

AFRL



**DIGITAL**  
CAPABILITIES DIRECTORATE

# Industry Collider

The appearance of U.S.  
Government visual information  
does not imply or constitute federal  
endorsement.

# Event Expectations

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- No acquisition requirements associated with this Collider
- Questions we **can** answer
  - Inquiries specific to DCD and the DigITal Acquisition Hub Stand-Up
- Questions we **cannot** answer
  - Inquiries tied to a current/emerging requirement or active contracts
- **Take aways**
  - Who we are
  - What we're trying to accomplish
  - How to find us again
  - Your participation? Submit your response to the Request for Information (RFI)

# Agenda

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- 1005-1035 Opening Remarks & DCD Overview
- 1035-1140 DCD Portfolio
- 1140-1155 Break
- 1155-1220 DCD DigITal Acquisition Hub Introduction
- 1220-1320 “Ask us Anything” Open Panel Q & A’s
- 1320-1330 Collider Wrap Up

# DCD Overview

**Time As A Weapon!**

**A Premise for AFRL's Digital Transformation**

Mr. David Shahady – Deputy Director, DCD

# The Doolittle Raid – 98 Days from Concept to Execution



Pearl Harbor Attack  
7 Dec 1941

President  
Calls for  
Bombing of  
Japan ASAP  
21 Dec 1941

Concept  
Pitched  
10 Jan 1942



Concept Approved  
3 Feb 1942

Bomber  
Mods Begin  
19 Feb 1942



Training  
Begins  
1 Mar 1942

Mission  
Ready  
25 Mar 1942



Carrier  
Departs  
2 Apr 1942



16 B-25 Bombers  
Attack Tokyo Japan  
18 Apr 1942



# What if we treated **Time**... Like a **Weapons Platform**?



Our goal would be to: **“Create Wormholes”** to **Cheat Time**





Digital allows us to convert **“Toil into Time”**  
It gives us **“wormholes”** from our current state  
to future state – **FASTER!**

# AFRL Digital Capabilities Directorate

Our Digital Transformation Strategy

AFRL Digital Transformation Vision

AFRL is MADE to Accelerate: Model, Analyze, Decide, Execute

AFRL Digital Transformation Mission

Measurably accelerate the generation and transition of adoption-ready technology with demonstrable military benefit

AFRL Digital Transformation Goals

**FASTER RESEARCH:**  
Accelerated Research, Experimentation, and Innovation

**BETTER DECISIONS:**  
Analytically Rigorous Technical, Business, and Operations Decisions

**STREAMLINE TRANSITIONS:**  
Seamless Entrance into Acquisition

**REDUCE TOIL:**  
Flexible and Responsive Business/Operations

Customer Experience (Mission Support)

Innovation Programs (Pathfinders and Pilots)

AFRL's Digital System (Products/ Services)



