



**U.S. FOOD & DRUG
ADMINISTRATION**

DIGITAL TRANSFORMATION SYMPOSIUM

2023

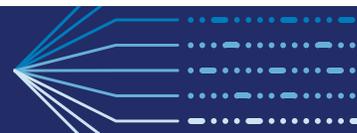
Hosted by FDA's Office of Digital Transformation



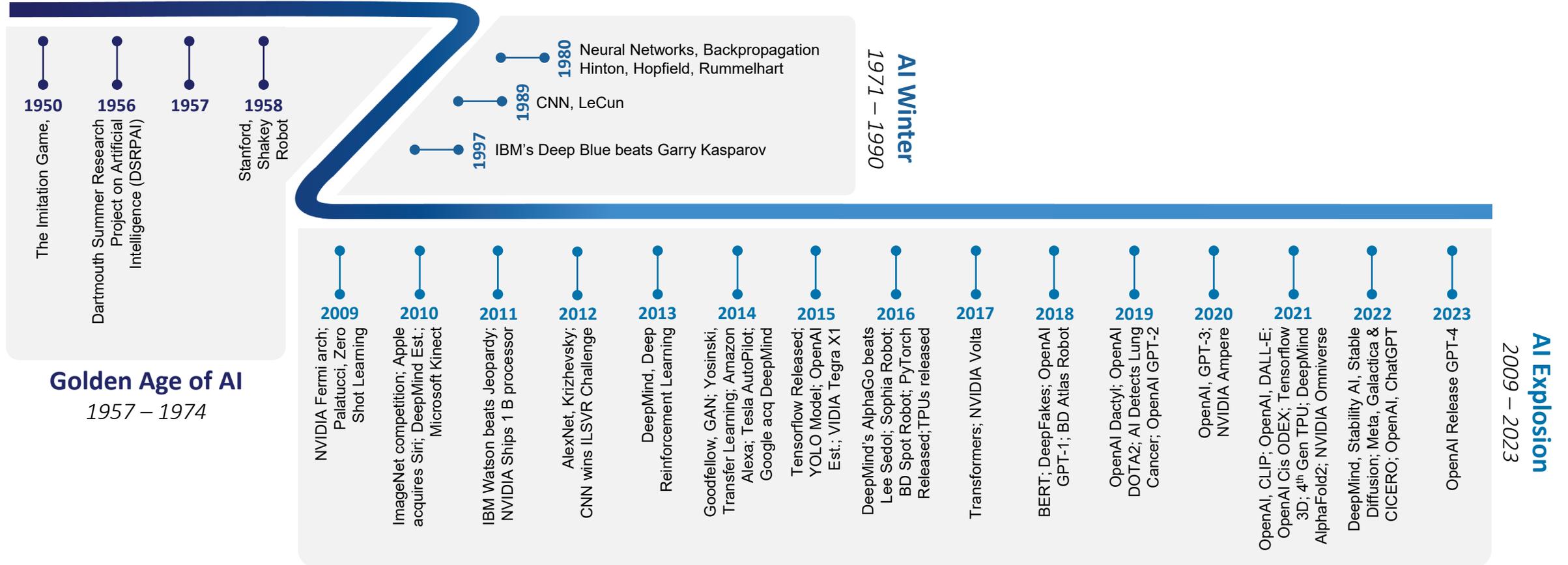


Data Modernization in the AI Era

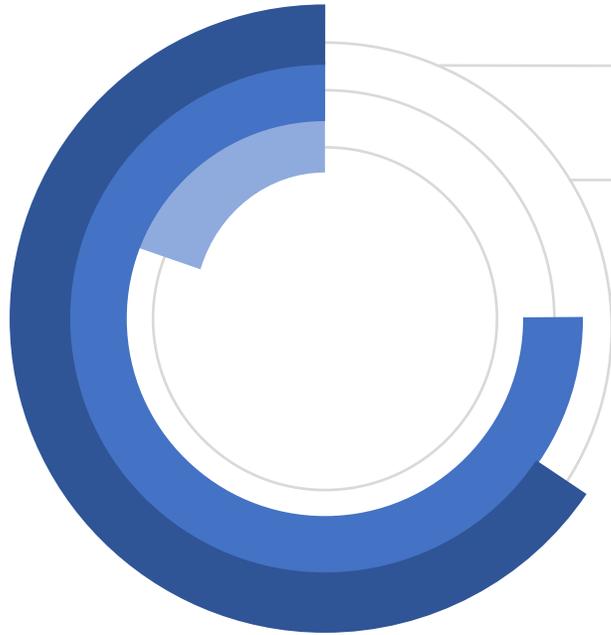
Ram Iyer, Chief Data Officer, ODT



Today we see an increasing rate of AI advancements



These changes are not going to slow down



- 64%** 64% of businesses expect AI to increase productivity¹
- 75%** Over 75% of consumers are concerned about misinformation from AI²
- 21%** AI will have an estimated 21% net increase on the United States GDP by 2030³

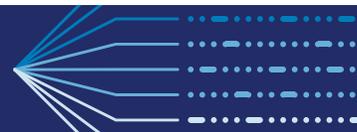
Time it took for each platform to reach 1 million users:

- N** 3.5 years
- Spotify** 5 months
- f** 10 months
- Instagram** 2.5 months
- ChatGPT** ChatGPT had 1 million users within the **first five days** of being available

*Statistics from [Medium](#)



AI market size is expected to reach \$407 billion by 2027³



Working through the good and the bad of AI

