Digital Data Management
An Update

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AGENDA

- Looking back
- Framing the issues
- Elements of the solution
- Cause and effect
- Panacea versus process
- The way forward

Challenges, Questions, and Solutions

DM Definition

Data management is the structured processes and systems that plan for, acquire, and maintain data, consistent with requirements, throughout the data life cycle.

ANSI-859

Data Management Functions

- Identification/Definition
  - Data Requirements, Life cycle Needs
- Preparation
  - Internal and External Data
- Control
  - Document control processes
  - Import/Export of data
  - IP, proprietary, limited access
  - User authorizations, use requests
  - Master Lists
  - Data Marking
- Dispositioning
  - DMP
  - Delivery (digital or physical)
- Archival
  - Project files, decision data, data retention

Changes were required in the approach range, and the methods for the DM functions

Looking back

- DM was mandated in the 1960's by Congress and the DoD
- Original intent
  - Eliminate redundancy of data production and storage
  - Centralize systems use
  - Acquire only specific data for deliberate, planned, and specified use

Background

- DM evolved out of DoD and Congressional concerns (circa 1960)
  - $$$ being spent on technical data and no one knew how much
  - Available $ was not being spent effectively
  - Much of what was being acquired was unnecessary, redundant, and obsolete
  - DM was an expensive resource that was not being managed wisely
  - Finally – no one knew what was being purchased, ordered, or used, anyway
- Industry complaints increased re: the number and variety of management systems being imposed on them in development and production contracts
  - Data was pushing up the cost of contracts
- Perception was that DoD was attempting to increase and maintain control of contracts by requiring even more information
  - And no one knew what the originally acquired data really was, what it supported, and what anyone was doing with it
- Perception: the necessity for some of the management systems and the supporting data was questionable and unclear
  - Some elements required and acquired the same things in different ways
  - Some DoD systems required generation of data that was already available in the contractor's own internal data systems

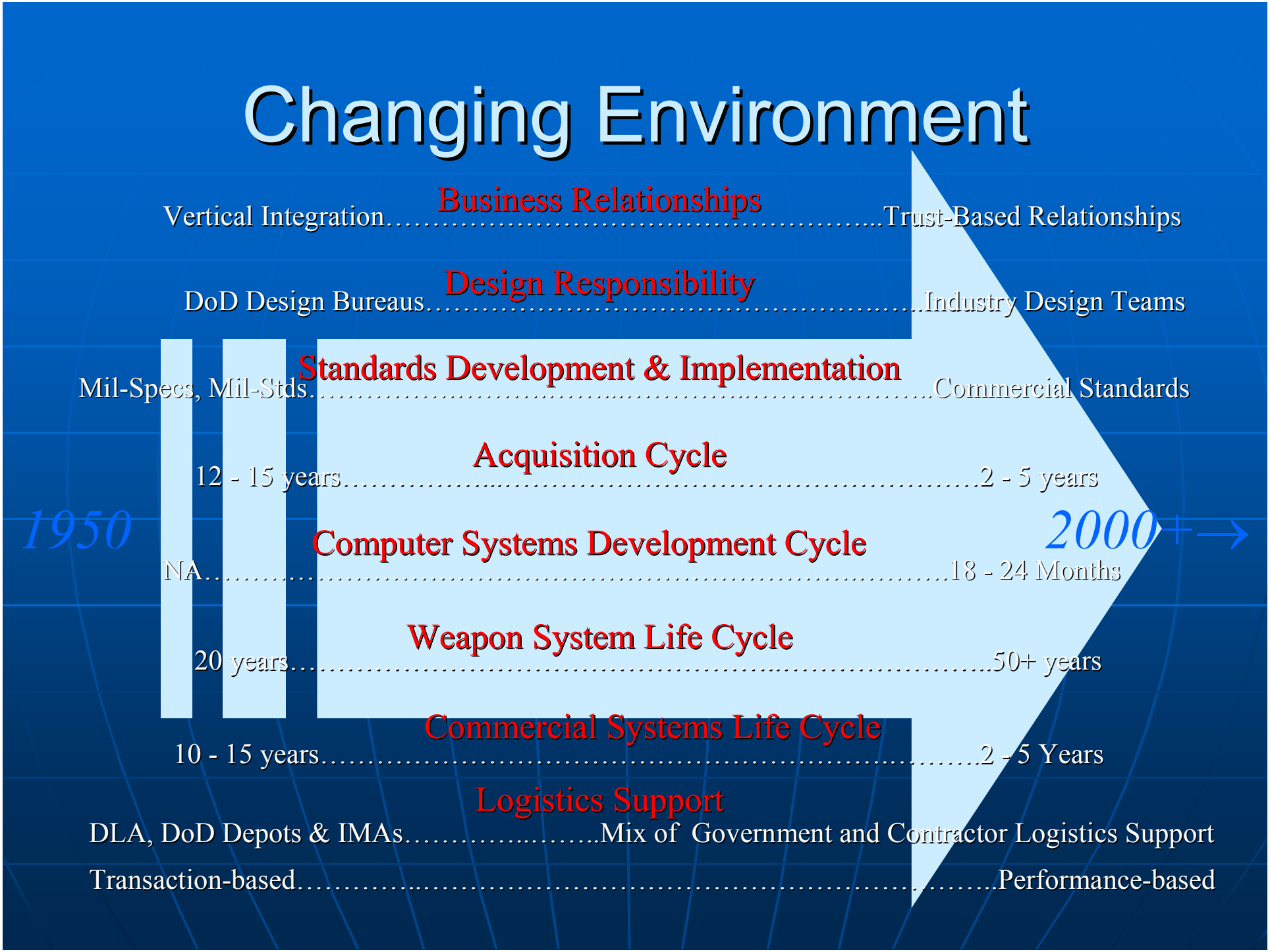
So What Has Changed?