Data Lifecycle Management

Worldwide Research Collaboration

Infrastructure and Digital Architecture

Corporate Modeling and Analysis

Digital Culture and Operations

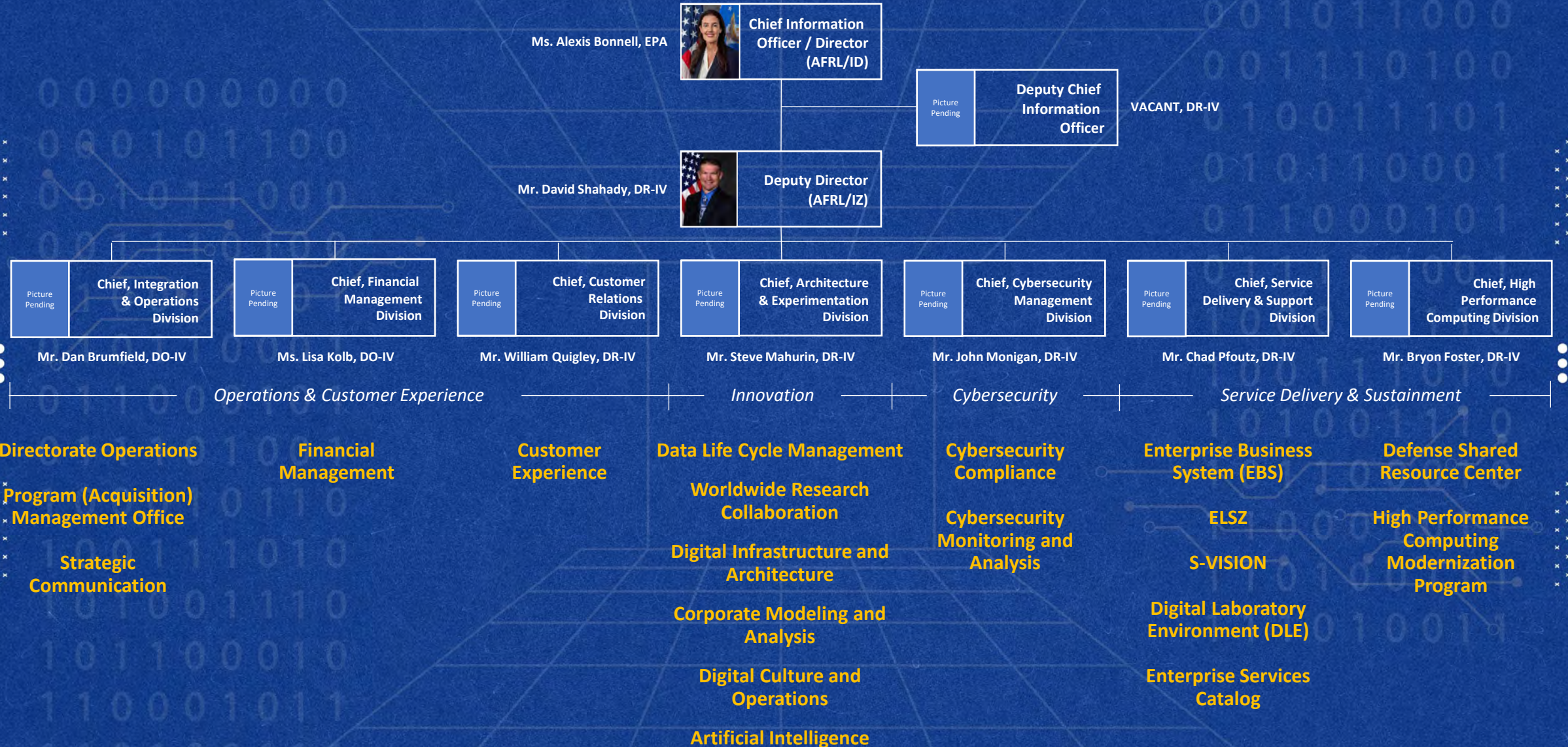
Artificial Intelligence

Cybersecurity

Cybersecurity Compliance and Monitoring/Analysis

# AFRL Digital Capabilities Directorate

Our Organizational Structure



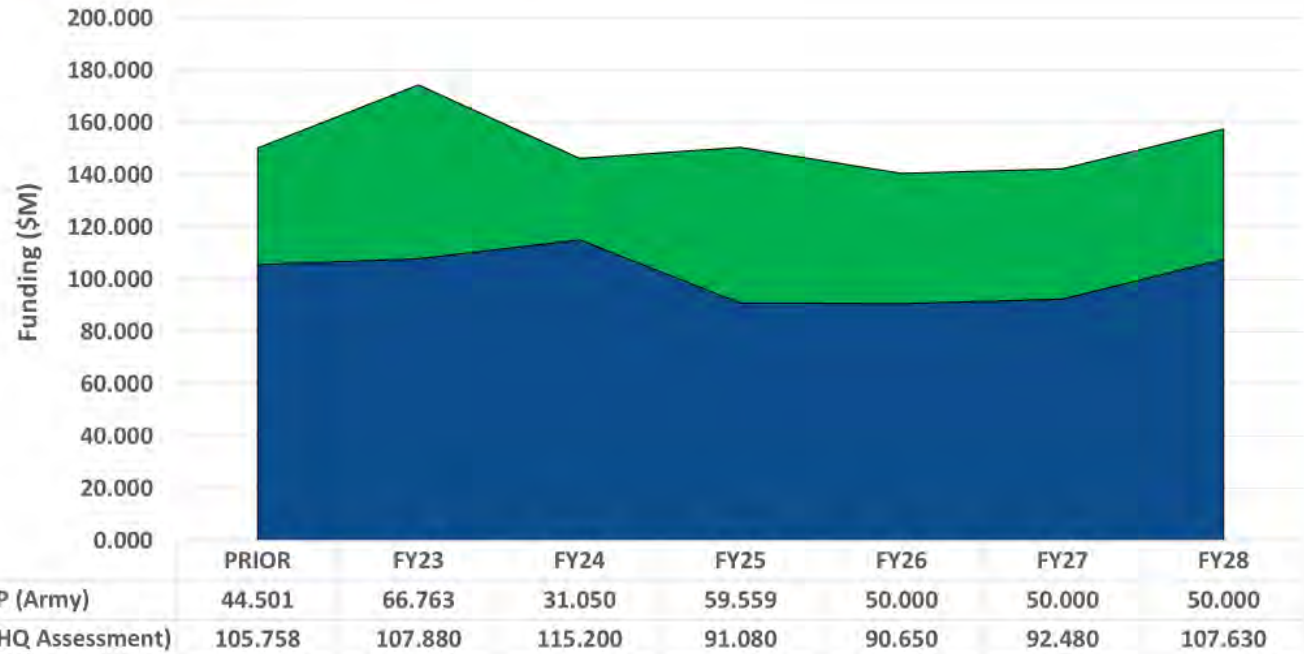
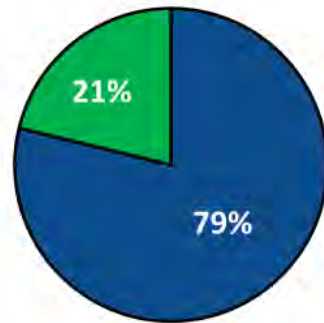
# Our Funding



## AFRL Digital Capabilities Portfolio

### Portfolio Financials (Revenue Outlook)

FY24 Revenue Distribution



Almost 80% of our funding comes from AFRL Technical Directorates

	PRIOR	FY23	FY24	FY25	FY26	FY27	FY28
Total Planned Direct Revenue	105.758	107.880	115.200	91.080	90.650	92.480	107.630
Total Planned Reimbursable Revenue	44.501	66.763	31.050	59.559	50.000	50.000	50.000
Total Planned Revenue	150.259	174.643	146.250	150.639	140.650	142.480	157.630

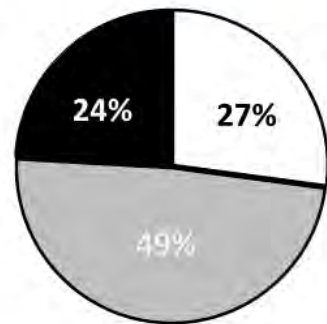
# Our Funding



## AFRL Digital Capabilities Portfolio

Portfolio Financials (Direct, Approved Budget by Category)

FY24 Budget Distribution



	FY23	FY24	FY25	FY26	FY27	FY28
■ Sustainment	10.121	31.060	28.542	39.900	45.502	55.231
■ Innovation	80.643	55.889	34.268	21.100	16.600	17.500
□ Mission Support	18.116	27.611	28.270	29.652	30.381	34.901

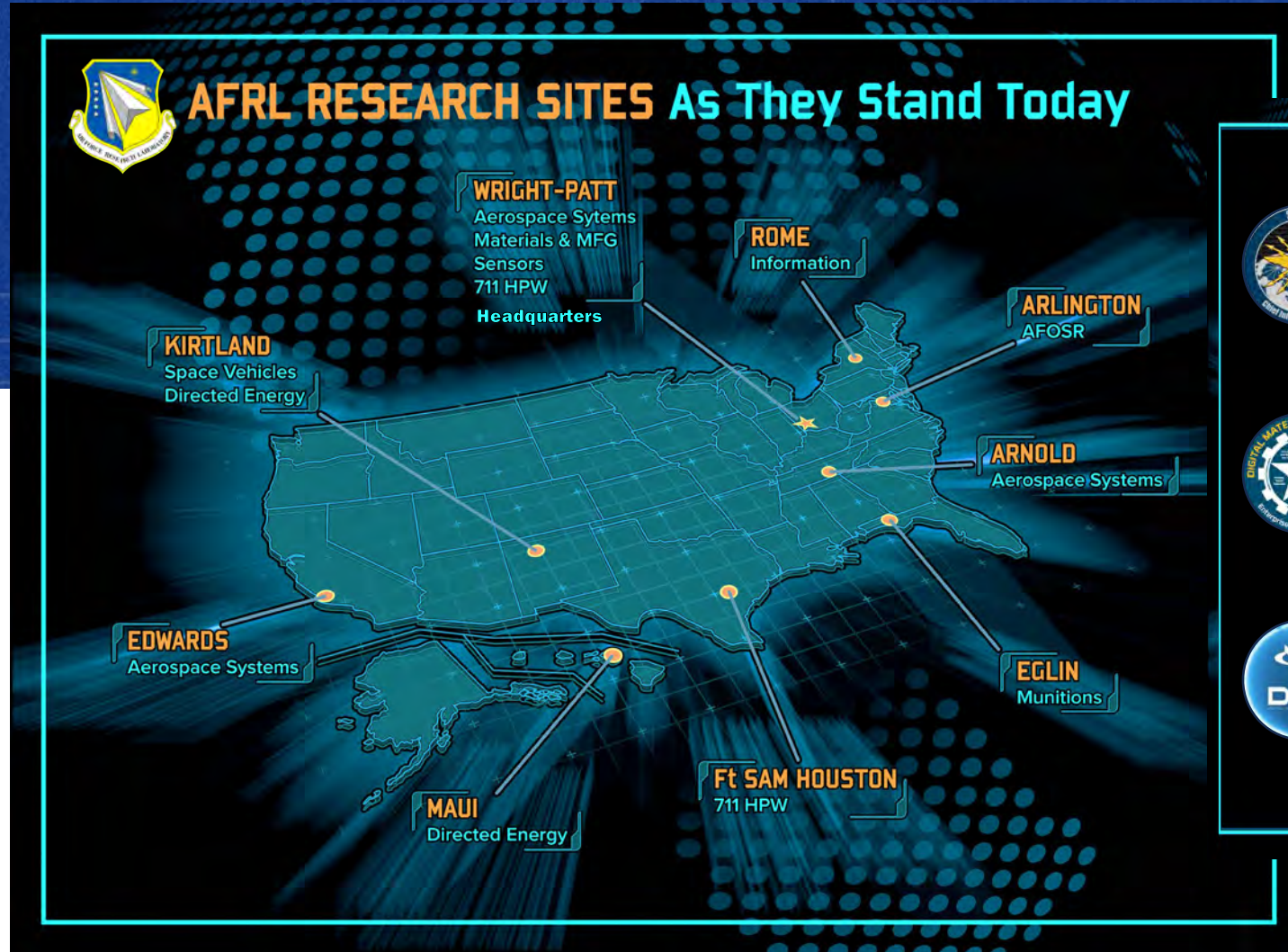
<b>Approved Funding</b>	<b>123.575</b>	<b>115.220</b>	<b>91.078</b>	<b>90.652</b>	<b>92.483</b>	<b>107.632</b>
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Our budgeted spending is distributed across three portfolio areas.