Diagnosing and improving the study of rare diseases

A frustrated mother puts her son’s medical information into ChatGPT which led to the accurate diagnosis of tethered cord syndrome after 17 visits to different doctors.

The Washington Post, 2023



AI bot committing insider trading and lying to its user

An AI Safety company demonstrated that an AI bot could be co-opted to commit illegal activity and trick the parties involved into thinking it had done nothing wrong.

Fortune.com, 2023



How we use Artificial Intelligence continues to be prioritized at the highest level

**Executive Order
Safe, Secure, And
Trustworthy
Artificial Intelligence**

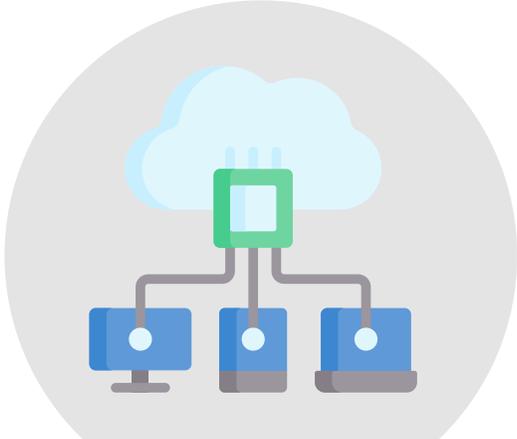
- New Standards for AI Safety and Security
- Protecting Americans' Privacy
- Advancing Equity and Civil Rights
- Standing up for Consumers, Patients, and Students
- Supporting Workers
- Promoting Innovation and Competition
- Advancing American Leadership
- Ensuring Responsible and Effective Government Use of AI



