

AFRL



DIGITAL

CAPABILITIES DIRECTORATE



Industry Collider

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

Event Expectations

- 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

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

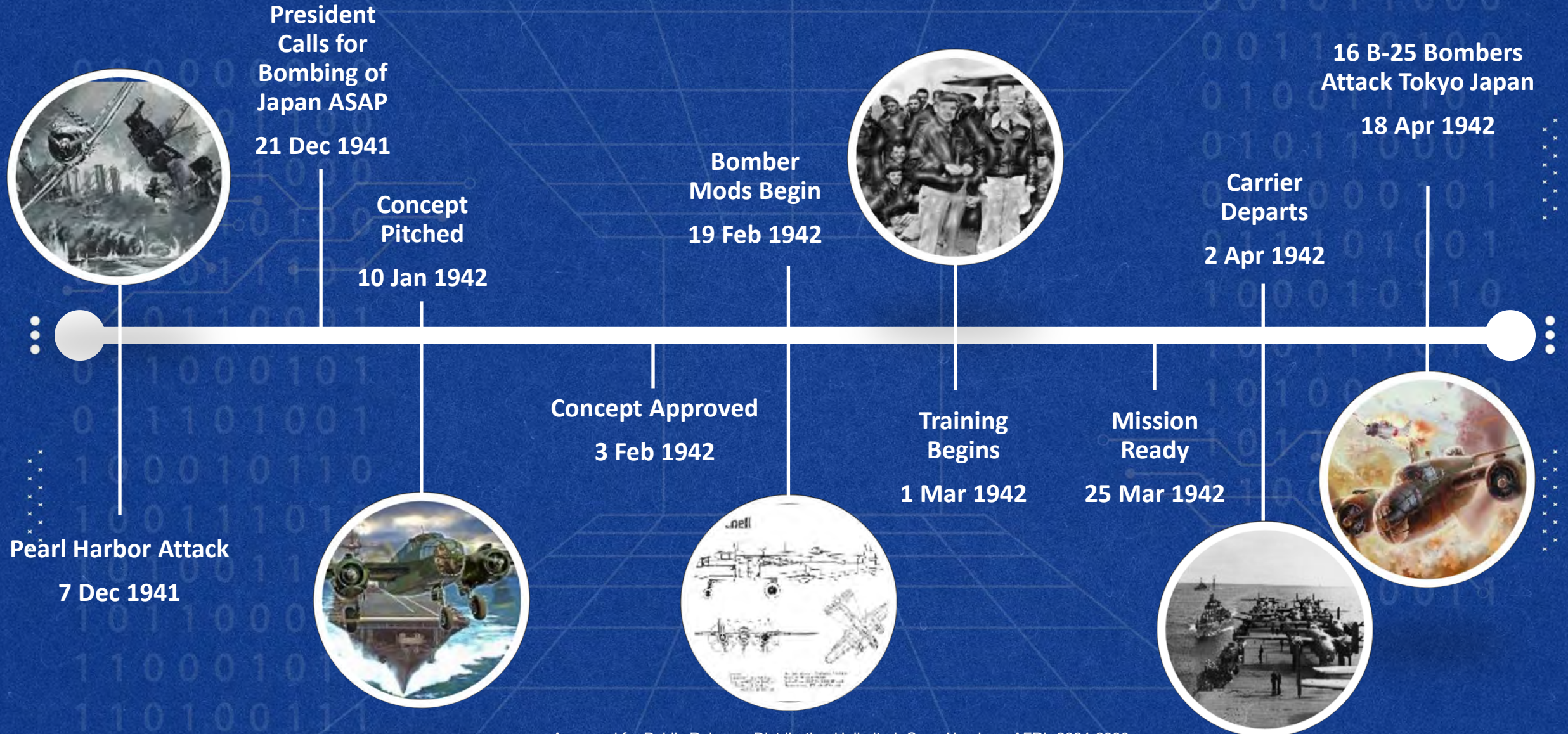
DCD Overview

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



Approved for Public Release; Distribution Unlimited: Case Number: AFRL-2024-2330



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

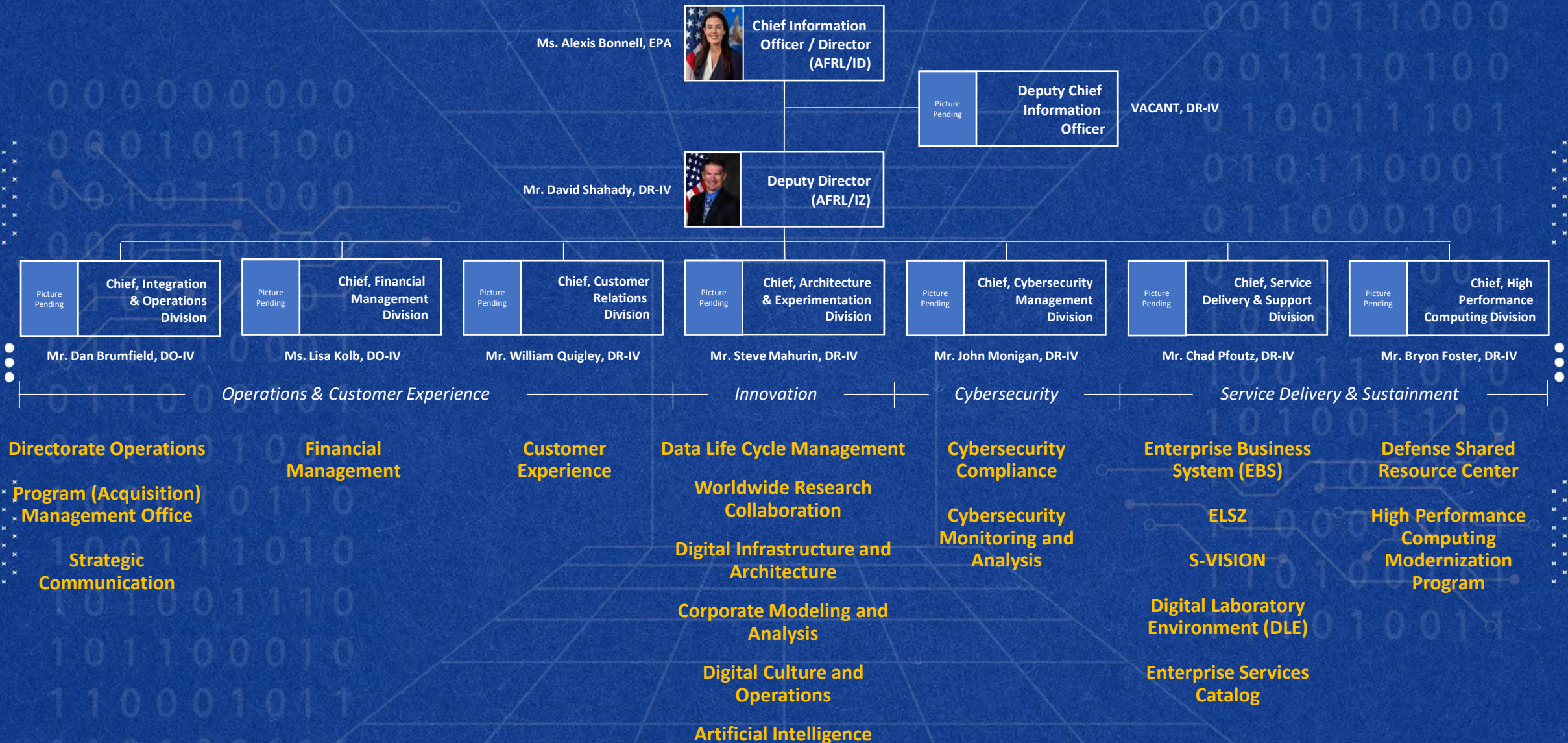