The problem is more pressing

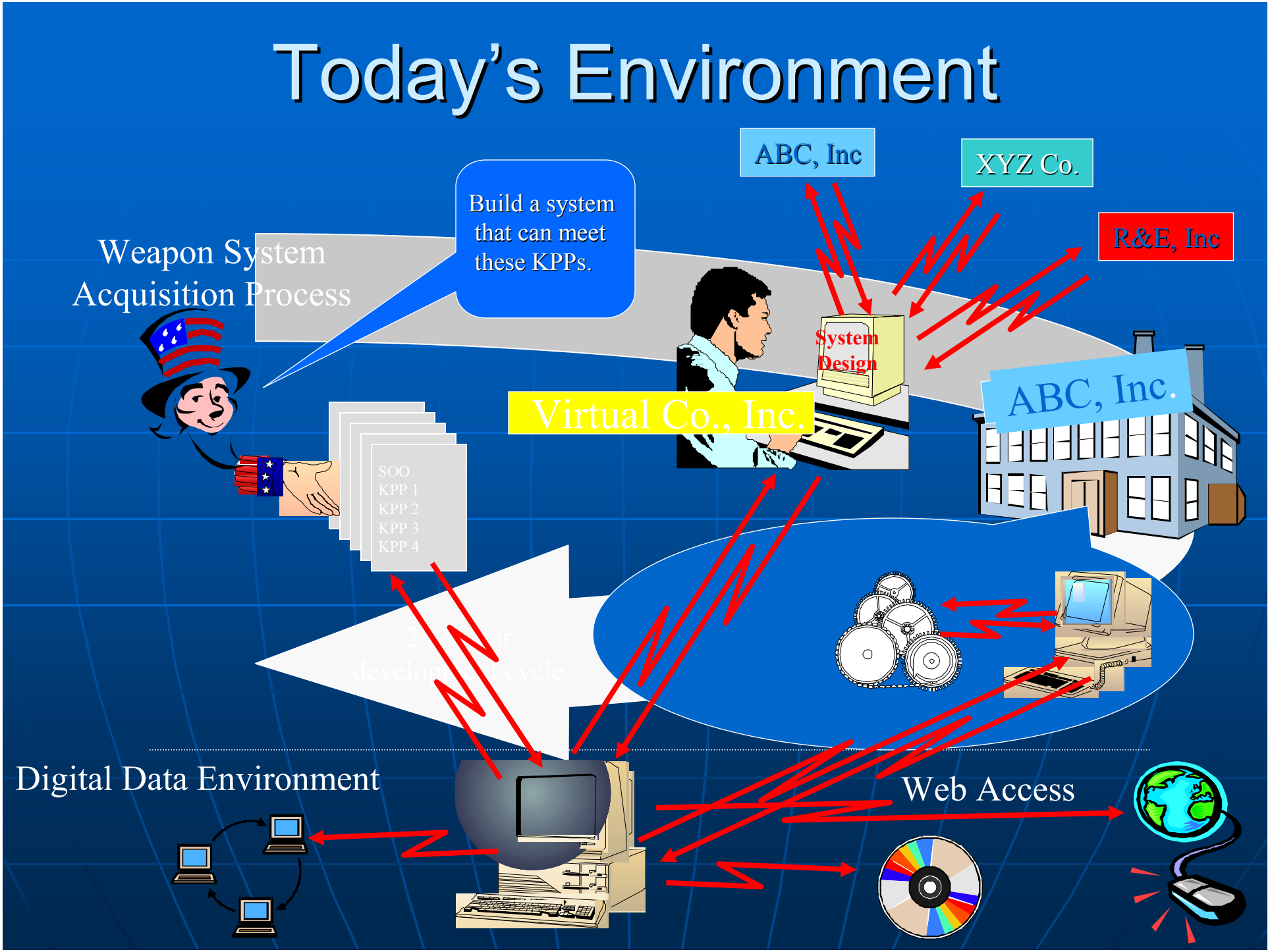
- More data than ever
- Less money than before
- Business model revolution
- Best practices rule
- Transaction and decision time is compressed
- Network centric strategies