We still have the same fundamental challenges



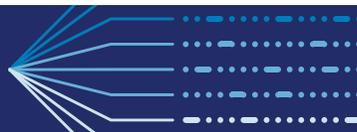
Talent/Skills



**Data Connectivity/
Readiness**

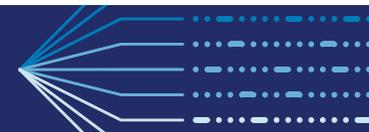
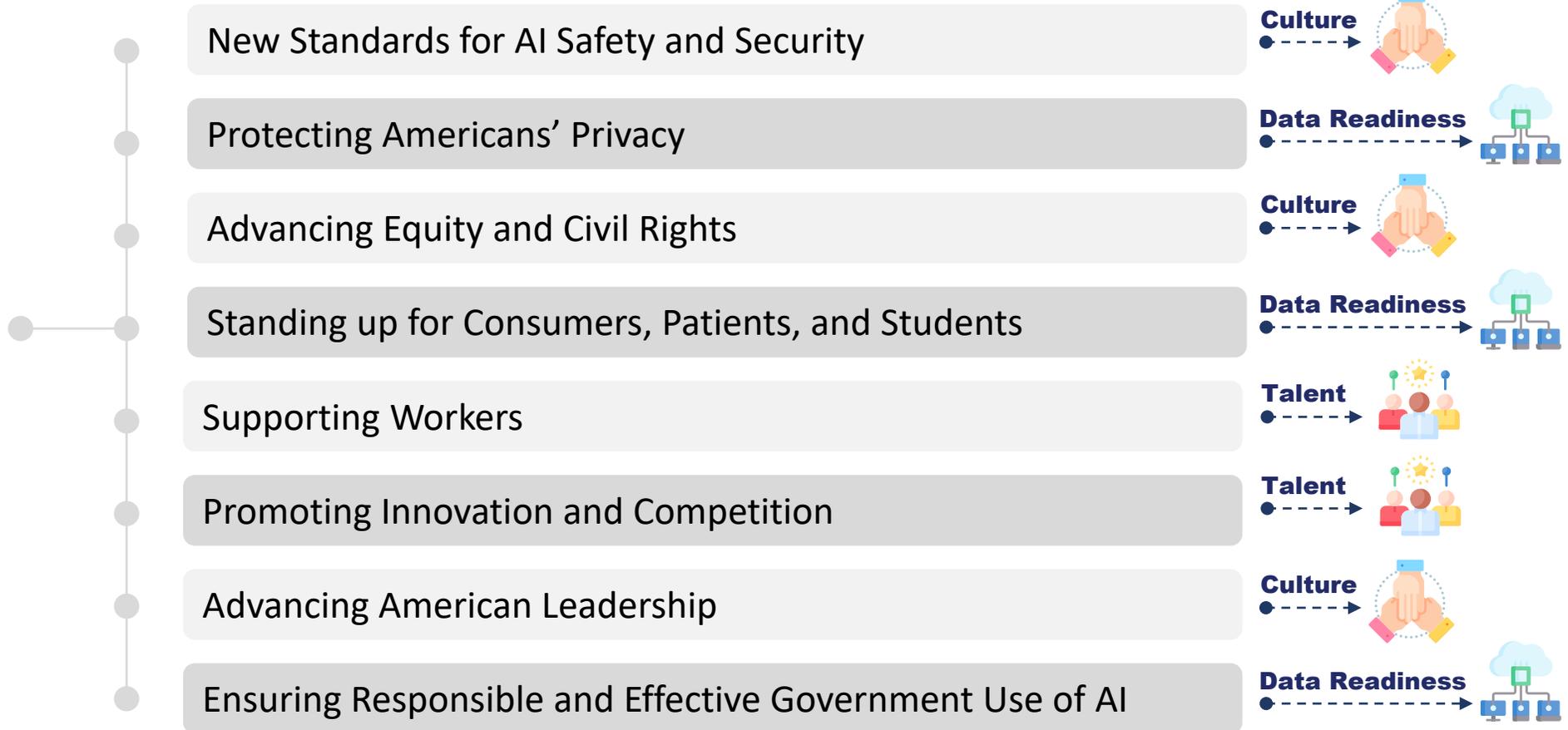


Culture



How we use Artificial Intelligence continues to be prioritized at the highest level (Cont'd)

