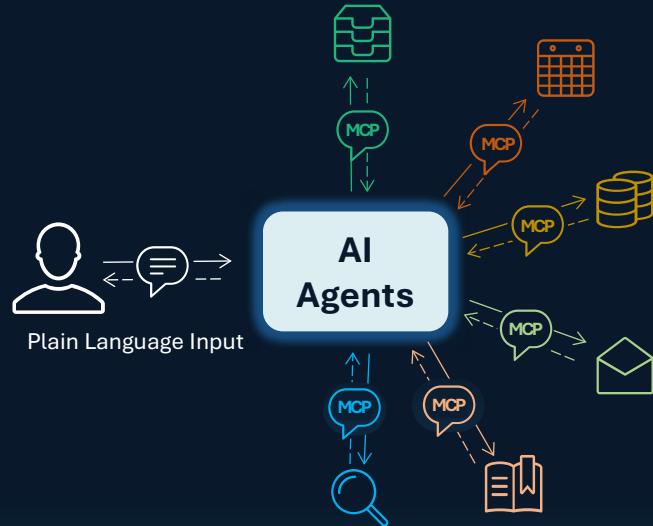
# Agents Can Shift the User Experience Paradigm

## OLD PARADIGM



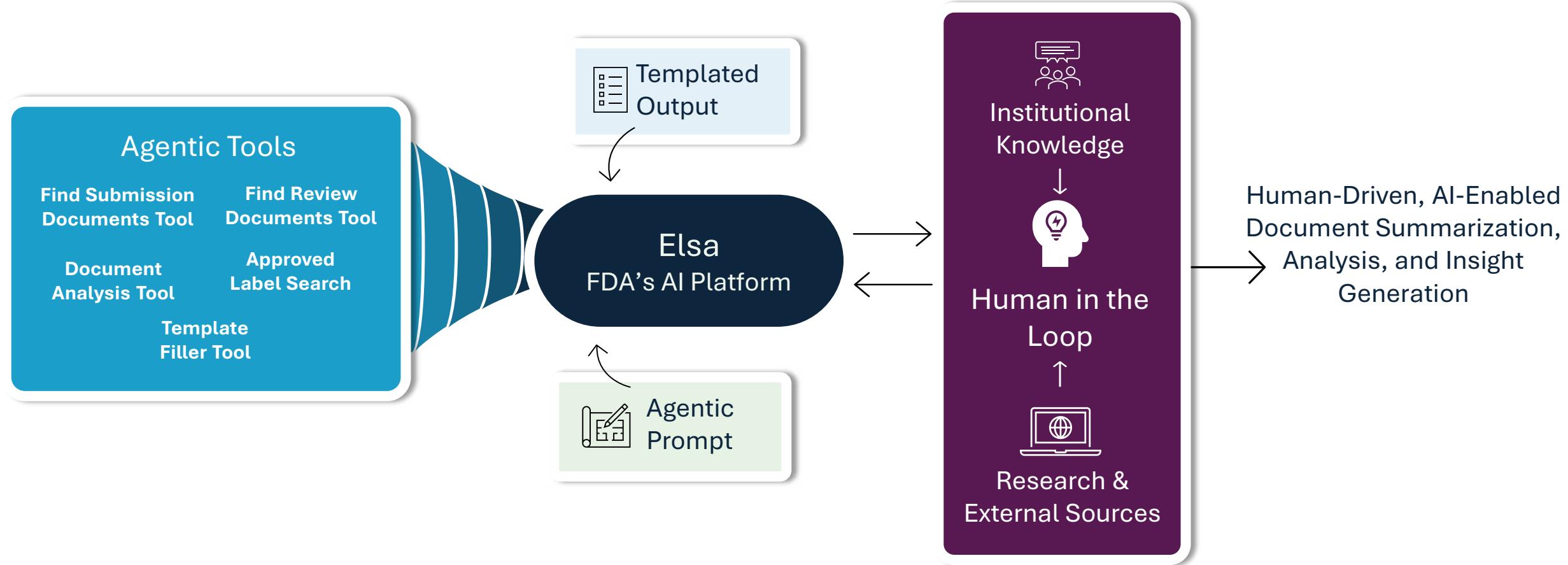
*Siloed systems require users to “speak the language” of each system, causing **barriers to locating critical data***