And “technology” is not the solution

Changing Environment

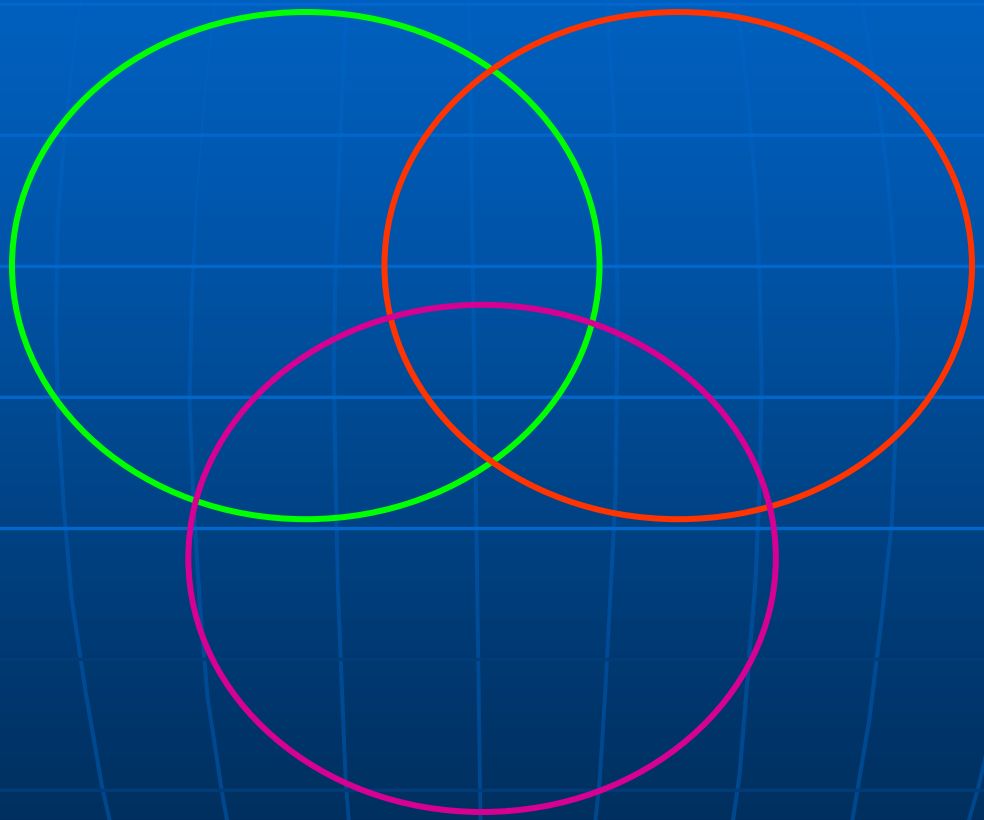


Today's Environment



Data Management "Solution":

Three Primary Areas - Principles, Practices, and Training



Principles

- Basic tenets and values
- General

Practices

- Implementation specifics
- Organization-specific

Training

Basic and Advanced