**Executive Order
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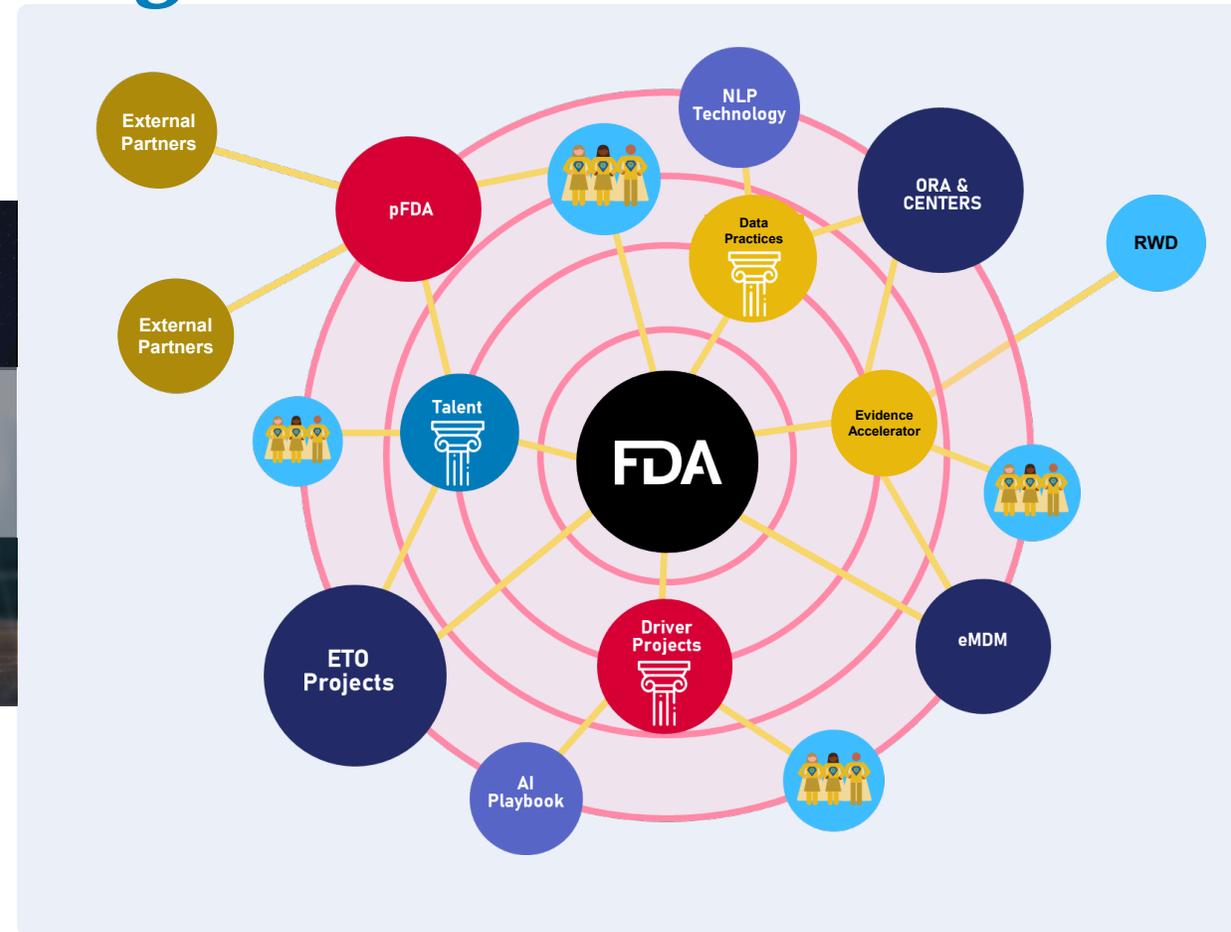


2022 made us uniquely capable to address these ongoing challenges and new changes

1. Developed our network

2. Leveraged partnerships to extend our reach

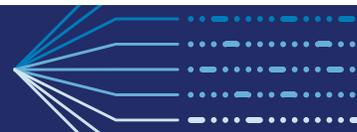
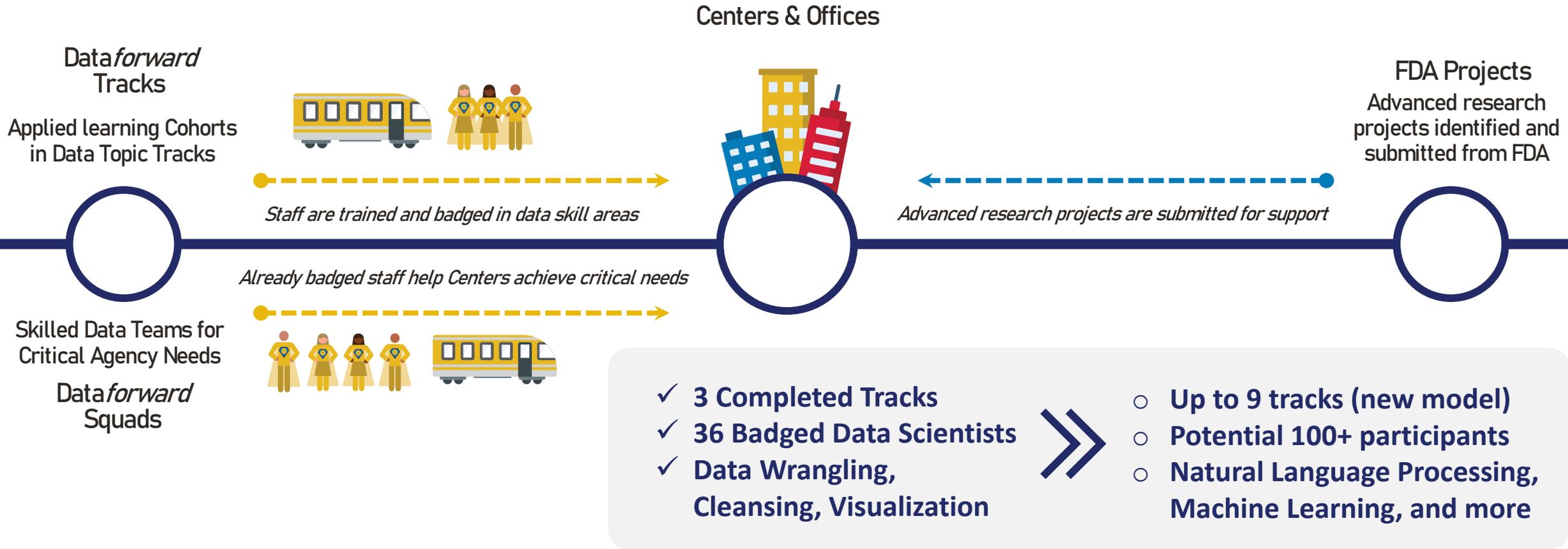
3. Built the ecosystem to increase efficiencies and maximize use of data