# Our Customers & Stakeholders



Our primary focus is to support AFRL scientists, engineers, managers, and functional specialists.



**Office of the  
Air Force Chief  
Information Officer**



**Air Force Materiel  
Command Digital  
Acceleration Task  
Force**



**Air Force Digital  
Transformation  
Office**

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AFRL's Digital System (Products/ Services)



Data Lifecycle Management

Worldwide Research Collaboration

Infrastructure and Digital Architecture

Corporate Modeling and Analysis

Digital Culture and Operations

Artificial Intelligence

Cybersecurity

Cybersecurity Compliance and Monitoring/Analysis

# A Conversation: DCD Portfolio





**Mission Support**



**Innovation  
"Hangar 18"**



**Delivered  
Products/Services  
"LABVERSE"**



**Digital Capabilities Directorate Portfolios**

# Trends Driving Strategy

## Our Transformation Journey

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- Emphasize **SERVICES**
- Migrate from collections of data  
to our **RELATIONSHIPS WITH KNOWLEDGE**
- Increase the means for **COLLABORATION**  
while staying **PROTECTED**
- **ACCELERATE RESPONSIVENESS** to a changing world

Priority on Adoption-Readiness and Scalability



**Mission Support**

**Dr. Darcy Mortimer  
Deputy Division Chief,  
IZO**



**Innovation  
"Hangar 18"**



**Delivered  
Products/Services  
"LABVERSE"**



**Digital Capabilities Directorate Portfolios**

# Reducing Toil in Business & Operations



## DCD Mission Support Portfolio





Mission Support



Innovation  
"Hangar 18"

Mr. Steve Mahurin  
Division Chief, IZX



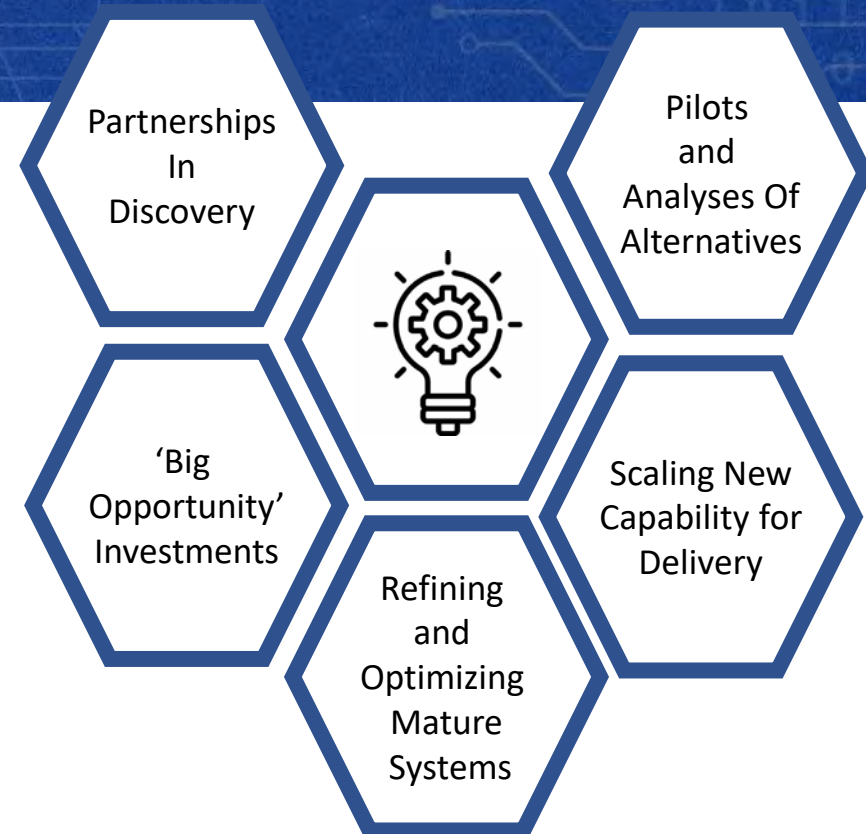
Delivered  
Products/Services  
"LABVERSE"



# Continuous Innovation



## DCD Innovation Portfolio (HANGAR 18)



# Innovation Portfolio

## Programs

*Innovation Programs (Pathfinders and Pilots)*



-  **Data Lifecycle Management**
-  **Worldwide Research Collaboration**
-  **Infrastructure and Digital Architecture**
-  **Corporate Modeling and Analysis**
-  **Digital Culture and Operations**
-  **Artificial Intelligence**