Artificial Intelligence

Cybersecurity

Cybersecurity Compliance and Monitoring/Analysis

AFRL Digital Capabilities Directorate

Our Organizational Structure



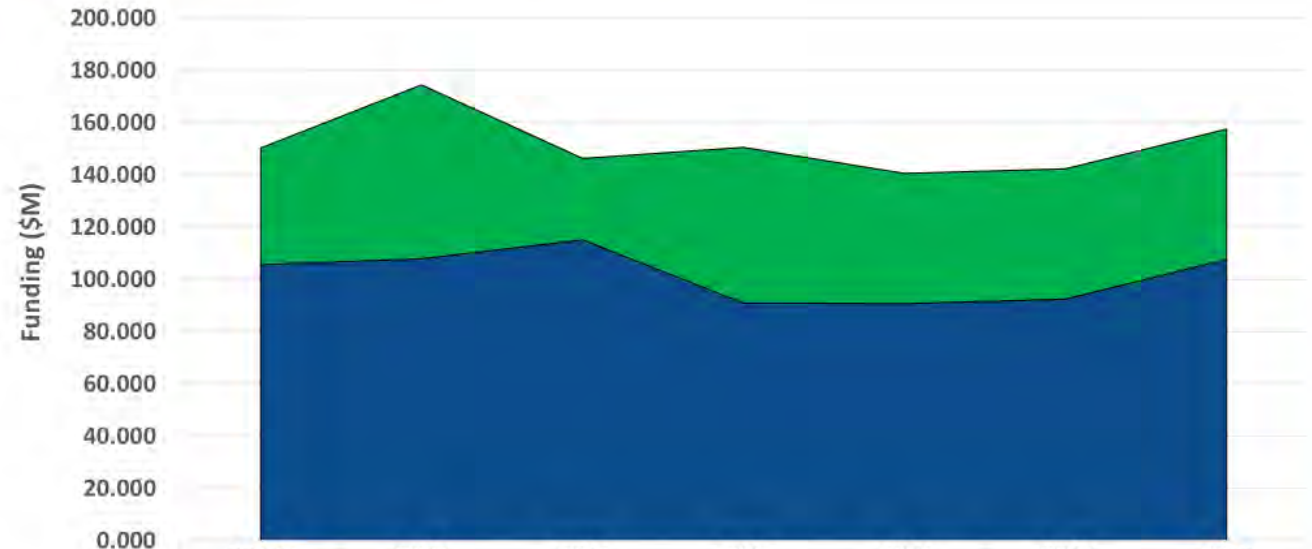
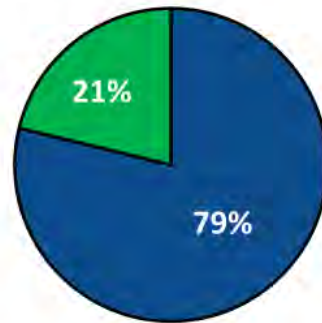
Our Funding



AFRL Digital Capabilities Portfolio

Portfolio Financials (Revenue Outlook)

FY24 Revenue Distribution



	PRIOR	FY23	FY24	FY25	FY26	FY27	FY28
HPCMP (Army)	44.501	66.763	31.050	59.559	50.000	50.000	50.000
AFRL (HQ Assessment)	105.758	107.880	115.200	91.080	90.650	92.480	107.630

