USAF Digital Campaign

Thing Big, Start Small, Scale Fast
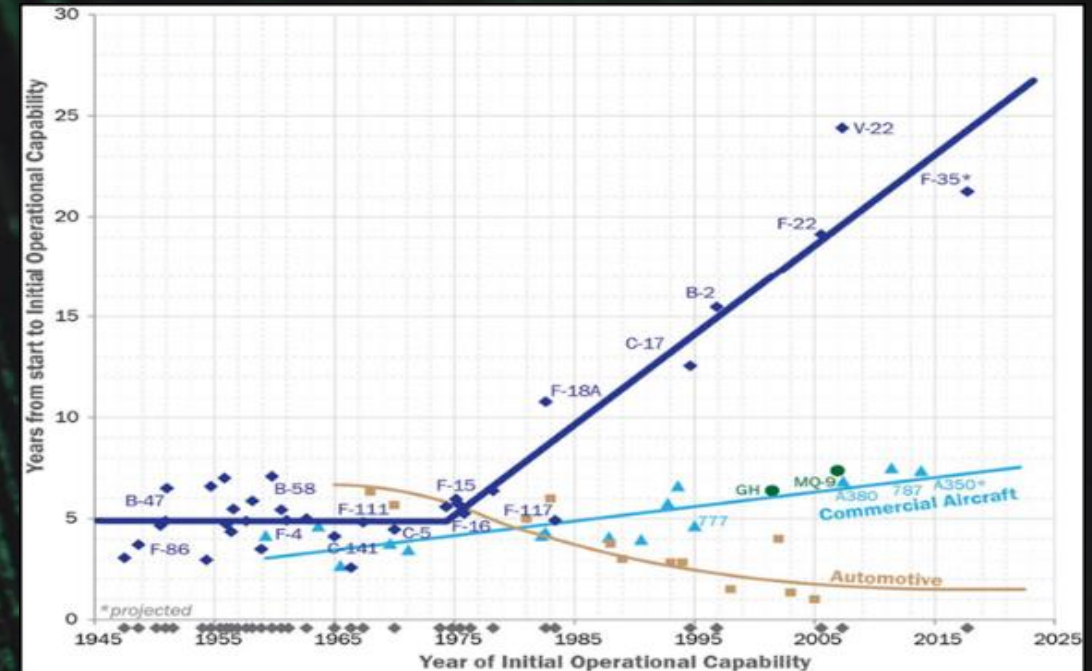
Mr. Chris Garrett
SL for Systems Engineering
AFLCMC/EN

Purpose

U.S. AIR FORCE

- **Air Force must digitally transform its acquisition enterprise**
  - Better manage complexity of modern weapon systems
  - Focus creativity on its workforce
  - Resolve ambiguity of a dynamic threat environment

*Upward Trend in DoD Time-to-Market (DARPA/TTO Study: 2012)*

Vision

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One Team…One Digital Lifecycle Enterprise

OBJECTIVE: Deliver capabilities at ever increasing speed and efficiency by designing, sustaining, and modernizing them in an integrated digital environment

Agile Processes
Digital Engineering
Open Systems Arch.
Business Processes
Authoritative Enterprise Data
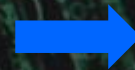
Authoritative Virtualization
**Authoritative Automation**

Challenges

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- **AF Acquisition Enterprise is large and complex**
  - Acquisition system forged out of the World War II-era Defense Industrial Base
  - Vietnam War era-budgeting and resource allocation system

- **Budgeting is done at the program level**
  - Difficult to fund enterprise-level projects
  - Funding system encourages single program "cottage industries"

- **Scaling must recognize constraints and leverage the existing system to prioritize and resource the effort**
  - Need implementation plan that encompasses totality of enterprise while generating immediate value to programs