# Multitudes of Independent Systems

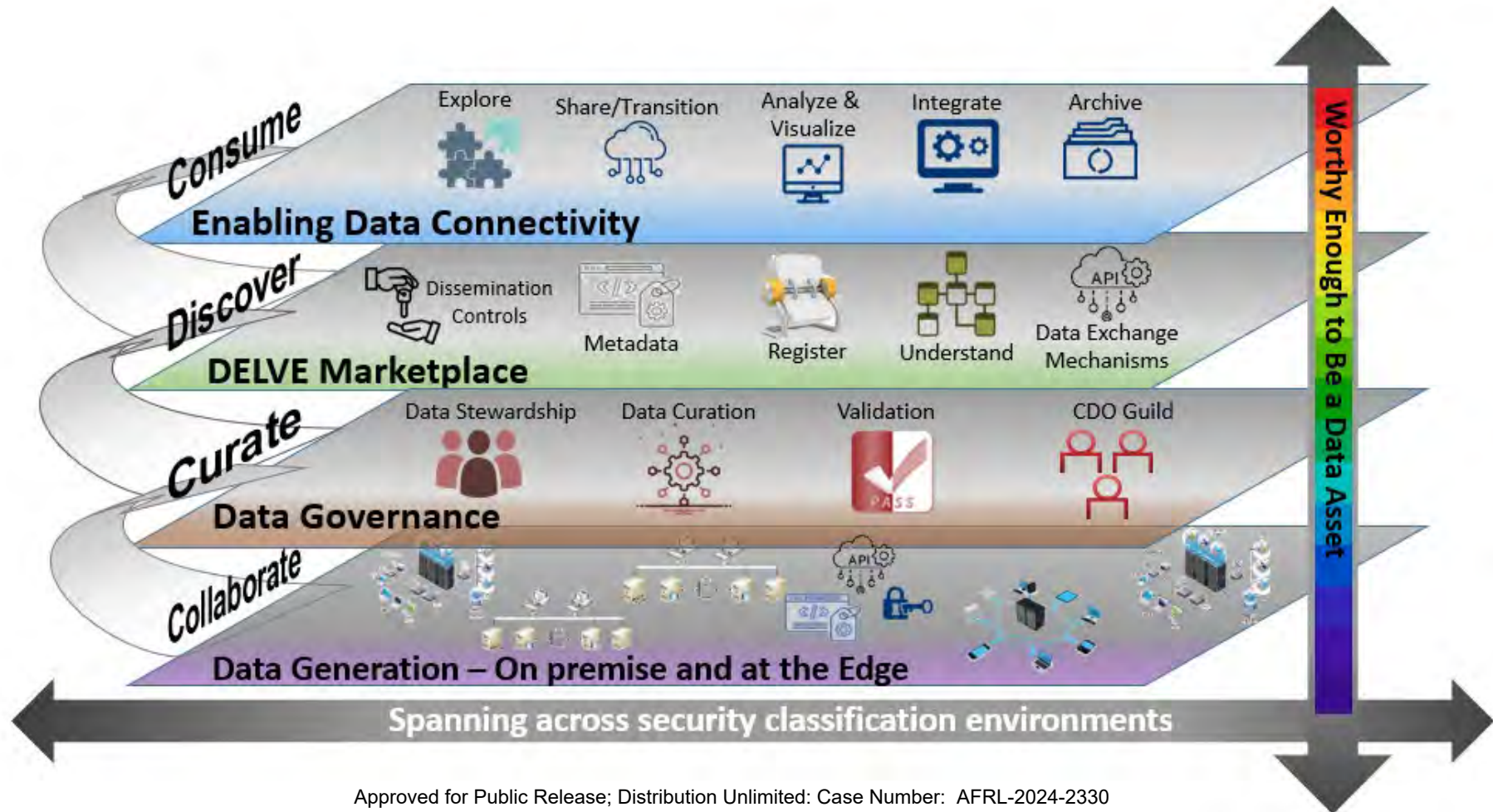




# Data Lifecycle Management

## Architecture

Governance, projects, and community engagement to holistically transformation data lifecycle management.



# Multitude of Research Partners



Spectrum  
of  
Security  
Access

Implementing  
Collaboration Tools as  
a Service



Problem?



Scientist,  
Engineer,  
Manager,  
Specialist



Capitalizing on Cloud  
Environments for R&D



Experimenting With  
an Ecosystem of  
Collaboration Tools



# Worldwide Research Collaboration

## Customer Journey and Impact

### AFRL Google Workspace

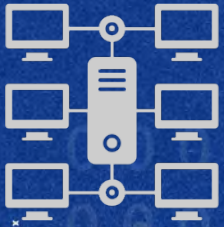
- **2,200+** 90-day active users including **600+** external partners
- Launched pilot for **foreign collaboration with AFRL/RX**
- Supported **DAF Chief Scientist Microelectronics Study** directed by Congress
- AFRL named a **2023 Google Cloud Customer Award Winner** for "innovation, utilizing Google Cloud ... to transform significant ideas into tangible changes that advance their mission"

### Official Launch of Digital Laboratory Environment (DLE) - JAN 2023

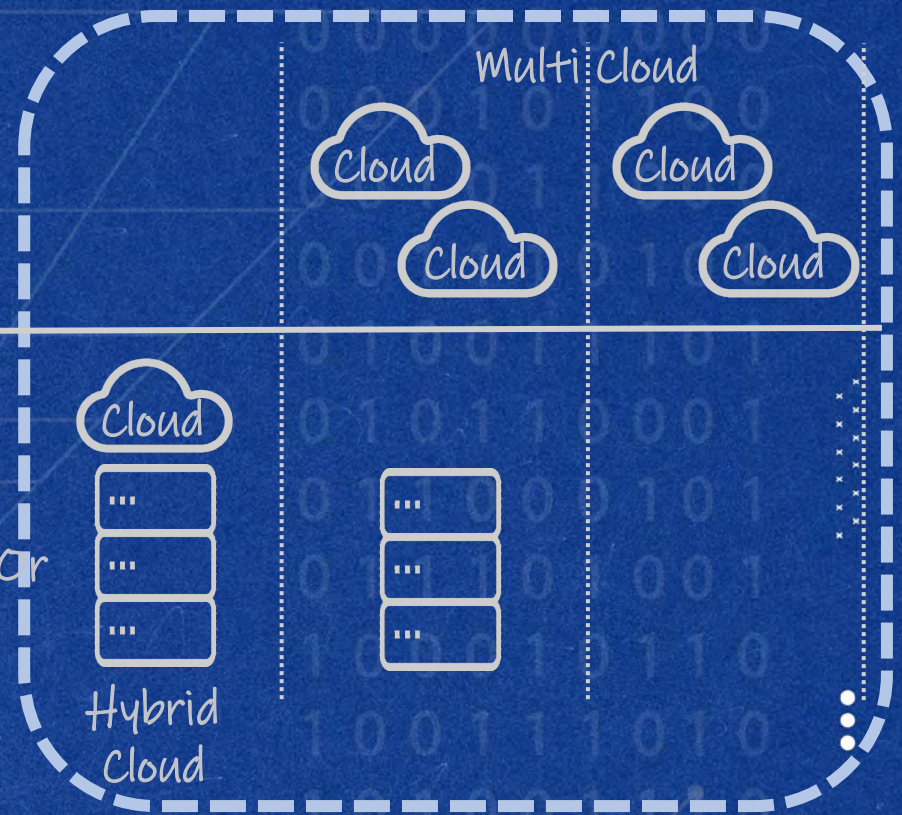
- Growth to **>2,500** 90-day active users
- AFRL-wide licensing of **8** core S&T software tools
- **60+ TBs of data** uploaded in first 9 months of operation
- Nearly **all 300** Cameo Teamwork Cloud Licenses in-use

