LSA DIGITAL
Lean Scaled Architects

CASE STUDY

U.S. Office of Personnel Management

# BETTER, LOWER COST CYBERSECURITY WITH DATA-DRIVEN AGENTIC AI

## CONTEXT

The U.S. Office of Personnel Management was facing a major personnel reduction-in-force, impacting their IT and other operational agencies. There was less IT staff capacity available for development, operation and maintenance of systems, introducing potential cybersecurity risk.

## CLIENT CHALLENGE

OPM needed a solution to plan and develop practical Human-AI solutions, leveraging existing IT planning solutions data to maximize the contribution of remaining staff. However, the IT planning solution (Alfabet EA) did not yet have good quality data, and IT equipment and software were at risk of missing critical patches and updates -- introducing potential cybersecurity risk

## SOLUTION

We used a simple "Goals-Questions-Metrics" approach to consider the important metrics needed to prove success.


This approach shows leadership provides the goals, OPM asked the questions, and OPM & IT leadership agreed on "measures of success" – for example, cybersecurity incidents should not increase with a lower number of human FTEs.

## SNAPSHOT

Agentic AI, Enterprise Architecture & ITSM

US Government

Alfabet EA + ARIS + n8n

## PAIN POINTS

- Staff IT positions were reduced, resulting in fewer people to do IT maintenance
- Some systems were higher priority to patch than others because of critical security vulnerabilities, but it was difficult to track and respond to changing conditions (e.g., "zero-day vulnerability")

## KEY BENEFITS

- Better cybersecurity assurance with prioritized system patching
- Optimized processes fully utilize human value contribution
- Scalable approach using Alfabet & ARIS for larger, more complex solutions

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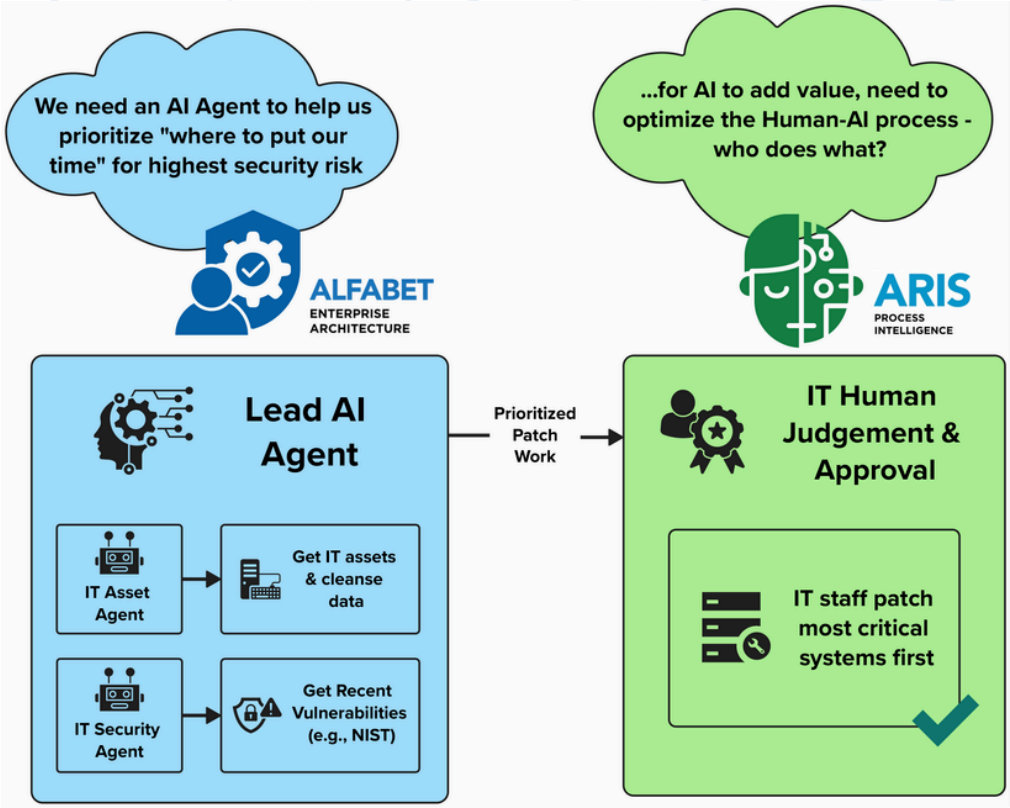
## WHAT WE DID

We leveraged key Enterprise Architecture (EA) & Process Intelligence (PI) tools to optimize a better "Human-AI" process - that is, to answer the question: What should Humans do, and what should AI do?

The "Alfabet" tool was setup and configured to store IT asset data to perform better value analysis and future-state technology planning.




This data was not always correct, so an AI "IT Asset Agent" was designated to collect and clean data, so that an IT Security Agent could compare the assets to "zero-day" vulnerability databases to check for security vulnerabilities. When key assets were shown to have high security vulnerability risk, they were ranked higher for prioritized patching recommendations.

The IT maintenance process was visualized and optimized using ARIS Process Intelligence software, showing critical points where a human needed to provide expert judgement, or where the AI Agent could perform tasks autonomously.

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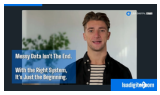
## WORDS OF ADVICE

For practical AI solution outcomes, focus on the goals, ask the right questions, and measure the right outcomes. To improve processes that strike the right Human-AI balance, it's important to know what the humans are *actually* doing today, so invest in technologies and techniques to "mine" processes to inject better AI value. In the end, this will help improve the outcome measures.

See our 5-minute demo video!



https://lsadigital.ai/itpatch