



Leveraging AI to Transform Personnel Development for Great Power Competition

28 AUG 2024





“The implementation of skills development, powered by GenAI and automation, will enable organizations to drive one trillion dollars in productivity gains worldwide by 2026.”

IDC, FUTUREScape 2023

The power of AI can significantly enhance skill sets within the DAF by providing advanced training, improving operational readiness, and fostering a culture of innovation and adaptability.

QUESTION

What word would best describe your view on AI?

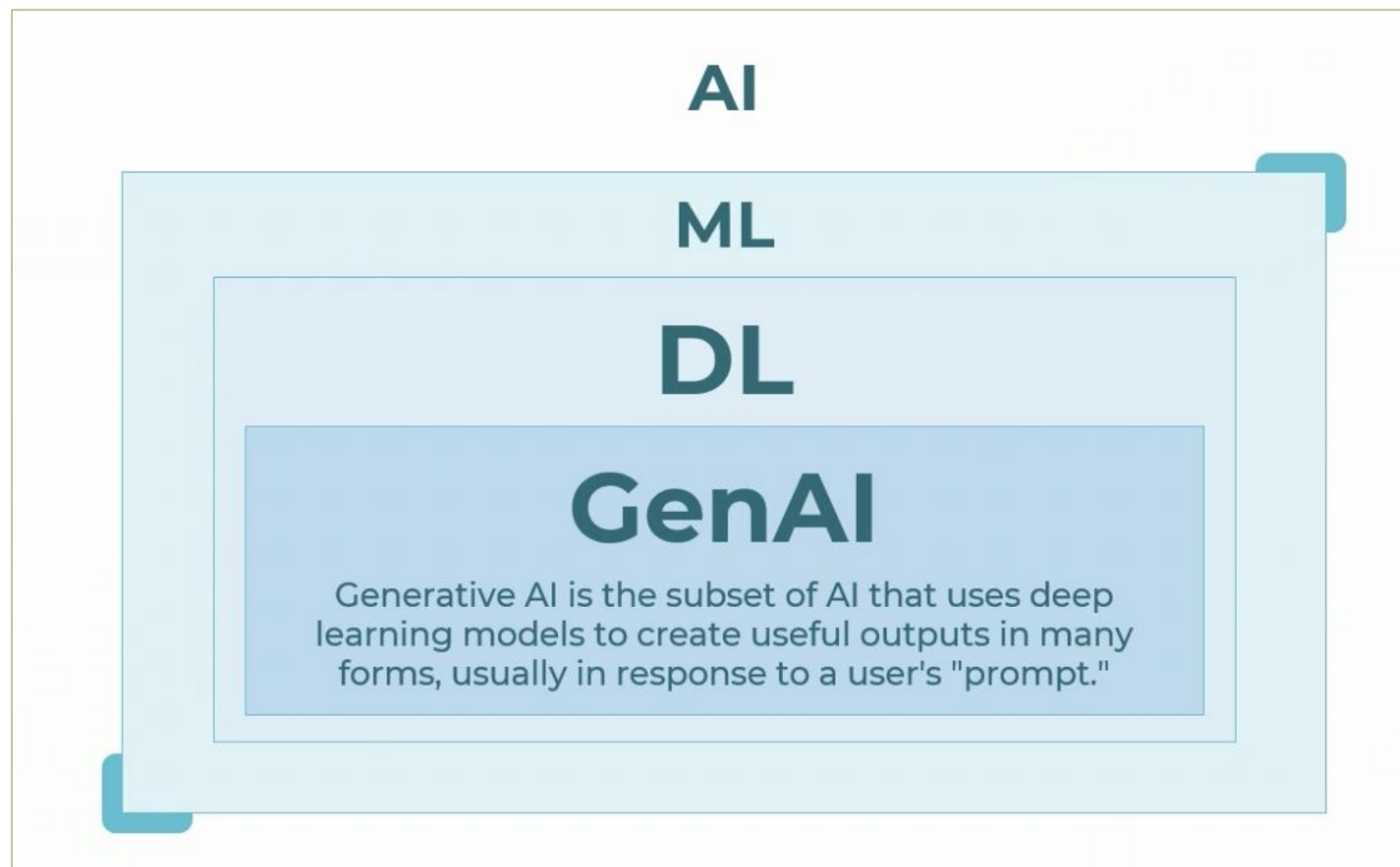
1. *Cautious*
2. *Curious*
3. *Enthusiastic*

WHAT IS AI?

How does AI differ from Generative AI?