### Build Your Own Digital Lab

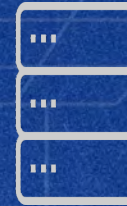
- IZX+ACT3 supporting GenAI for **CSAF-directed demonstration** for e-Pub data
- AFRL Cloud Lab launch in beta to **12** teams across AFRL
- Partner in **CloudONE development of Google Cloud** for DAF
- Selected by DISA & Google as **Zero Trust development partner**



Implementing Solutions Across Networks and Classifications



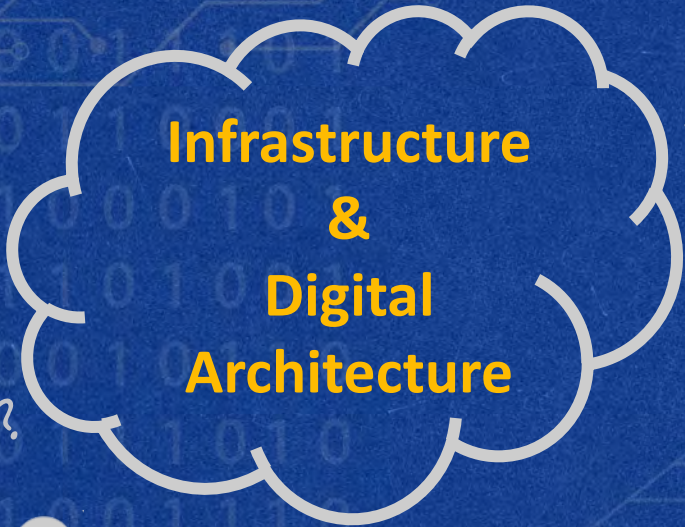
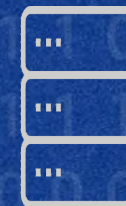
Traditional IT



Hybrid IT



Hybrid Cloud



**Infrastructure & Digital Architecture**

Problem?



Scientist,  
Engineer,  
Manager,  
Specialist

Implementing an AFRL Enterprise Architecture

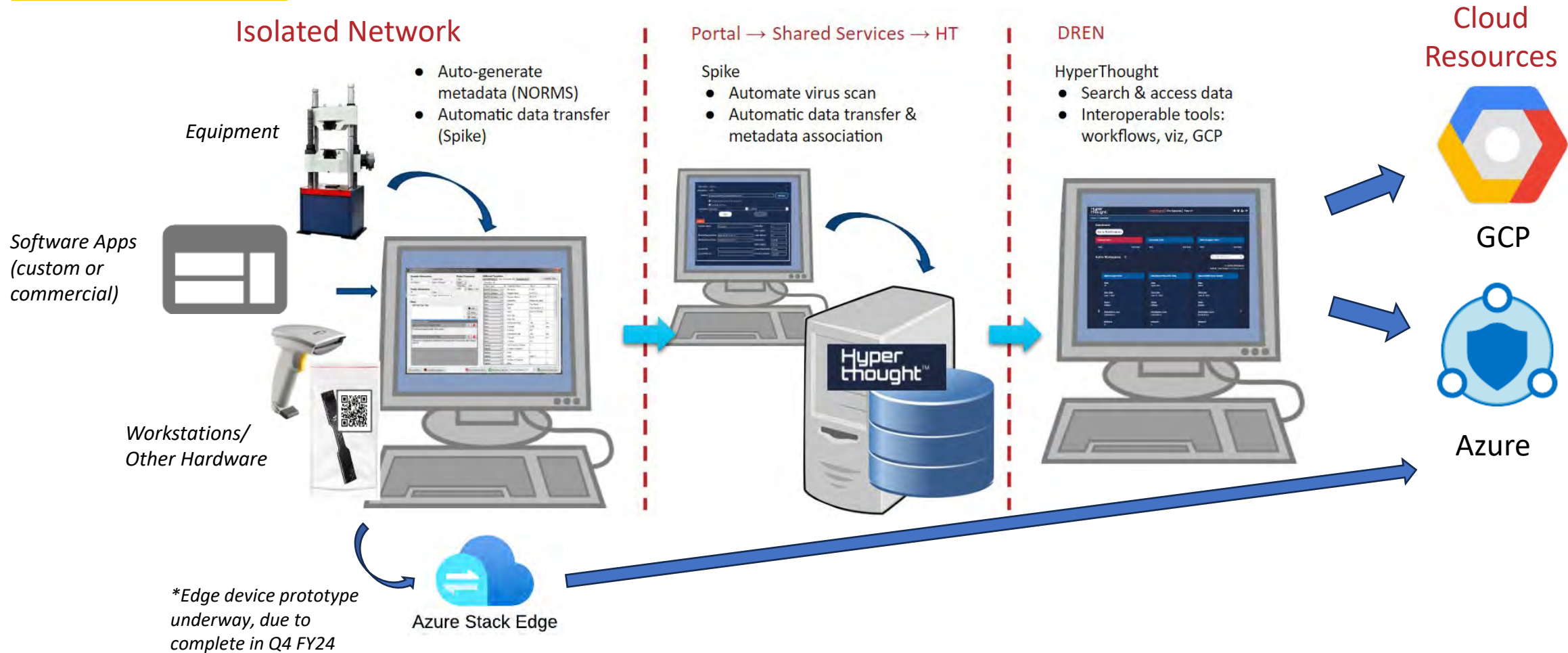
Capitalizing On and Implementing "Super Cloud" Capabilities

Laboratory Directorates and Offices



# Federated Connectivity and Access

## Technical Approach - CARBN



# Digital Architecture

## Digital Services Catalog Technical Journey

**MVP Scheduled  
for Release  
Mid-Late April**

We are starting with  
our IT Services Catalog  
and plan to add 2-3  
Catalogs in future  
releases