Evolving Acquisition Processes

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Strategy: Systematically identify and promote digital enhancements to acquisition processes using Agile methodology—data, tools, infrastructure, policy
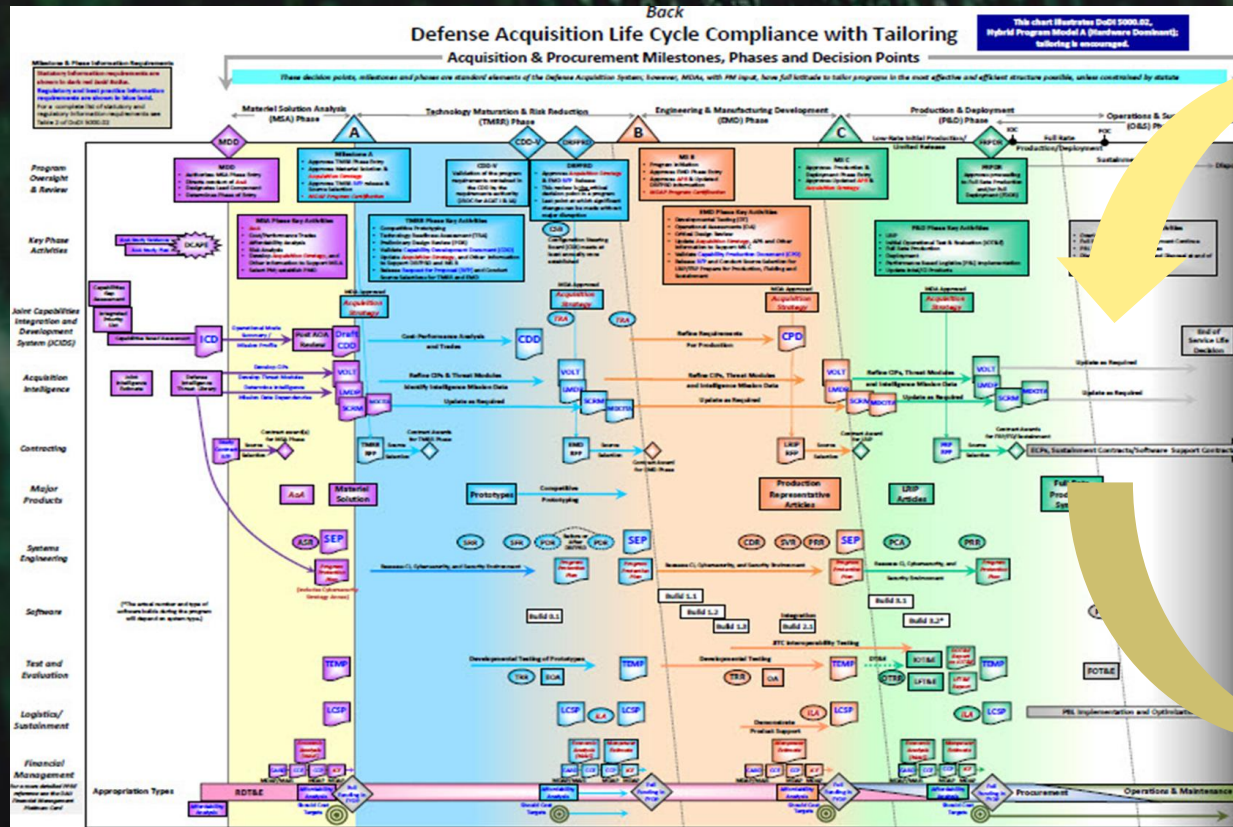
Encompass AF enterprise…from requirements generation through Operations and Sustainment

Franchise Approach

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- **Franchise Owner (Central Digital Transformation Office)**
  - Resource the effort ensures consistency across programs
  - Look to apply a consistent set of digital standards and implementation guidelines to build an underlying foundation to support scaling
  - Create an expertise in training, standards, tools and processes that creates a demand cheaper than available separately