- AI is a computer program that simulates human intelligence
- Generative AI is a type of AI that creates new outputs from detected patterns in a corpus of data
- The earliest forms of Generative AI can be traced back to research at MIT in the 1960's
- The proliferation of ChatGPT brought Generative AI to the mainstream in 2022



THE AI MARKET OPPORTUNITY COULD IMPACT CORE SKILLS FOR NEARLY HALF OF THE GLOBAL WORKFORCE



Future of Jobs



Human-machine frontier

Proportion of tasks completed by humans vs machines

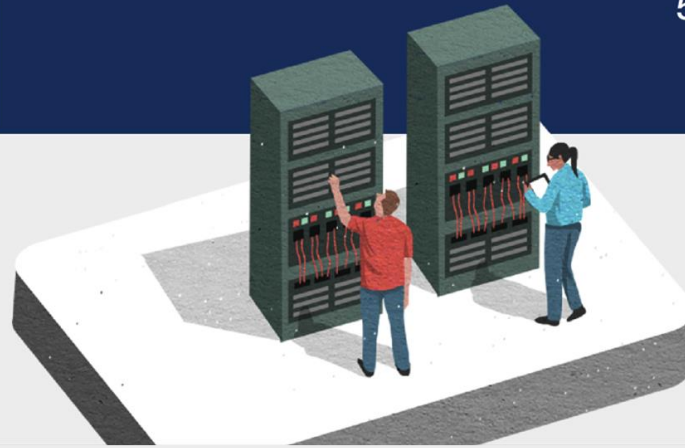
2022



2027



Machine Human



Source: World Economic Forum, *Future of Jobs Report 2023*.

Future of Jobs

Reskilling needs

44%

of workers' core skills are expected to change in the next five years

BENEFITS OF AI TO DAF PERSONNEL

AI provides a technological edge, enhancing mission effectiveness and operational readiness.



- **Improved Decision-Making:** AI processes data rapidly for informed command decisions.
- **Autonomous Systems:** Deployment of drones for reduced human risk
- **Predictive Maintenance:** AI predicts equipment needs, optimizing availability.
- **Enhanced Cybersecurity:** Quick detection and response to cyber threats.
- **Intelligence & Surveillance:** Analyzes ISR data for improved threat detection.
- **Training & Simulation:** Realistic AI-powered virtual training environments.
- **Logistics Optimization:** Timely delivery and reduced logistics costs
- **Operational Efficiency:** AI automates routine tasks for strategic focus.
- **Enhanced Communications:** Resilient and secure communication management.

WHILE GEN AI WILL IMPACT ALL MISSION FUNCTIONS, A FEW THAT STAND TO MAKE THE MOST GAINS

Customer Service (Force Support, Personnel & Base Support)

- Customer self service
- Data retrieval during initial contact
- Support recommendations
- +35-40% productivity

Marketing (Recruiting, Public Affairs)

- Content creation, personalized
- SEO optimization
- Increase ecommerce conversion rates
- +5-15% productivity

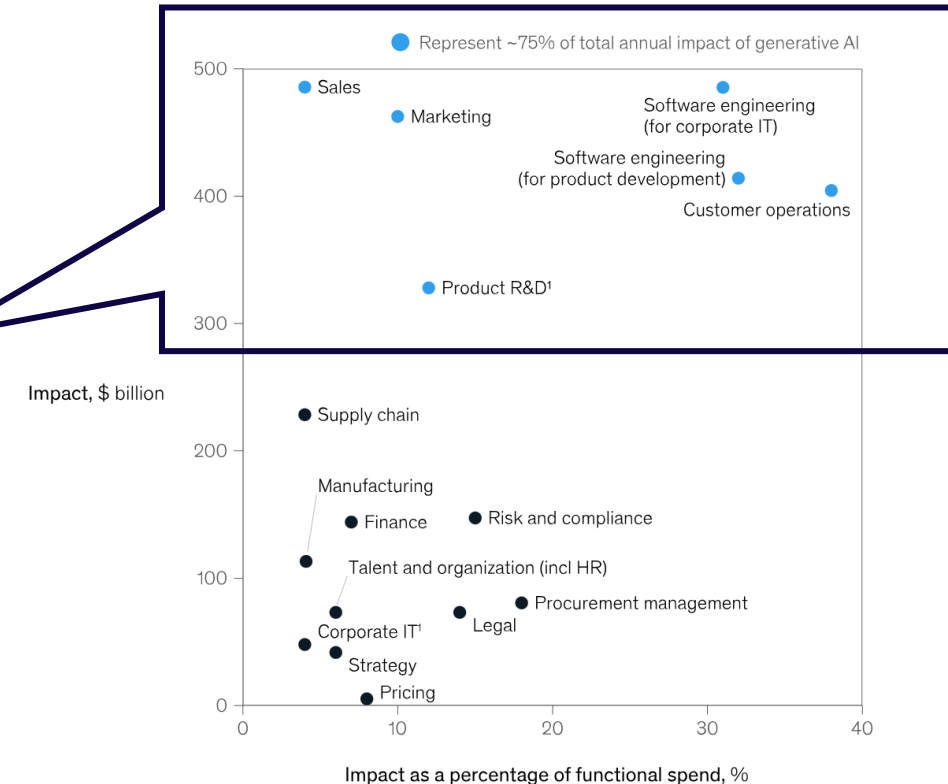
Sales Support (Acquisitions, Contracting, FMS)