## NEW PARADIGM

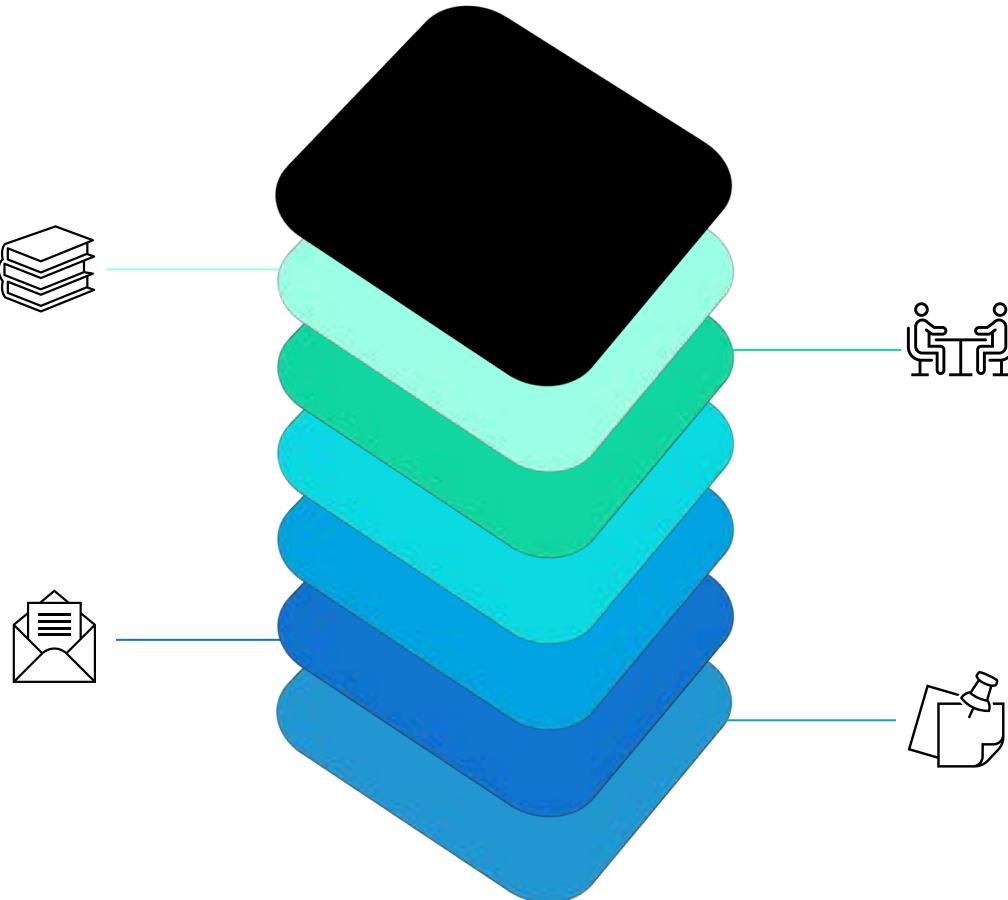


*Users could **access information through plain language queries**, leaving the “system translation” to AI, via agentic tools*

# Reg Review Use Case 1 Agent Design



# Multi-Pronged Approach to Drive Agency-Wide Adoption



## Comprehensive Training Strategy

Implemented FDA-wide **webinars**, virtual **office hours**, and **walk-in clinics** to meet diverse AI literacy levels across the agency



## Leadership Sponsorship

Created **executive announcements**, **management communications**, and Center/Office **communications tool-kit** to drive engagement and trust from a center/office level



## Peer-to-Peer Learning Networks

Established a **Champions Program** connecting users across Centers/offices, **innovation community of practice** to accelerate organic adoption and the **Agentic AI Innovation Challenge** to showcase the potential of agentic AI



## User Resources

Developed training materials including **FAQs**, **user guides**, and **micro-training videos** to support self-service adoption and ongoing learning



# Lessons Learned



## Expectation Management Is Paramount

Clear communication about capabilities and limitations **prevents trust erosion** from poor first interactions



## AI Literacy Varies Dramatically

Diversity AI knowledge and appetite requires **tailored training approaches**, ranging from foundational education to supporting innovation



## Transparency Builds Trust

Showing the AI's **thought process, not just outputs**, was transformative for building confidence in regulatory work requiring traceability



## Business Users Drive Innovation

Employees closest to the work **create the most impactful solutions**, empowering users and establishing governance for buy-in is essential



## Start Now, Don't Wait

Organizational **transformation takes time**. Building frameworks and processes positions earlier positions organizations rapidly adopt future AI advances

# Fireside Chat



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# Open Q&A and Closing Remarks

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# References/Academic Links Related to AI – Trends/Usage

- [OMB Memo M-25-21](#)
- [NIST AI Risk Management Framework](#)
- [GSA's USAI.gov](#)
- [CIO.gov Use Case Repository \(2024\)](#)
- [DHS AI Use Case Library](#)
- [HHS AI Use Cases Inventory](#)
- [GAO Report: Generative AI Use and Management at Federal Agencies \(2025\)](#)
- [CFA Institute Explainable AI in Finance: Addressing the Needs of Diverse Stakeholders](#)
- [PMI Certified Professional in Managing AI \(PMI-CPMAI\)](#)
- [IAPP AIGP: Artificial Intelligence Governance Professional](#)

# Thank You for Participating!

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