- **Franchisee (Program Managers)**
  - Programs with available budgeting and funding to innovate
  - Each program has a small enough scope to innovate a manageable digital transformation
  - Allows individual programs to remain on target with their specific program needs
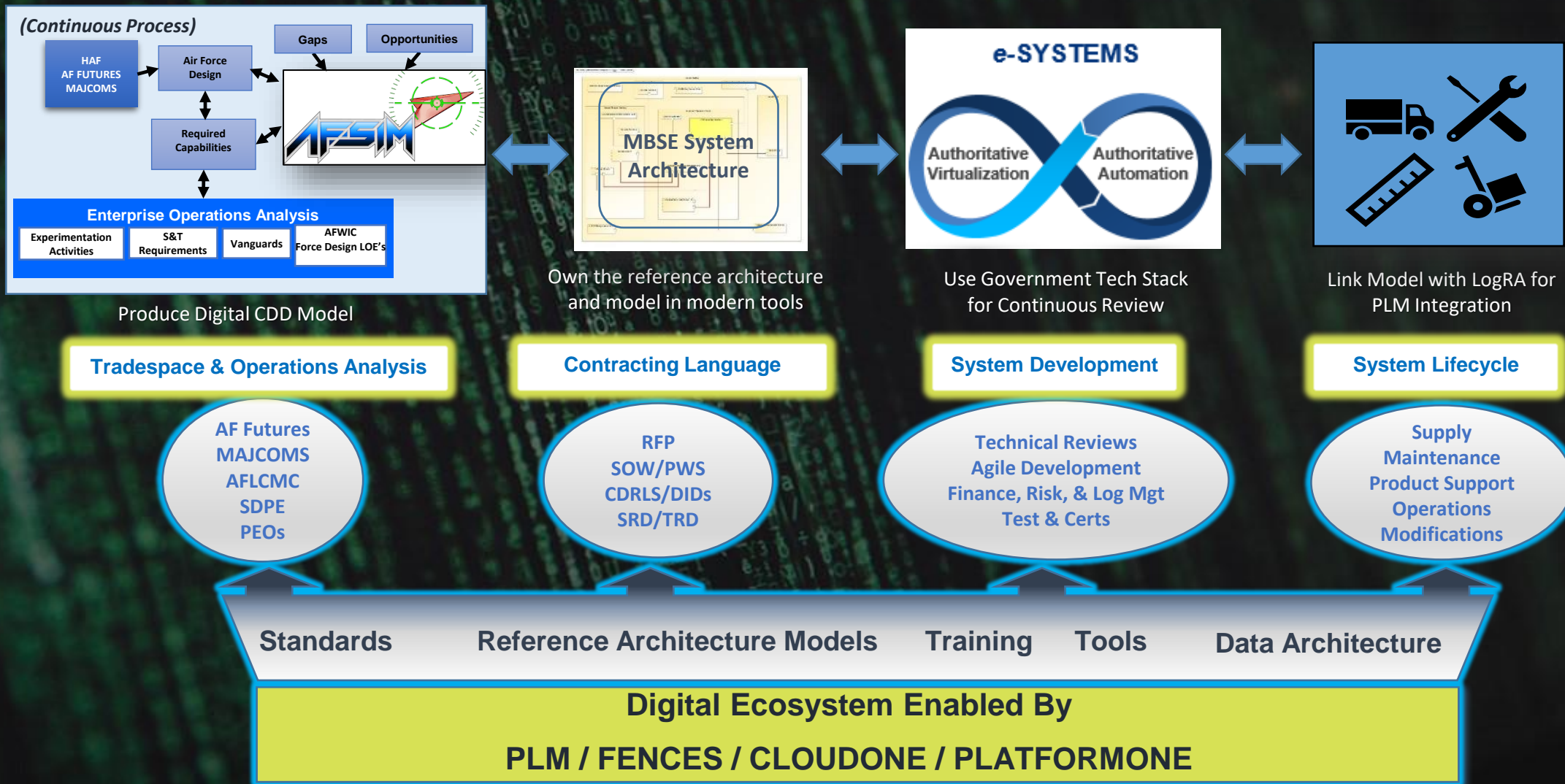
- **Innovate from the "inside out"**