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

Almost 80% of our funding comes from AFRL Technical Directorates

Our Funding

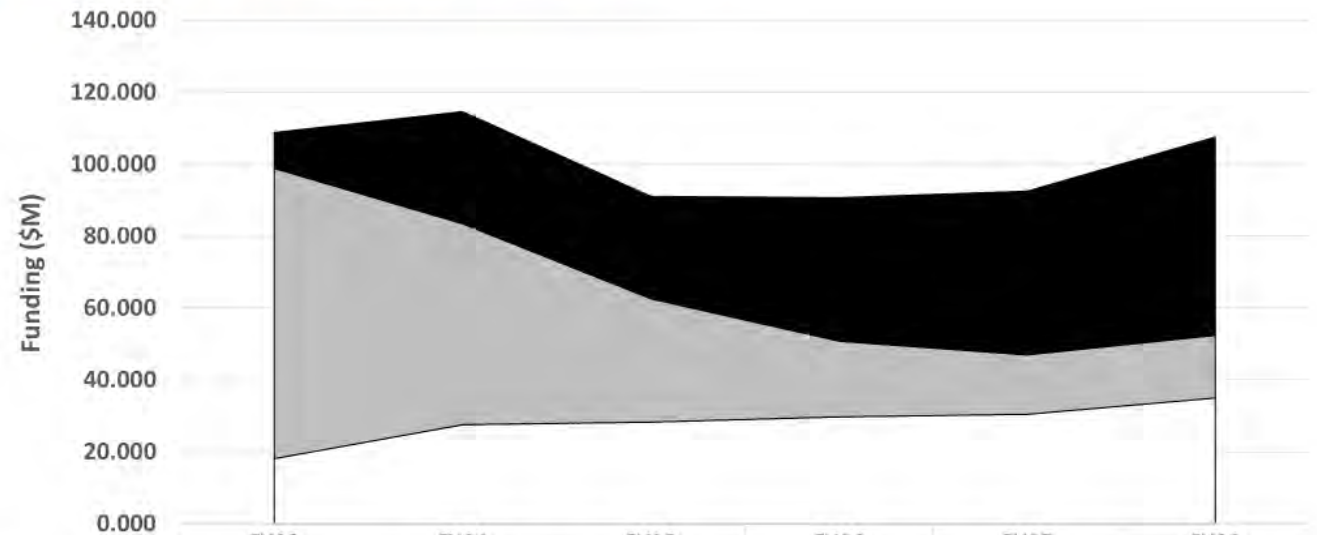
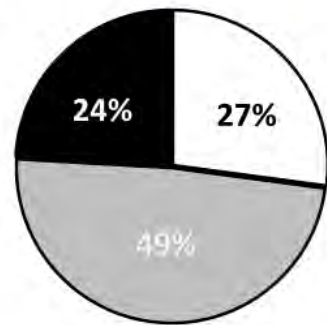


Our budgeted spending is distributed across three portfolio areas.

AFRL Digital Capabilities Portfolio

Portfolio Financials (Direct, Approved Budget by Category)

FY24 Budget Distribution



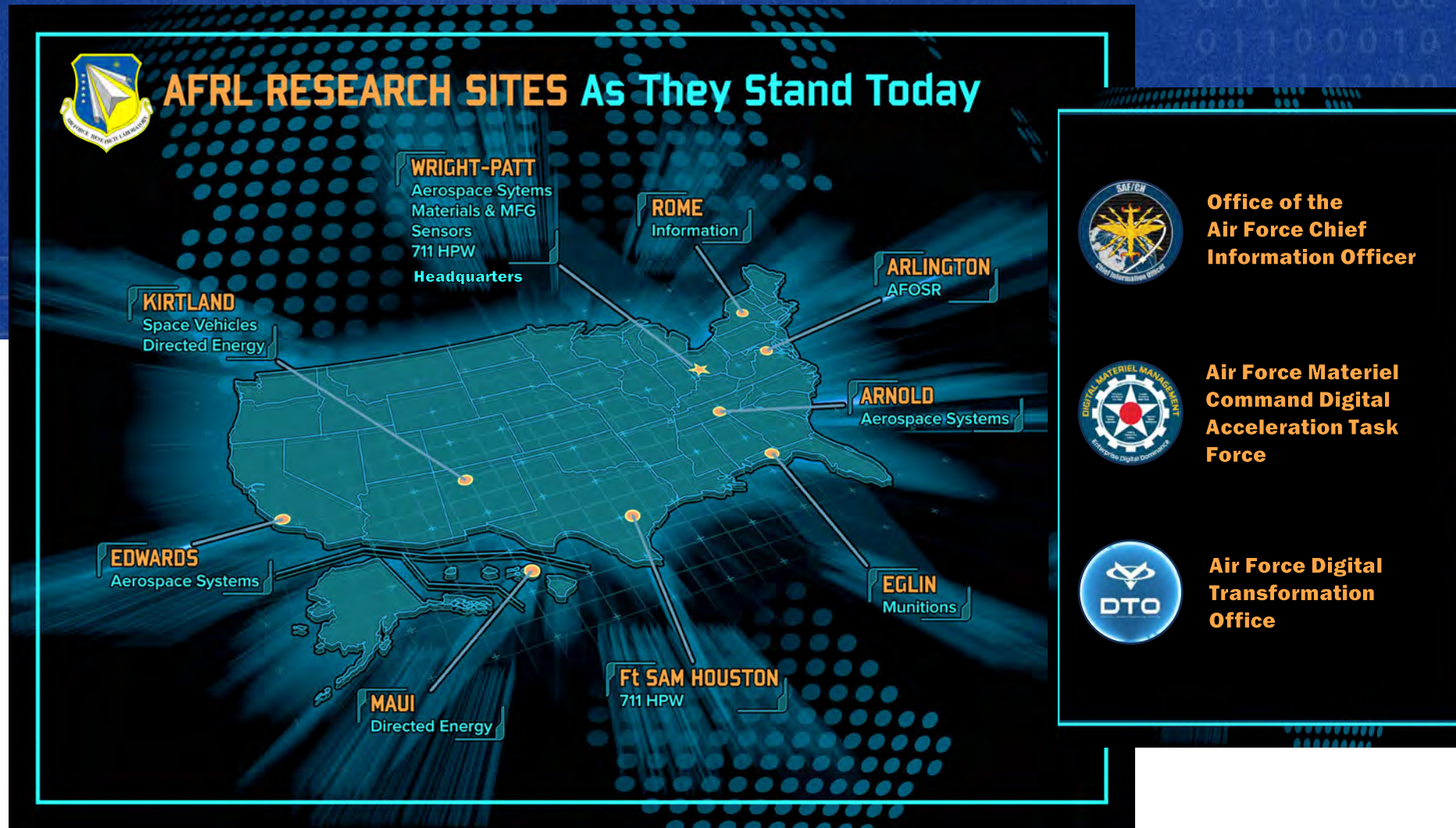
	FY23	FY24	FY25	FY26	FY27	FY28
■ Sustainment	10.121	31.060	28.542	39.900	45.502	55.231
■ Innovation	80.643	55.889	34.268	21.100	16.600	17.500
□ Mission Support	18.116	27.611	28.270	29.652	30.381	34.901