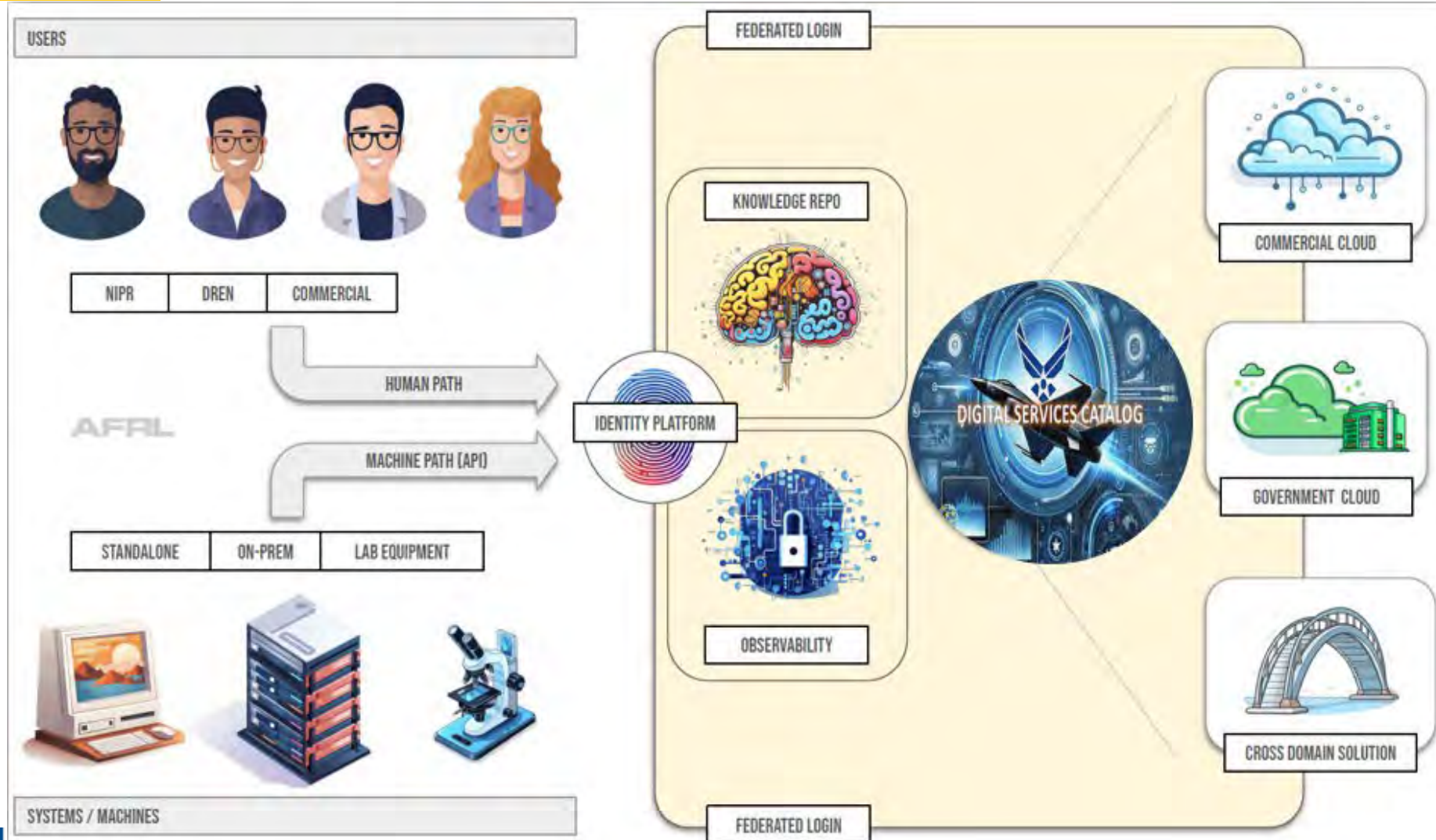
**AVAILABLE  
CATALOGS**

**IT Services** Human Resources Facilities Innovation Finance Contracting Medical R&D



# Digital Architecture

## High Level View



# Processes



Expand Digital Upskilling



Experiment with new ways of working

Planning	Financial	Contracts
Security	Workflow	Admin
Personnel	Safety	Mgmt
Inspection	Training	Reporting



**Digital Culture and Operations**



Enhance the Digital Culture

Problem?



Scientist,  
Engineer,  
Manager,  
Specialist

Technical and Functional Directorates







Implementing Digital Engineering Concepts

Delivered S&T Capabilities



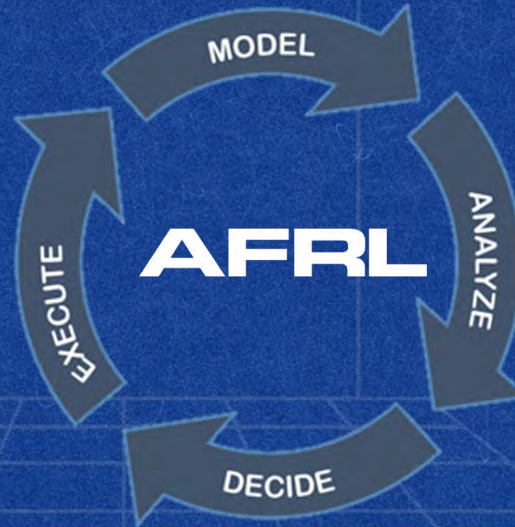
Threats and Risks



Implementing Modeling and Analysis of Capability



Corporate Modeling & Analysis



Implementing the Infrastructure Framework Needed for Modeling and Analysis

Problem?



Scientist, Engineer, Manager, Specialist

# Increase Organizational Effectiveness

Reducing  
Toil



# Connect with Modern Approaches



**Artificial  
Intelligence**

Simplify Paths for  
AI-Enabled Tools

Problem?



Scientist,  
Engineer,  
Manager,  
Specialist



Rapid  
Enablement



# Trends in Innovative Pathfinders and Pilots

## Expansion Beyond Traditional IT Focus

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- Pilots, Transitions, and Scaling New Capability for Delivery
  - ✓ Connecting the Disconnected – Data, Tech Stacks, and Tool Chains
  - ✓ Onboarding \*-as-a-Service: Data, Platforms, Software, Cyber, ...
  - ✓ Building for Cyber-Resilience and Responsive Fielding:
    - Multi-Level/Cross-Domain Security
    - Architecting to balance trust and availability
  - ✓ Enabling Digital Laboratories
    - ✓ On-premise and in-cloud
  - ✓ Supporting AI Adoption

# Innovation Thrives on Partnerships

## Needs for Enabling Innovative Program

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- Recent Support Growth Areas in Innovative Pathfinders and Pilots
  - ✓ Cloud Service Architecture and Integration
  - ✓ Cloud Engineering and Migration
  - ✓ AI for Purpose: Leading the Way for Adoption (generative, predictive)
  - ✓ AI Foundations: Selecting, tuning, confidence-building, authorities
  - ✓ Data Connectivity and API Gateways
  - ✓ Unified Identity and Access Management
  - ✓ Modeling, Simulation, and Analysis Support