Digital Campaign Defined

The future of weapon system development and sustainment:
- IT Infrastructure
- Availability of data / Open Architectures / Stds
- Collaborative ecosystem (Models and Tools)
- Integrated processes
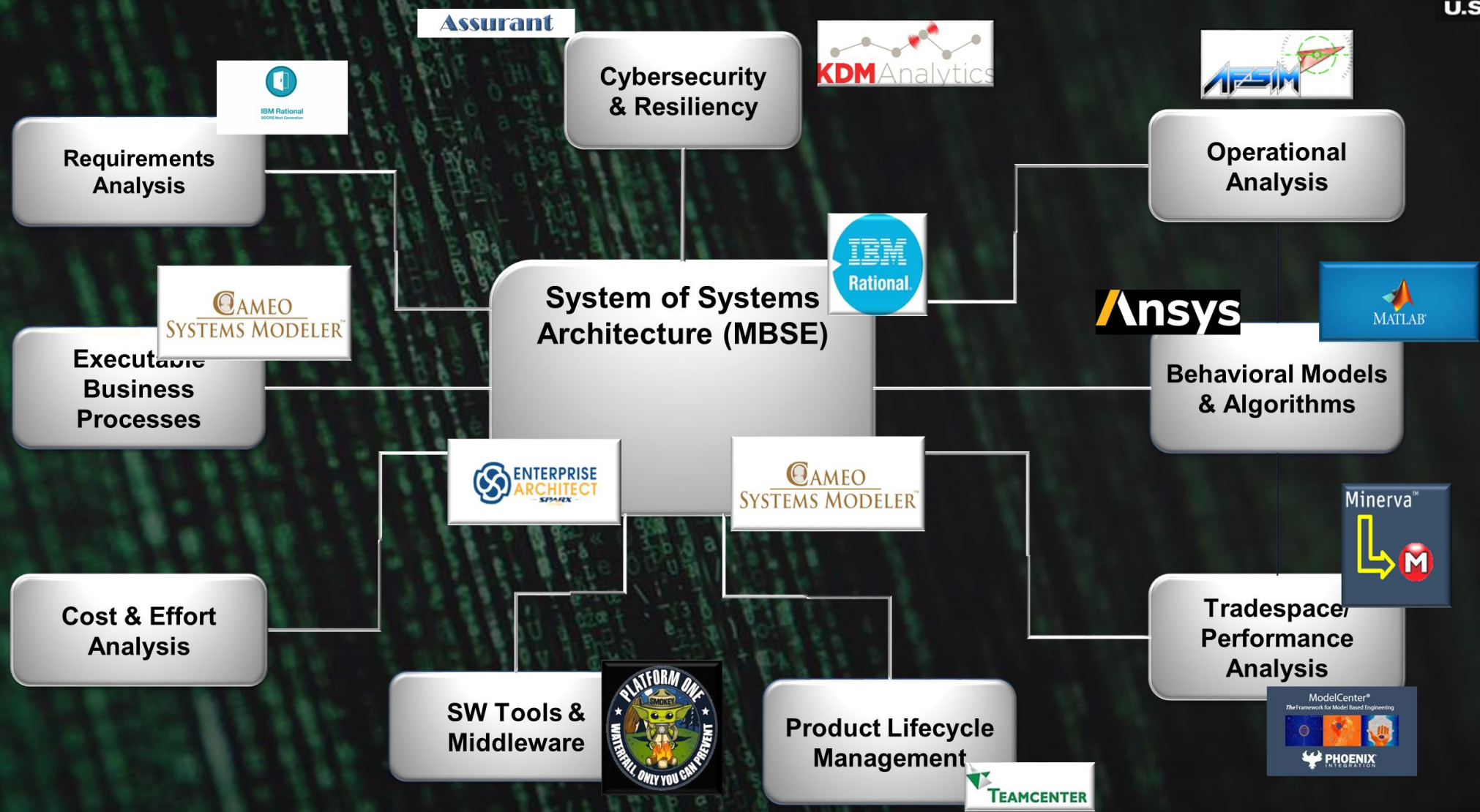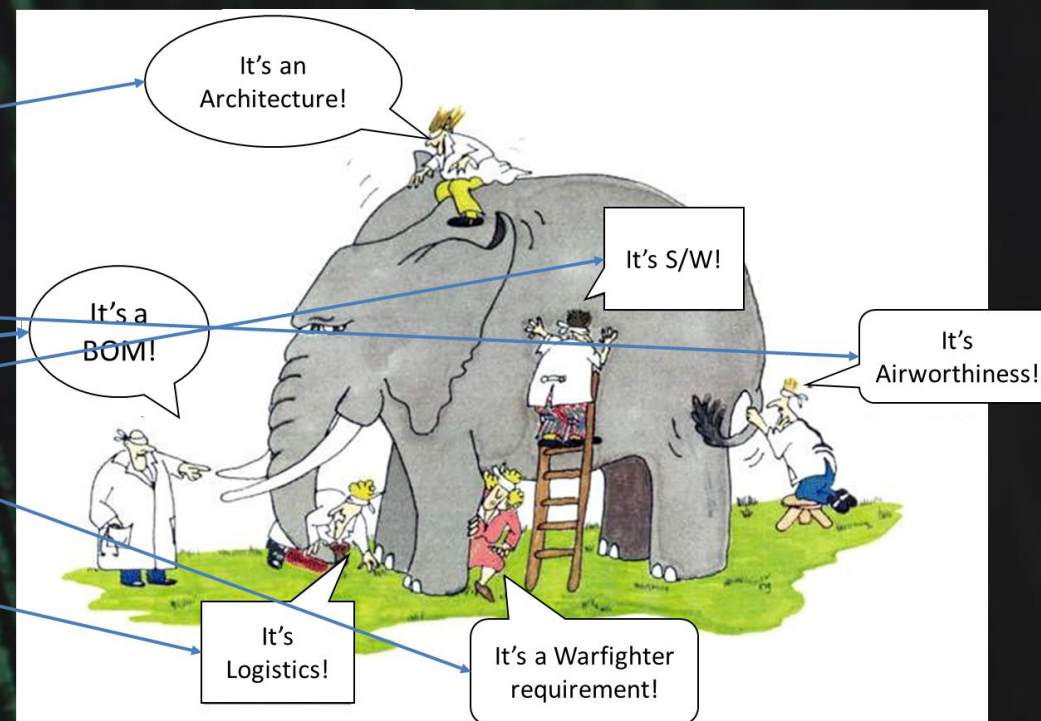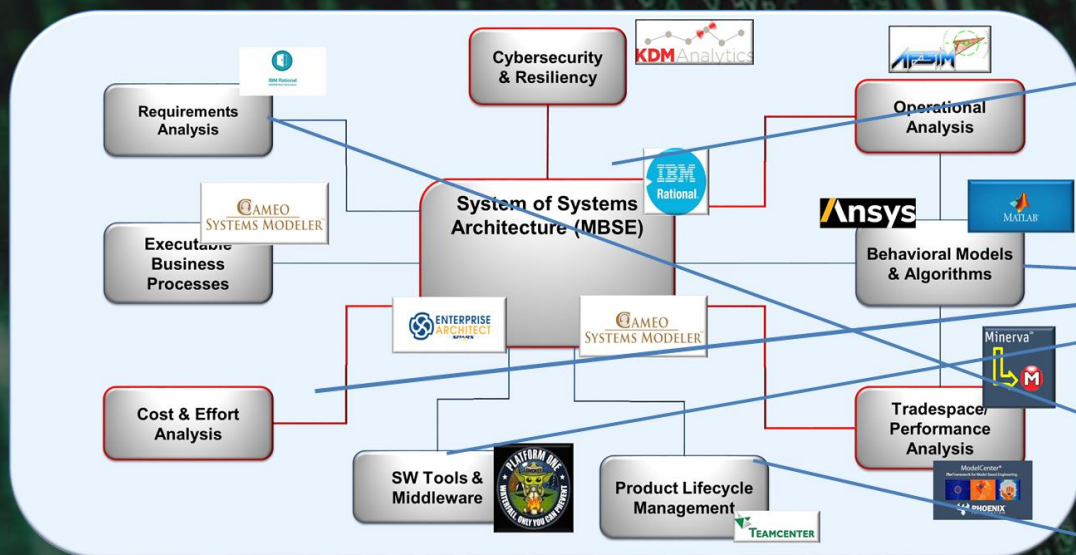- Agile culture (Trained Workforce)