Approved Funding	123.575	115.220	91.078	90.652	92.483	107.632
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Our Customers & Stakeholders



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



AFRL Digital Capabilities Directorate

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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

A Conversation: DCD Portfolio



Mission Support



**Innovation
"Hangar 18"**



**Delivered
Products/Services
"LABVERSE"**

Digital Capabilities Directorate Portfolios

Trends Driving Strategy

Our Transformation Journey

- 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**



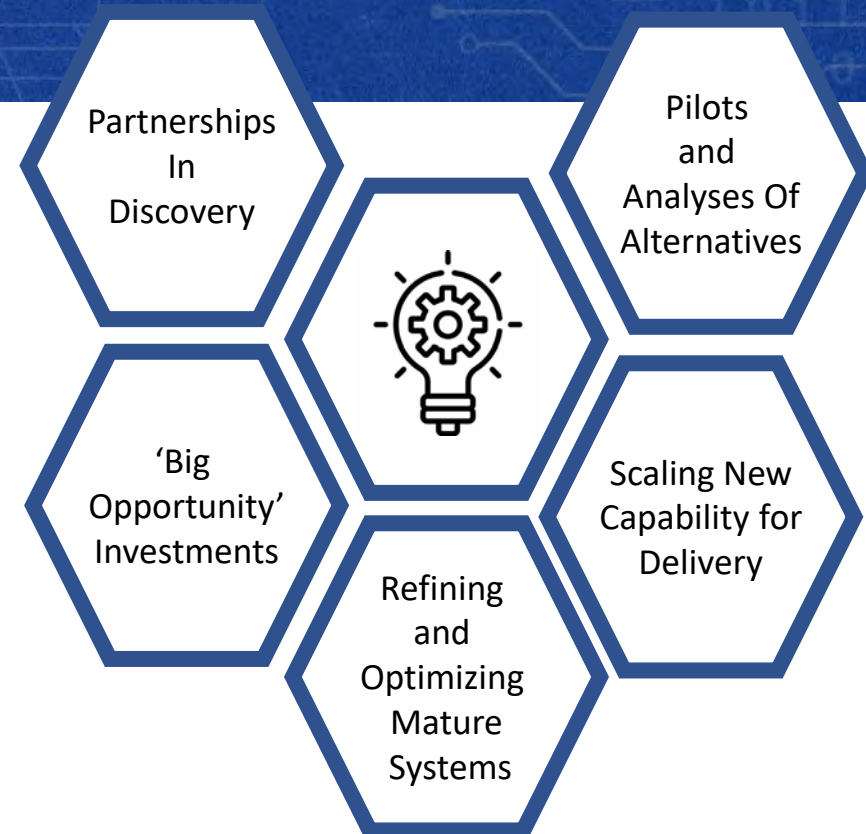
**Delivered
Products/Services
"LABVERSE"**

Digital Capabilities Directorate Portfolios

Continuous Innovation



DCD Innovation Portfolio (HANGAR 18)