**Mission Support**



**Innovation  
"Hangar 18"**



**Delivered  
Products/Services  
"LABVERSE"**

**Mr. Chad Pfoutz  
Division Chief, IZD**



**Digital Capabilities Directorate Portfolios**

# Emphasizing Customer-Centered Delivery

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**DCD Delivered  
Products / Services  
Portfolio  
(LABVERSE)**

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# Multitudes of Independent Systems



## Implementing Cybersecurity Risk Management Framework

Authority to Operate



Implementing  
Services  
Catalog

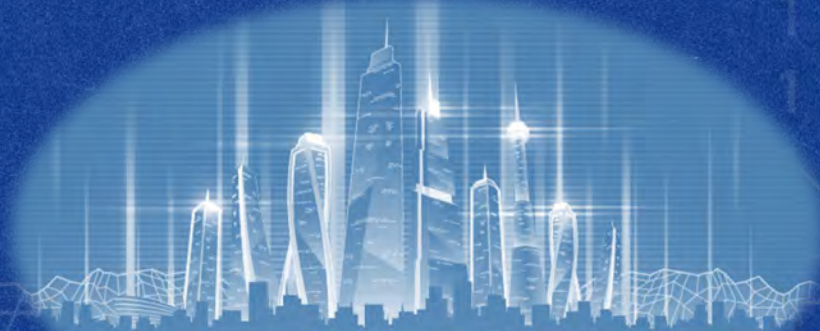
Fielded  
Enterprise  
Services

**LABVERSE /  
Digital  
System**

Problem?



Scientist,  
Engineer,  
Manager,  
Specialist



Welcome To  
**LABVERSE**

Technical and Functional Directorates



# Services & Products in Production

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- **Enterprise Business System (EBS)**
  - Supports AFRL centralized business processes for S&T activities across AFRL
- **Digital Laboratory Environment (DLE)**
  - Collaborative environment offering Scientific & Digital Engineering tools and Continuous Integration / Continuous Delivery tools hosted at Impact Level 5
- **Enterprise Laboratory Services Zone (ELSZ)**
  - Unclassified network that includes a set of enterprise research collaboration and information sharing tools used by AFRL staff and their external partners
- **Secure - Vice Simulations Operations Network (S-VISION)**
  - Isolated collateral secret network that includes a set of enterprise research collaboration and information sharing tools used by AFRL and external partners
- **Air Force Research & Development Mission Infrastructure (AFRDMI)**
  - Provides development zone on SIPR & JWICS to use operational data in R&D efforts



# EBS Summary

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- **Modernized EBS platform is established, stable, and providing positive results**
- **AFRL rapidly deploys apps and reporting for its broad user base using EBS platform tools:**



- **EBS Allows TD IT Shops to share tools, code, and costs**
  - PEGA – Low-code application development, training, and support – provides a common baseline from which to build
  - Tableau – BI tool for data preparation and interactive visualizations
  - Cognos – BI suite for reporting, analytics, score carding, monitoring events and metrics
  - Content Server – Records Management
  - G2 – AFRL/FM Automated Tool which enables the AFRL TDs to standardize business practices and processes throughout all stages of FM.
- **Enables local and enterprise-level development, management, and delivery**
- **Provides contract support for development on enterprise applications**
- **Provides development assistance + application review to ensure success**

# AFRL Digital Lab Environment



## AFRL's Next Generation Science & Technology Work Environment

Fostering collaboration & global partnerships across boundaries for AFRL, DoD, Industry, and Academic partners

- Cloud-focused to be able to connect from anywhere
- Sandbox/Development accredited at an IL-2
- Staging & Production accredited at an IL-5 w/ a DISA CAP
- Plans in-work for an IL-6+ environment
- On-demand partner access via approved CAC/ECA/CTR Certs, YubiKey & hardware tokens
- Collaboration-oriented for access to necessary data & tools (OS, COTS & GOTS)
- Multi-network access to include NIPR, DREN, & commercial internet
- Engineering / Tenant Workspaces for project data & applications w/ Data Lake (a.k.a., Tech Data Repository) for data & applications available to all users
- IT professionally managed, providing the latest software capabilities & cybersecurity

# Trends in Customer Centered Operational Needs

## Operating Partnership Areas

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- Optimized and Responsive Support Services
  - ✓ Data-driven Services Delivery Operation
  - ✓ Help Desk Support
  - ✓ Client Systems Support
  - ✓ Networks/Systems Support (On-Prem and Cloud)
  - ✓ IT Asset Management/Logistics
  - ✓ Collaborative Tools Support
  - ✓ Cybersecurity Assessment & Compliance Support