- Create client/prospect profiles
- Prioritize sales leads
- Create scripts for client discussions
- +3-5% productivity

Software Engineering

- Generating initial code
- Code corrections
- Code refactoring
- Root cause analysis
- +20-45% productivity

Using generative AI in just a few functions could drive most of the technology's impact across potential corporate use cases.



Note: Impact is averaged.

¹Excluding software engineering.

Source: Comparative Industry Service (CIS), IHS Markit; Oxford Economics; McKinsey Corporate and Business Functions database; McKinsey Manufacturing and Supply Chain 360; McKinsey Sales Navigator; Ignite, a McKinsey database; McKinsey analysis

McKinsey & Company

Article, June 2023

WHAT ARE THE ETHICAL AND REGULATORY IMPLICATIONS OF THE USE OF AI IN THE DAF?

- **Data Privacy**
- **Bias and Fairness**
- **Transparency**
- **Responsible Use**
- **Regulatory Compliance**

THE PHASES IN AI MATURITY

Impact and ROI accelerate as organizations, and their people, move through the phases of maturity



EXPLORATION

- Entrepreneurial
- Opportunistic
- Ad-hoc

EXPERIMENTATION

- Aspirational
- Situational
- Nascent

INNOVATION

- Intentional
- Mobilized
- Codified

REALIZATION

- Operational
- Measured
- Governed

Ascending to **REALIZATION** *could* require a multi-year transformation

PEOPLE



Intentional upskilling and reskilling program accelerates maturity

PLATFORMS



PROCESSES



POLICIES

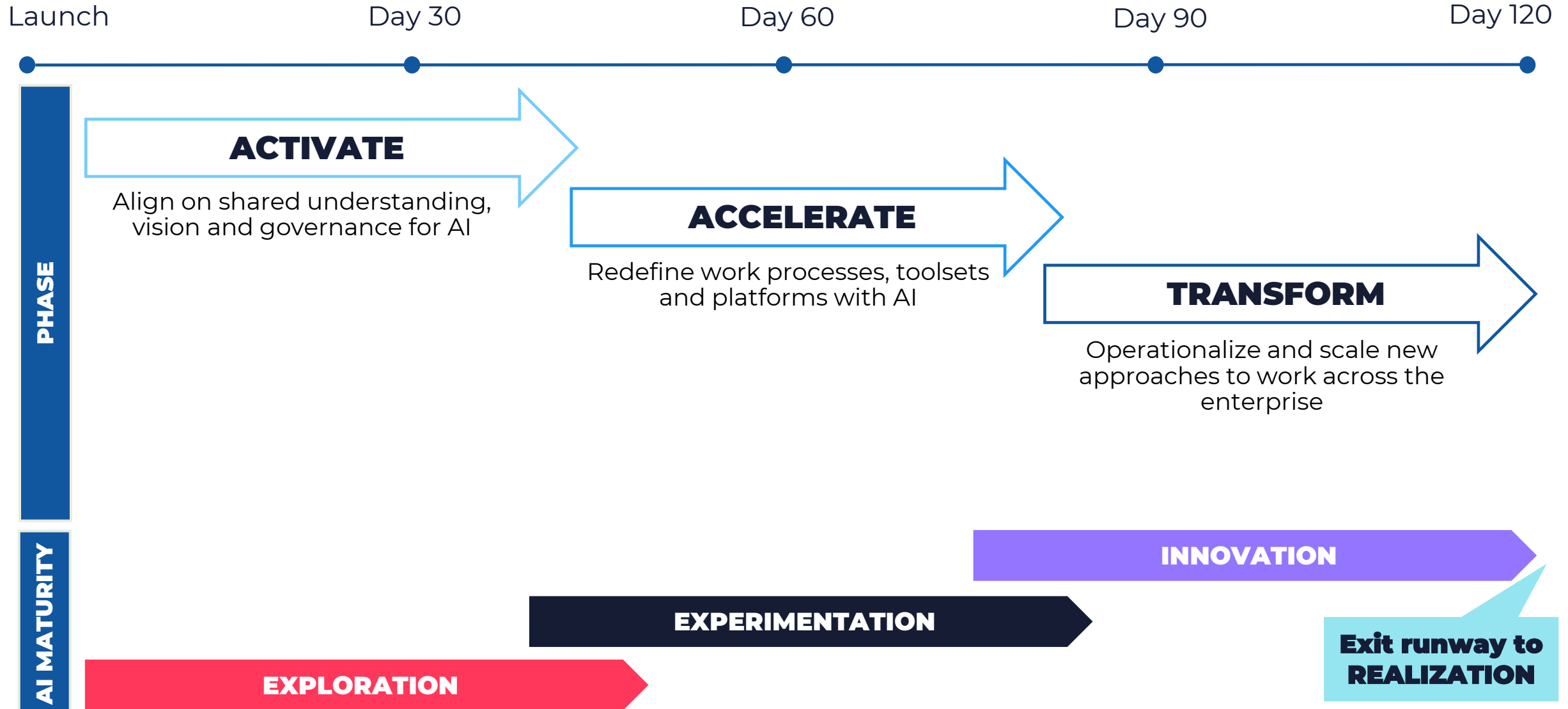


QUESTION

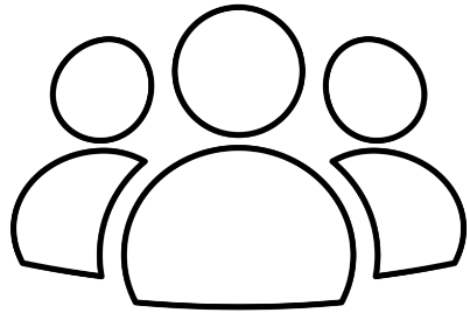
What do you believe is most strongly influencing your organization's adoption of AI?

- 1. Clarity of what AI can be used for***