Innovation Portfolio

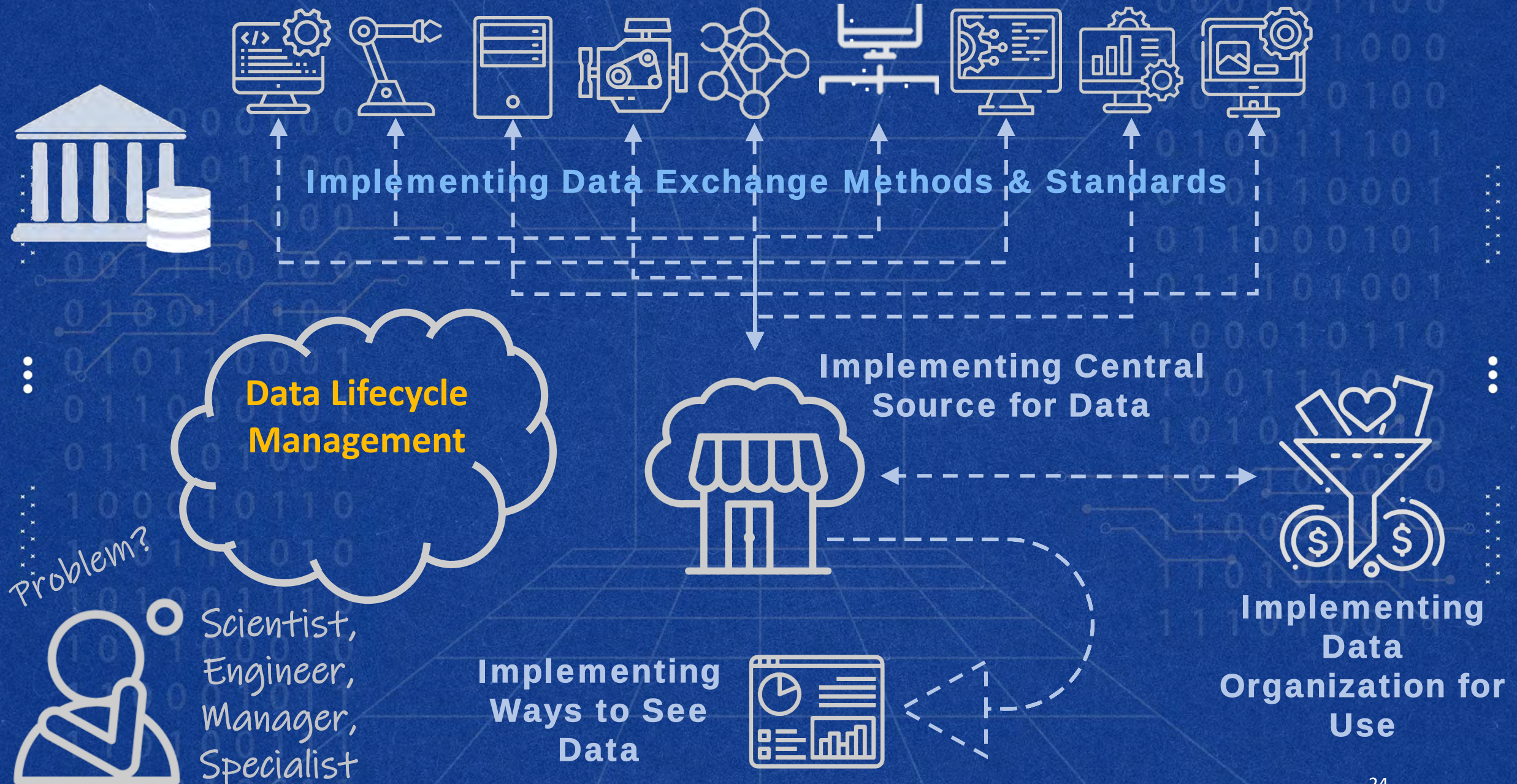
Programs

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**

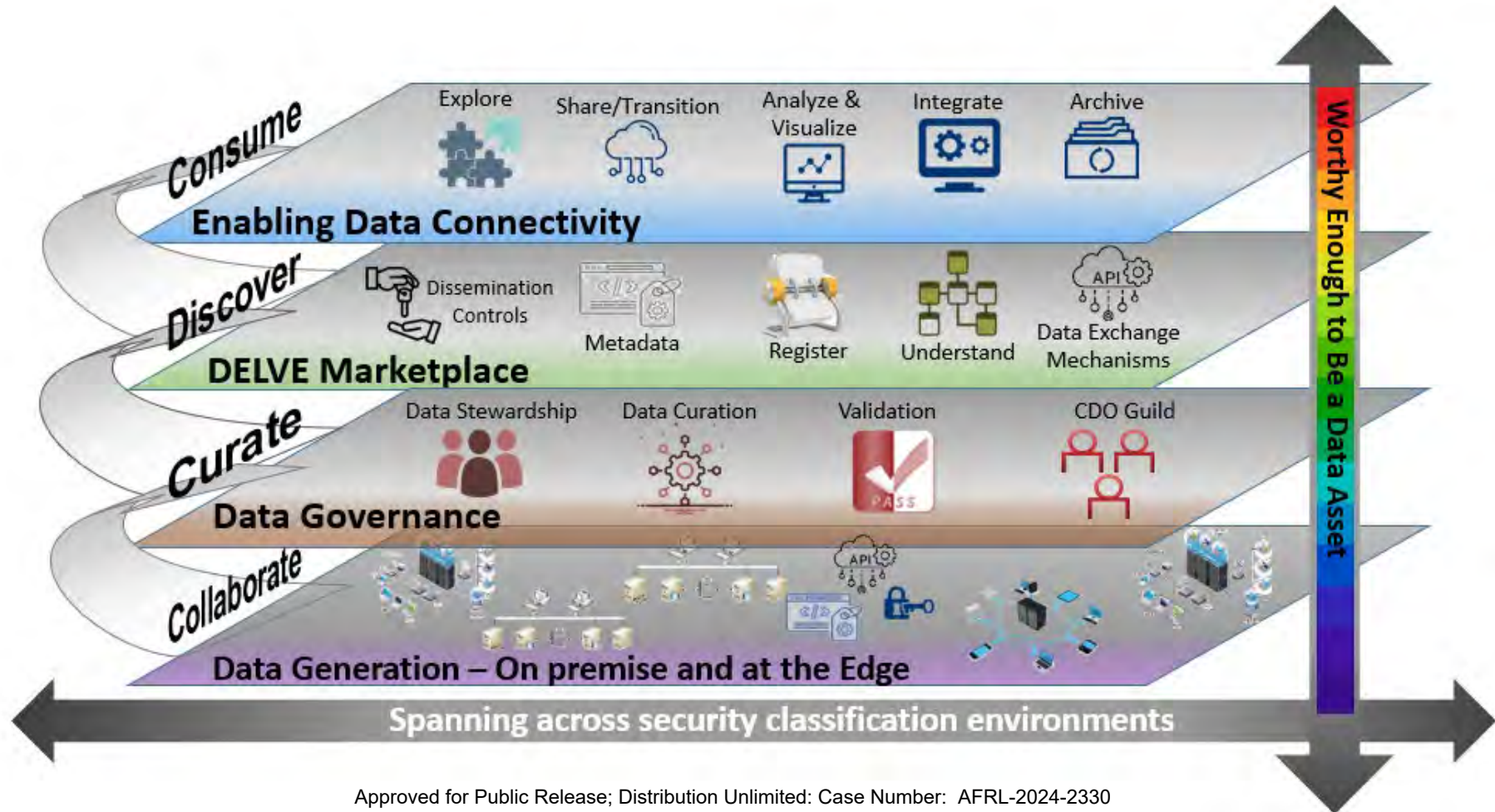
Multitudes of Independent Systems



Data Lifecycle Management

Architecture

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





Multitude of Research Partners



Spectrum
of
Security
Access

Implementing
Collaboration Tools as
a Service

Worldwide
Research
Collaboration

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

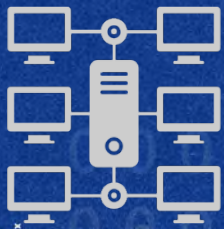
- **2,200+** 90-day active users including **600+** external partners
- Launched pilot for **foreign collaboration with AFRL/RX**
- Supported **DAF Chief Scientist Microelectronics Study** directed by Congress
- AFRL named a **2023 Google Cloud Customer Award Winner** for "innovation, utilizing Google 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

**Infrastructure
&
Digital
Architecture**

Problem?