# BREAK

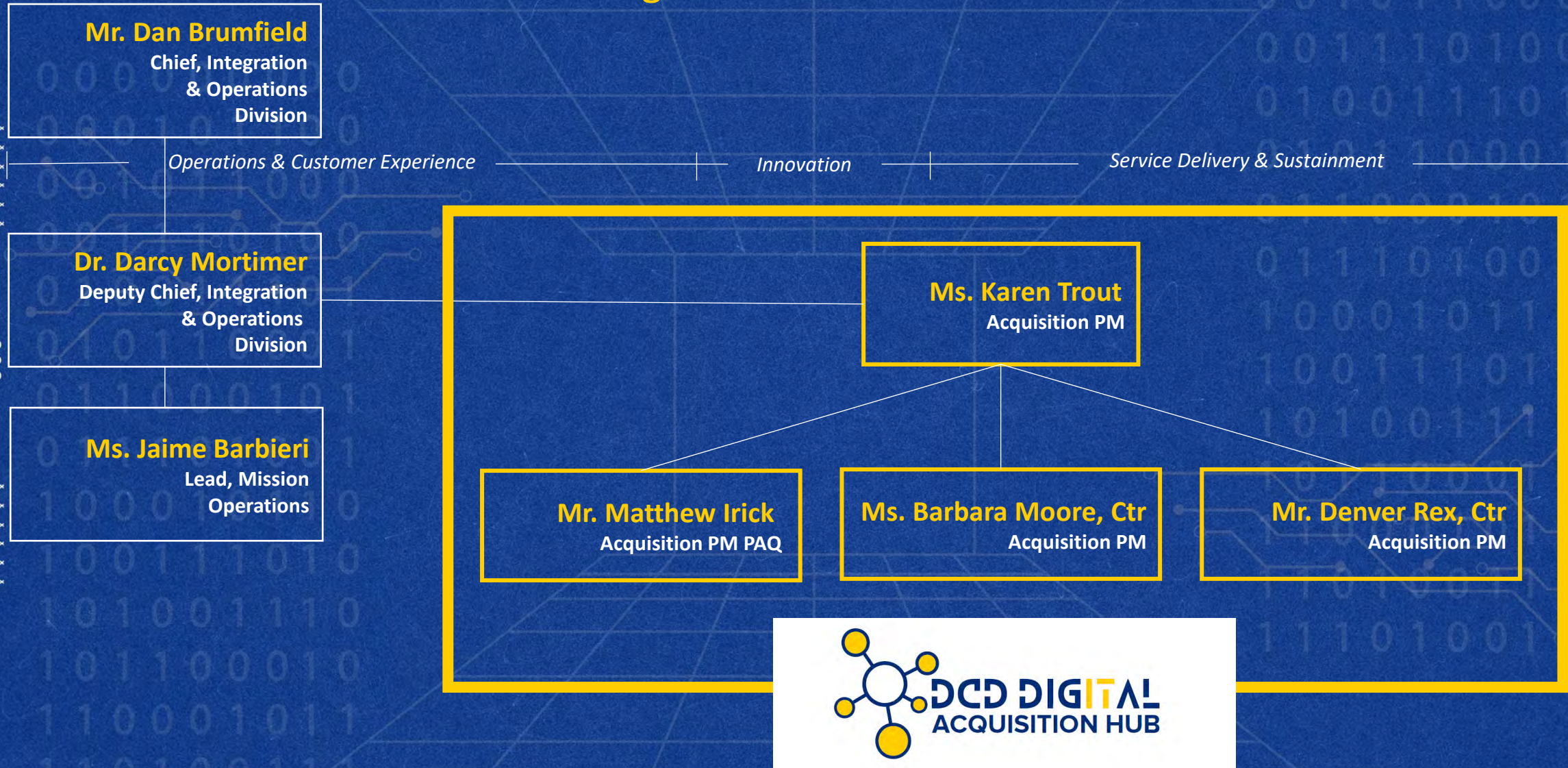
## 15 Mins

# Introducing the



Ms. Karen Trout – Acquisition Lead, AFRL/IZO

# AFRL Digital Capabilities Directorate Integration and Operations (IZO) Division Organizational Structure



# What is the DCD DigITal Acquisition Hub?

- **AFRL/IZ (DCD) was established in Feb 2023**
- **DCD created the DigITal Acquisition Hub in Apr 2024**
- **Purpose**
  - Enable AFRL's Digital Transformation to facilitate delivery of new capability
  - Enhance technical and investment decision processes
  - Maximize contractual flexibility and scalability
  - Ensure enterprise-wide focus on acquisitions

**Streamlining the acquisition of Digital /IT Talent, Products, and Services**

# Value Proposition

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- **Efficiency**

- Alleviate acquisition toil for Science & Technology leaders
- Standardize acquisition processes
- Flexible and scalable contracting

- **Economies of Scale**

- Enterprise approach for procurement and implementation of Digital & IT solutions

- **Technology Transition**

- Efficiently meet requirements
- Focus on capability delivery

- **Share Expertise**

- Program Management & Acquisition



# DigITal Acquisition Hub Impact Targets

# Current Initiatives

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- **Cross-cutting acquisition support across DCD**
- **Improve requirements definition process**
- **Enhanced Contractual Insight:**
  - Enabling strategic decision-making based on current contract landscape
  - Facilitating quick reference and utilization of available contracts
  - Centralizing management of current and future contracts

# Priorities Shaping the Future

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- **Streamlining Acquisition Processes:**

- Objective: Simplify and streamline acquisition process for Digital/IT talent, products, and services
- Key Initiatives:
  - Reduce contract administrative burden
  - Streamline access to existing and new contract vehicles

- **Enhancing Collaboration and Communication:**

- Objective: Foster collaboration across AFRL/industry partners and ensure clear communication channels for stakeholders
- Key Initiatives:
  - Improve requirements definition and defined deliverables
  - Stakeholder feedback & continuous improvement

- **Ensuring Compliance and Transparency:**

- Objective: Adherence to procurement regulations and guidelines
- Key Initiatives:
  - Acquisition Strategy development

# IZ is Here to Help

# For AFRL

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- **Reach out to us as you have Digital/IT acquisition needs**
- **Let us be your force multiplier in Digital/IT Acquisitions**
  - We want to help ease your acquisition burden
  - Include us in the discussion loop
- **Consider an enterprise approach in your Digital/IT solutions**
- **We're here for you!**

**Reach out to us!**  
**[AFRL.IZO.DCDAcqHub@us.af.mil](mailto:AFRL.IZO.DCDAcqHub@us.af.mil)**

# For Industry/Academia

- **Break the silos - collaborate and communicate**
- **Continue embracing digital technologies & include them in your offerings**
- **Promote progressive partnerships that promote speed, flexibility, and scalability in contracting**
- **Respond to the current Request for Information (RFI) – Open until May 3<sup>rd</sup>**
  - *Digital/IT Collaboration, Opportunities, Research, and Experimentation (CORE) Support*
  - <https://sam.gov/opp/2ad52abe84d241acbeb2e3e01c8bd269/view>

**Contact us at:**

**AFRL.IZO.DCDAcqHub@us.af.mil**

# Ask us anything! Open Panel Q & As

# Collider Q&A Expectations

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- No requirements associated with this Collider Event
- Questions we **can** answer
  - Topics specific to DCD and the DigITal Acquisition Hub Stand-Up
- Questions we **cannot** answer
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# Closing Remarks

Dr. Darcy Mortimer – IZO Deputy Division Chief, DCD

# DCD Focus Areas

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- Data Storage
- Cybersecurity
- Technical and Specialty Talent Benches
- Multi-Cloud Offerings
- Cloud Compute
- Artificial Intelligence (AI)
- Multi-Security Collaborative Environments
- Identity Innovation Trends

# Closing Remarks

- **Focus on Digital & IT Talent, Products & Services**
- **Leverage the DCD DigITal Acquisition Hub**
- **Time is a Weapon!**

**Contact the DCD DigITal Acquisition Hub at:  
[AFRL.IZO.DCDAcqHub@us.af.mil](mailto:AFRL.IZO.DCDAcqHub@us.af.mil)**



<https://forms.osi.apps.mil/r/hjVx5gmykh>



# Event Coordinators

Mr. David Shahady	Ms. Jessica Vetter
Mr. Daniel Brumfield	Ms. Kati Cospy
Mr. Steve Mahurin	Mr. Matthew Irick
Mr. Chadwick Pfoutz	Ms. Amanda Javorina
Dr. Darcy Mortimer	Ms. Courtney Klement
Mr. Sean Palmer	Mr. Logan Lambert
Mr. Paul Salchak	Ms. Aaron Lewis
Ms. Karen Trout	Ms. Barbara Moore
Ms. Vickie Ankney	Mr. Denver Rex

# Thank You

Contact the DCD DigITal Acquisition Hub at:  
**[AFRL.IZO.DCDAcqHub@us.af.mil](mailto:AFRL.IZO.DCDAcqHub@us.af.mil)**