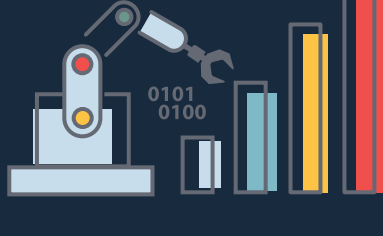# THE RISE OF AI:
Impact on Federal Missions

Federal agencies are utilizing their treasure trove of data by adopting artificial intelligence (AI), machine learning, and deep learning to tackle critical workloads, respond to citizen requests, drive innovation, and much more.

Where is AI making an impact today?

What do agencies need to lay the foundation and prepare for the rise of AI?

All in on AI

The federal government's investment in unclassified R&D for AI and related technologies has grown by more than **40% since 2015**[1]

68% of federal executives say their agency will invest in AI over the next year[2]

Beyond the Pilot

Feds are using AI to:

Improve predictions:
"[The] Department of Energy's self-learning weather and renewable forecasting technology uses machine learning, sensors, cloud-motion physics, and satellite observations to improve solar forecasting by 30%"[3]

Automate services:
"On the U.S. Army website, an interactive virtual assistant does the work of 55 recruiters...the system uses machine learning to improve recognition and helpful responses, with an accuracy rate of over 94%"[3]
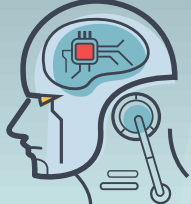
Improve cybersecurity:
"The Department of Homeland Security has piloted AI tools for detecting cyber network intrusions and malicious activities"[4]
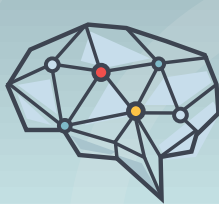
Educate employees:
"The Defense Advanced Research Projects Agency developed a digital tutor for computer skills learning that led to unprecedented performance by Navy students in training assessments"[4]
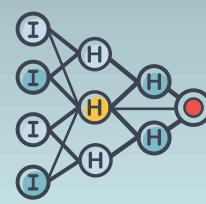
Challenges with AI Adoption

Top challenges[5] preventing AI adoption:

Technology and data

Workforce

Risk management

What More Do We Need?

Outside of funding, feds' top requests[6] are:

1 Formal guidance/policy on AI adoption

2 Formal federal guidance or policy on usage

3 Updated infrastructure to support the technology

4 Increase in skilled IT professionals

5 Support from executive leadership

Major Opportunity Ahead

Automation[7] could save feds

96.7 million hours
or
$3.3 billion conservatively,

— with the potential to save up to —

1.2 billion hours
or
$41.1 billion

Learn More
https://www.dellemc.com/ai

1 https://www.whitehouse.gov/briefings-statements/artificial-intelligence-american-people/
2 https://www.slideshare.net/accenture/technology-advances-federal-impacts?ref=https://www.accenture.com/us-en/insights/us-federal-government/federal-tech-vision-five-trends-shaping-government?src=SOMS
3 https://www2.deloitte.com/content/dam/insights/us/articles/3832_AI-augmented-government/DUP_AI-augmented-government.pdf
4 https://washingtontechnology.com/articles/2018/05/15/insights-berteau-ai-trends-opportunity.aspx
5 IBM Center for The Business of Government – Delivering Artificial Intelligence in Government: Challenges and Opportunities
6 MeriTalk – The Federal Cyber AI IQ Test
7 Deloitte – AI-augmented Government: Using Cognitive Technologies to Redesign Public Sector Work