Digital Ecosystem

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(Continuous Process)

HAF AF FUTURES MAJCOMS → Air Force Design

Gaps   Opportunities

Required Capabilities

AFSIM

Enterprise Operations Analysis

| Experimentation Activities | S&T Requirements | Vanguards | AFWIC Force Design LOE's |

Produce Digital CDD Model

MBSE System Architecture

Own the reference architecture and model in modern tools

e-SYSTEMS

Authoritative Virtualization   Authoritative Automation

Use Government Tech Stack for Continuous Review

Link Model with LogRA for PLM Integration

Tradespace & Operations Analysis

AF Futures
MAJCOMS
AFLCMC
SDPE
PEOs

Contracting Language

RFP
SOW/PWS
CDRLS/DIDs
SRD/TRD

System Development

Technical Reviews
Agile Development
Finance, Risk, & Log Mgt
Test & Certs

System Lifecycle

Supply
Maintenance
Product Support
Operations
Modifications

Standards   Reference Architecture Models   Training   Tools   Data Architecture

Digital Ecosystem Enabled By

PLM / FENCES / CLOUDONE / PLATFORMONE

Quick Lifecycle Decisions in Context

Right Data for all Phases... for all Disciplines... leads to Speed & Agility

Ongoing Efforts

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- "Digital Guide" – enablers, templates, resources, etc for programs (public facing digital guide: https://wss.apan.org/af/aflcmc/default.aspx)

- Tailorable contracting language and Data Item Descriptions (DIDs)

- DE Platform as a Service (DEPaaS)

- Government Referent Architecture (GRA) coordination and development

- Acquisition and Sustainment Data (seeks to develop data architecture needed for digital lifecycle of our systems; including test)

- Digital Engineering Consortium

- Training and Functional Engagement

- Ongoing challenges include: Data rights considerations, Multi-level security, Authorities to Operate, distributed workforce, and continued access to tools and authoritative data

Summary

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- **Air Force must digitally transform**

- **Digital Campaign is the mechanism for DAF Acquisition Enterprise to transform the acquisition enterprise**

- **Implementation strategy**
  - **Think Big – Whole enterprise is the target – Campaign steering the enterprise**
  - **Start Small – Franchise approach with programs innovating**
  - **Scale Fast – Lessons must be learned fast and applied across enterprise**

BACKUPS

Digital Campaign Points of Contact

U.S. AIR FORCE

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