Scientist,
Engineer,
Manager,
Specialist



Traditional
IT



Cloud
Only



Hybrid
IT

or



Hybrid
Cloud



Implementing an AFRL Enterprise Architecture

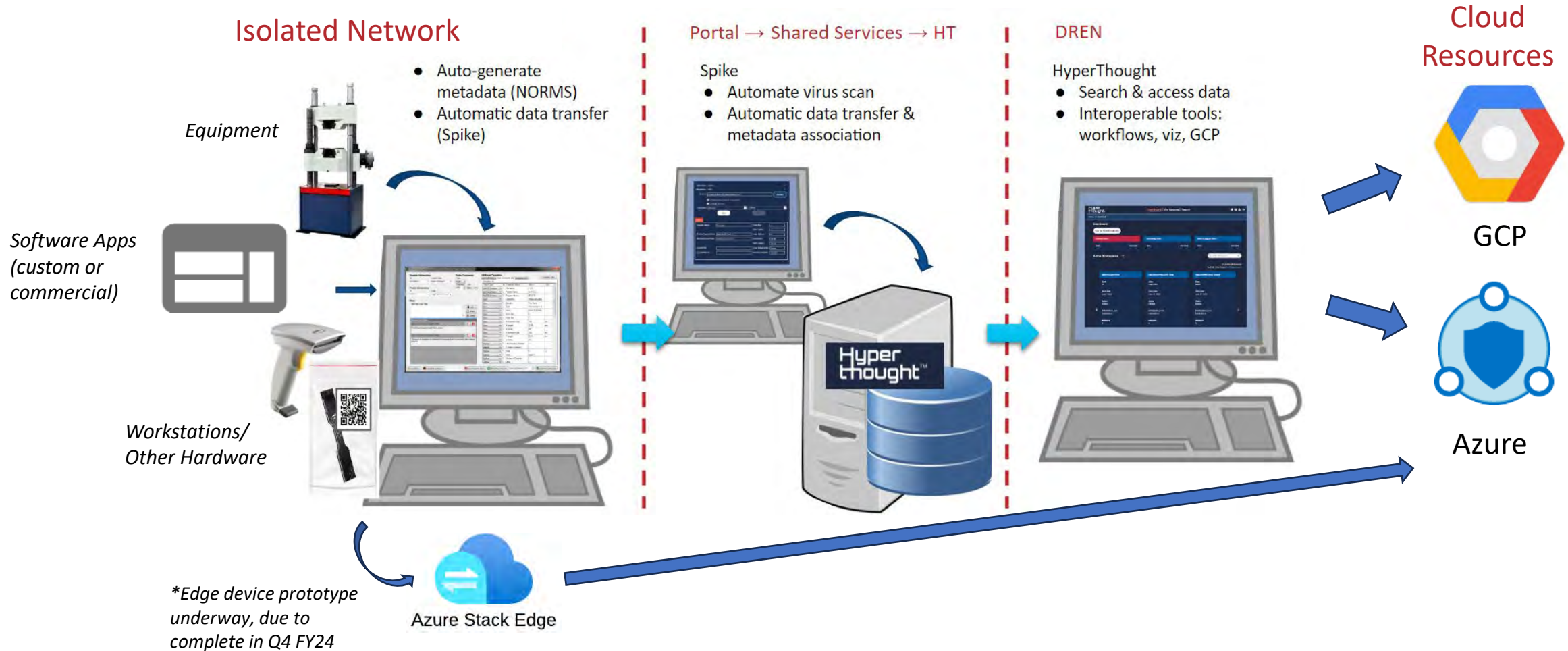
Capitalizing On and Implementing “Super Cloud” Capabilities

Laboratory Directorates and Offices



Federated Connectivity and Access

Technical Approach - CARBN



Digital Architecture

Digital Services Catalog Technical Journey

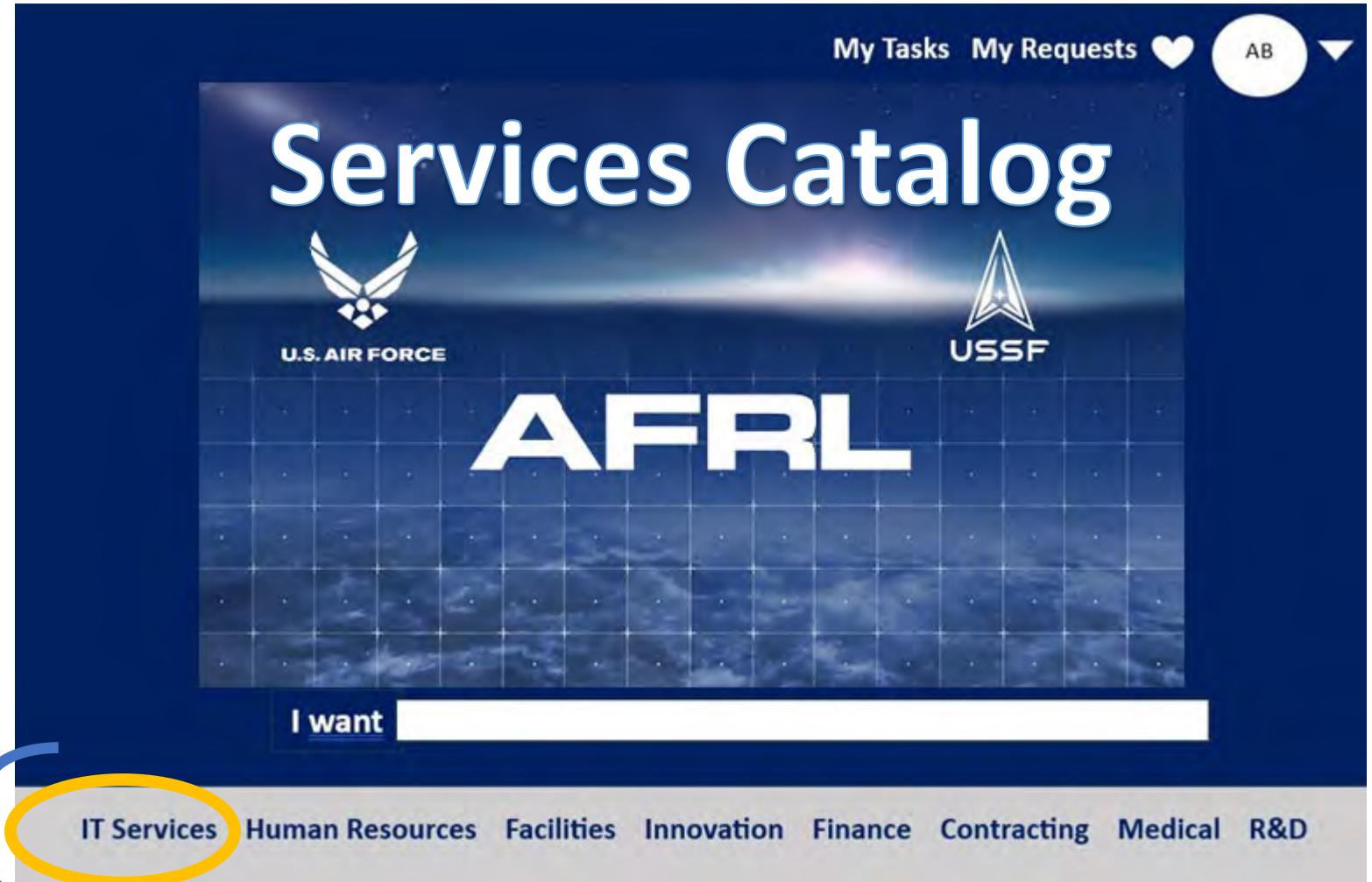
**MVP Scheduled
for Release
Mid-Late April**