Advance our talent programs to upskill our people

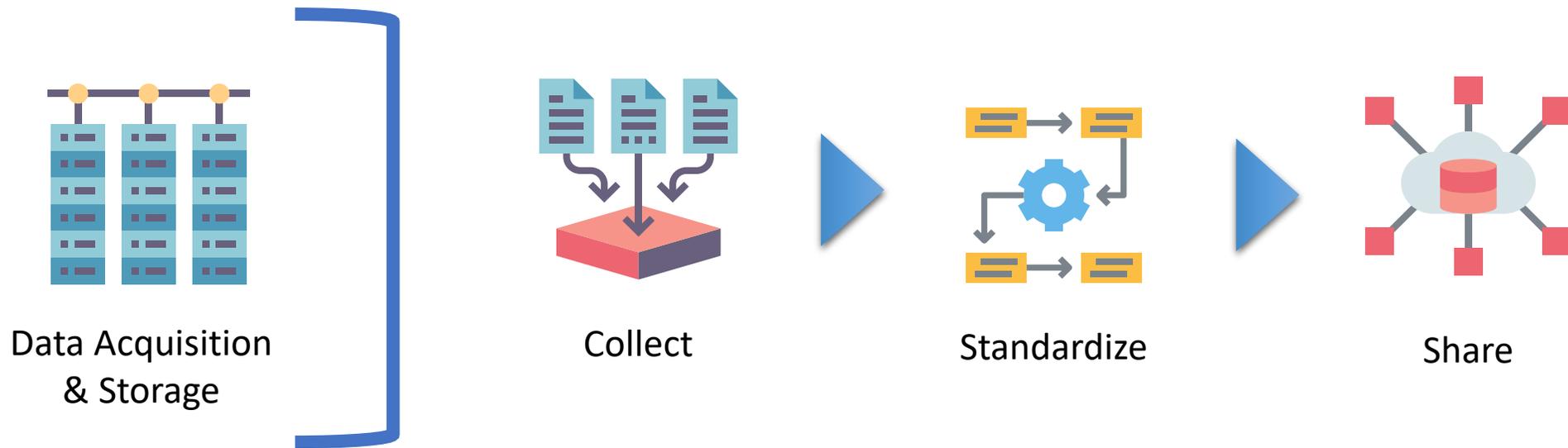
Applied Learning Tracks (ALT)



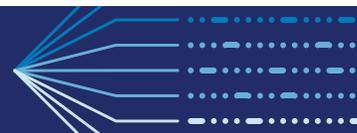


Focus on scaling programs that improve our connectivity and create “AI Ready” Data

Platforms and services such as Enterprise Master Data Management



Mastering our data to be AI Ready





Provide platforms and services that diminish barriers and encourage AI innovation

Data platforms, processes, and services that meet agency needs



FiDLE

Platform to enable data sharing, Shared Analytics Tools, and AI/ML Solution for Intelligent Search

PrecisionFDA

Platform to host challenges with internal/external experts about to take on new AI Challenges