- 2. Availability of training/reskilling***
- 3. Time and resources available to experiment***
- 4. Regulations/Policies***

A PHASED METHODOLOGY TO TRANSFORMATION



PERSONAS THAT FUEL TRANSFORMATION



Front Line End Users

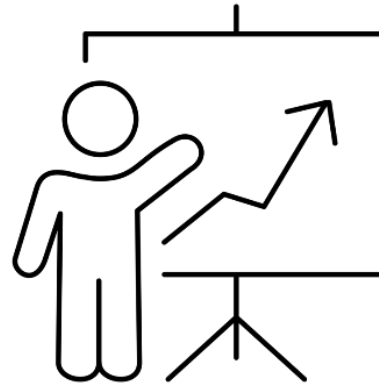
Information workers that use AI tools to accelerate their daily work

Sales &
Marketing

Product

Customer
Service

HR &
Talent



Leaders & Mobilizers

Stakeholders catalyzing the transformation of the business

Manager

Executive

Director

Project
Manager



Technologists & Developers

Specialists building the next-gen products and platforms

Data

Cloud

Cyber

Coding

AI UPSKILLING AVAILABLE ON DAFeL

Upskill DAF Personnel for Great Power Competition



- **AI Transformation**
- **Advanced Training and Simulation**
- **Enhanced Decision-Making and Cognitive Skills**
- **Analytics and Cyber Operations Skills**
- **AI-Enabled Maintenance and Engineering Skills**
- **Leadership and Strategic Thinking**
- **Human-AI Teaming and Collaboration Skills**
- **Innovation and AI Development Skills**
- **Cross-Functional Skill Development**

Leveraging AI to build and enhance these skill sets helps ensure DAF personnel are prepared to operate effectively in a rapidly evolving technological landscape, maintaining a strategic advantage over adversaries.

DAF E-LEARNING

<https://usaf.percipio.com>

THANK YOU

MARK ONISK

Chief Content Officer, Skillsoft

Mark.Onisk@Skillsoft.com

Contact your DAFeL team at:

aetc.daf.elearning@us.af.mil



Scan to visit DAFeL

“As more and more artificial intelligence is entering into the world, more and more emotional intelligence must enter into leadership.”

-Amit Ray, author