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

**AVAILABLE
CATALOGS**

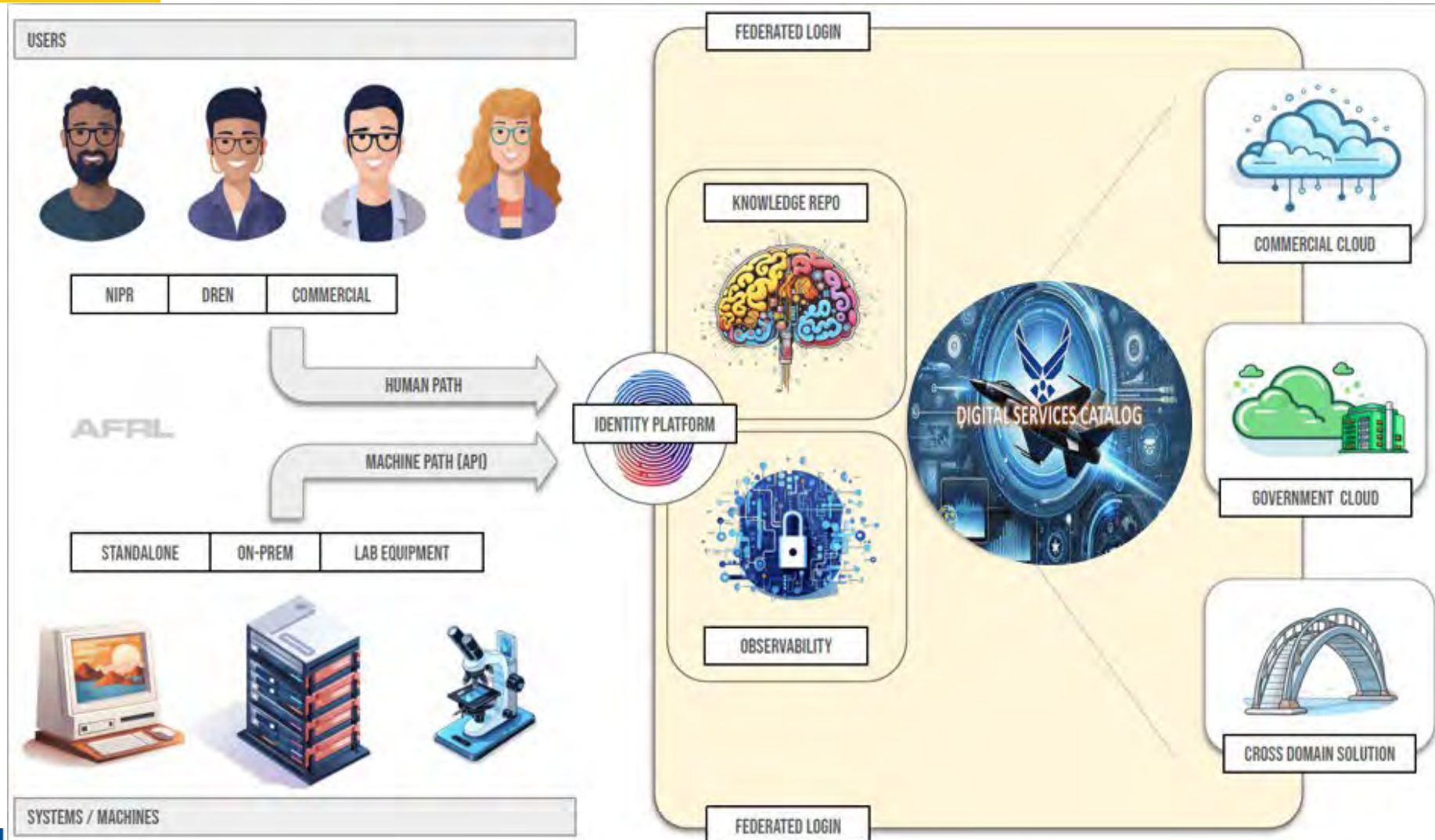
IT Services

Human Resources Facilities Innovation Finance Contracting Medical R&D



Digital Architecture

High Level View





**Expand Digital
Upskilling**



**Experiment with
new ways of
working**



**Digital Culture
and
Operations**

Problem?



Scientist,
Engineer,
Manager,
Specialist



**Enhance the
Digital Culture**

Technical and Functional Directorates





**Implementing
Digital
Engineering
Concepts**

**Delivered S&T
Capabilities**



**Threats
and Risks**



**Implementing
Modeling and
Analysis of
Capability**

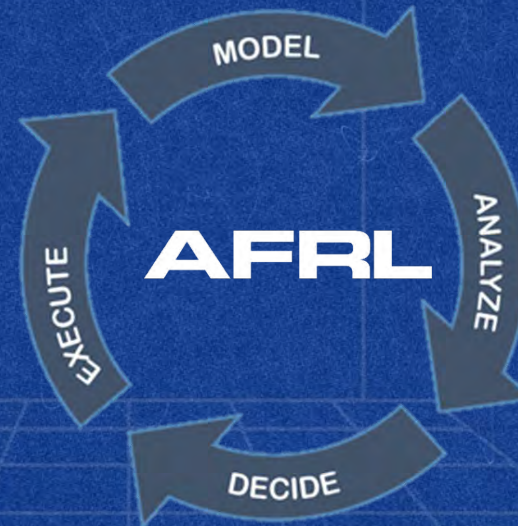


**Corporate
Modeling
&
Analysis**

Problem?