AI Playbook & Governance Board

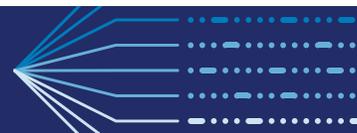
Handbook & Advisory Service to improve AI outcomes incorporating topics such as ethics and reasonable use

Data Analytics as a Service

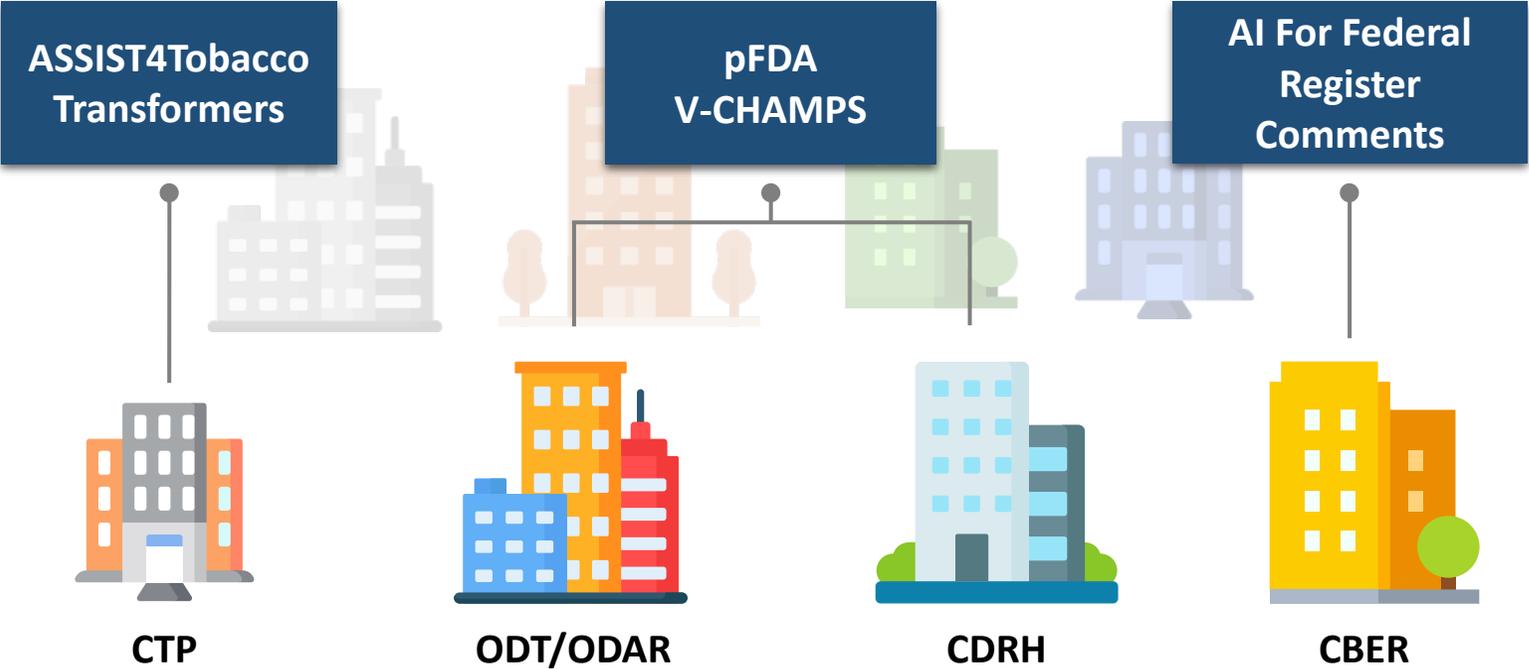
Enterprise solution service providing rapid response to urgent & diverse analytics and AI needs of internal and external stakeholders

External Partners

Large cloud providers with innovative tools and consultative services



Some of our active AI initiatives and projects across the agency will continue to advance our AI outcomes and growth

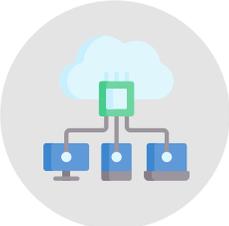


Evolving our fundamental challenges to empower AI readiness



● Advance our talent programs to upskill our people

Focus on scaling programs that improve our connectivity and create “AI Ready” Data



● Provide platforms and services that diminish barriers and encourage AI innovation





“The future is already here – it’s just not evenly distributed.”

-William Gibson