**Scientist,
Engineer,
Manager,
Specialist**



**Implementing the Infrastructure
Framework Needed for Modeling
and Analysis**

Increase Organizational Effectiveness

Reducing
Toil



**Artificial
Intelligence**

Problem?



Scientist,
Engineer,
Manager,
Specialist

Connect with Modern Approaches



Simplify Paths for AI-Enabled Tools



Rapid
Enablement



Trends in Innovative Pathfinders and Pilots

Expansion Beyond Traditional IT Focus

- 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

- 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



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



Multitudes of Independent Systems



Implementing Cybersecurity Risk Management Framework

Authority to Operate



**LABVERSE /
Digital
System**

Problem?

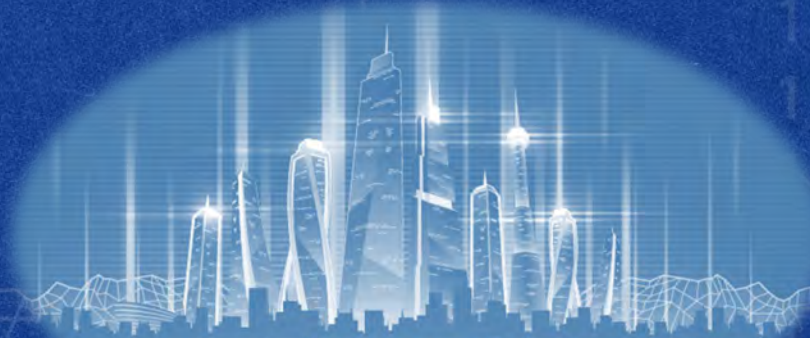


Scientist,
Engineer,
Manager,
Specialist



Implementing
Services
Catalog

Fielded :
Enterprise
Services



Welcome To
LABVERSE

Technical and Functional Directorates

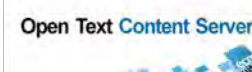


Services & Products in Production

- **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

- 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

- 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

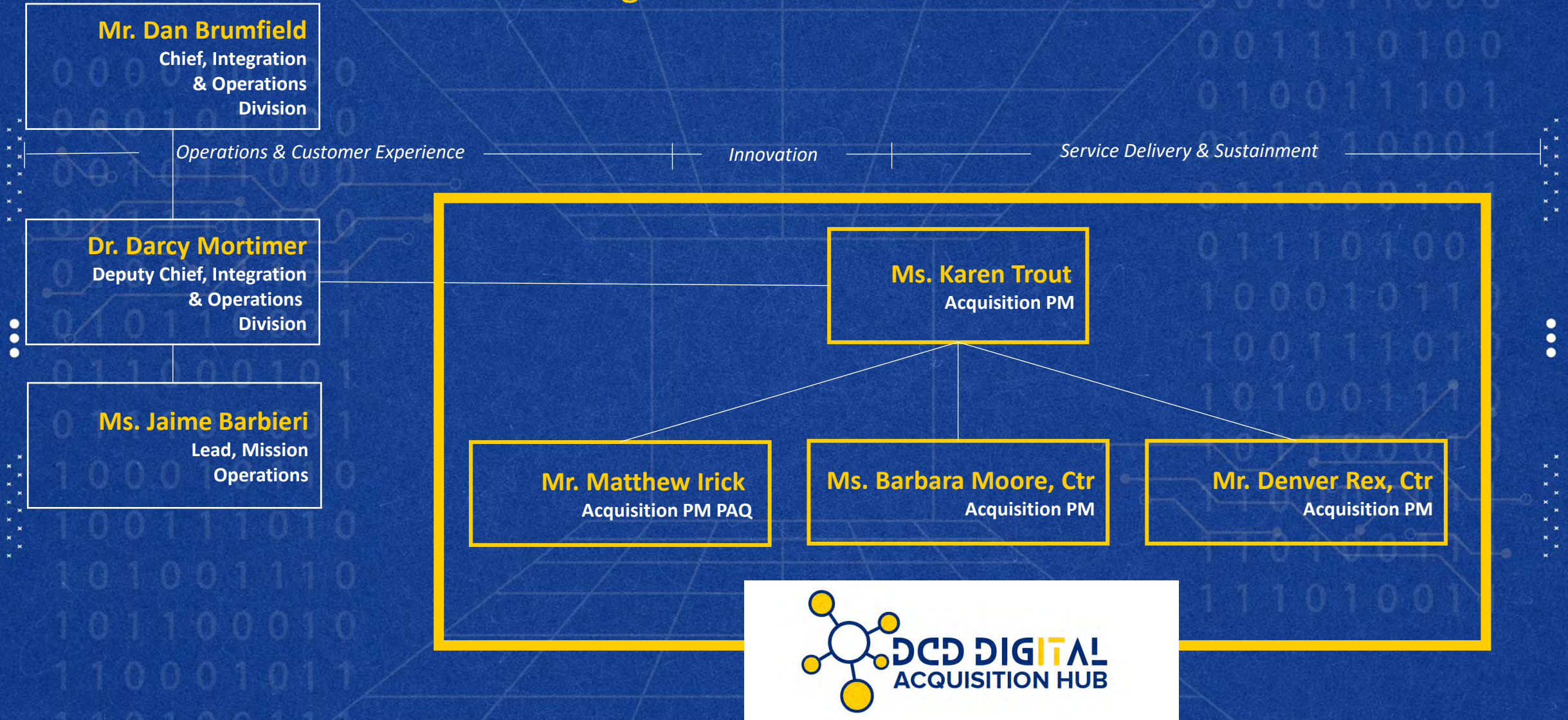
Introducing the



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

- **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

- **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

- **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

- **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

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 3rd
 - *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

- 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
 - Topics tied to a direct requirement or active contracts

Closing Remarks

Dr. Darcy Mortimer – IZO Deputy Division Chief, DCD

DCD Focus Areas

- 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**



DCD Collider Participant Feedback



<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