(PM and Practitioner)

Data Management "Solution:" continued

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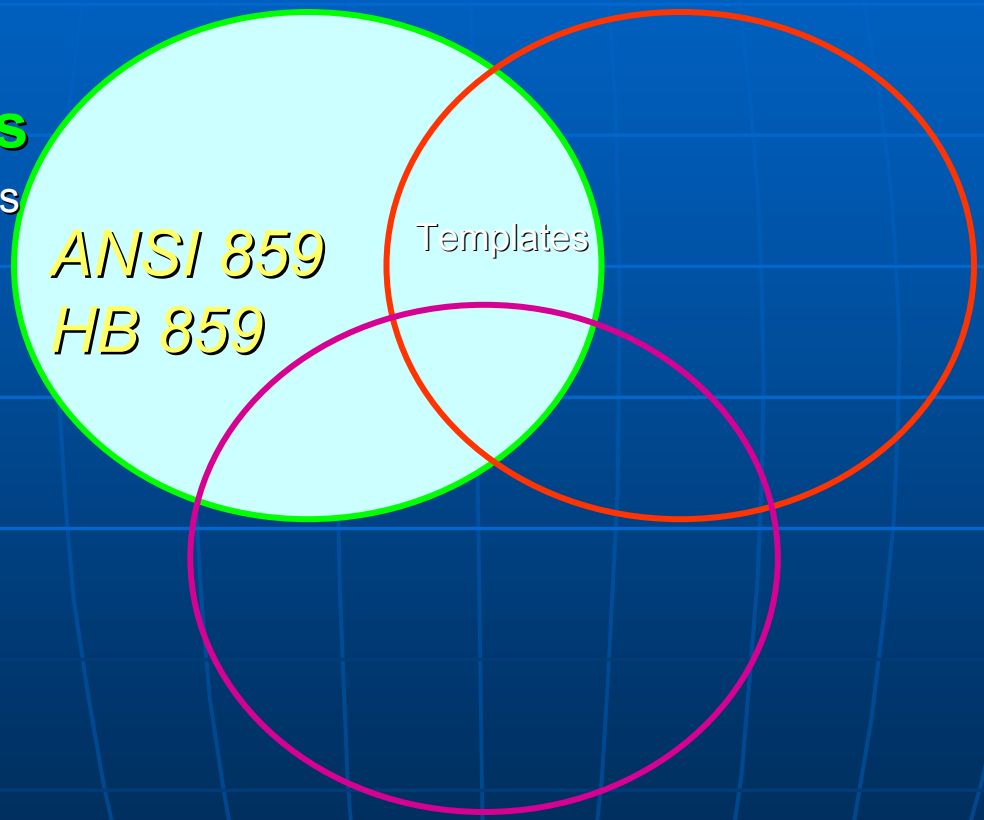

Principles

- Basic tenets and values
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Practices

- Implementation specifics
- Some are organizational-specific

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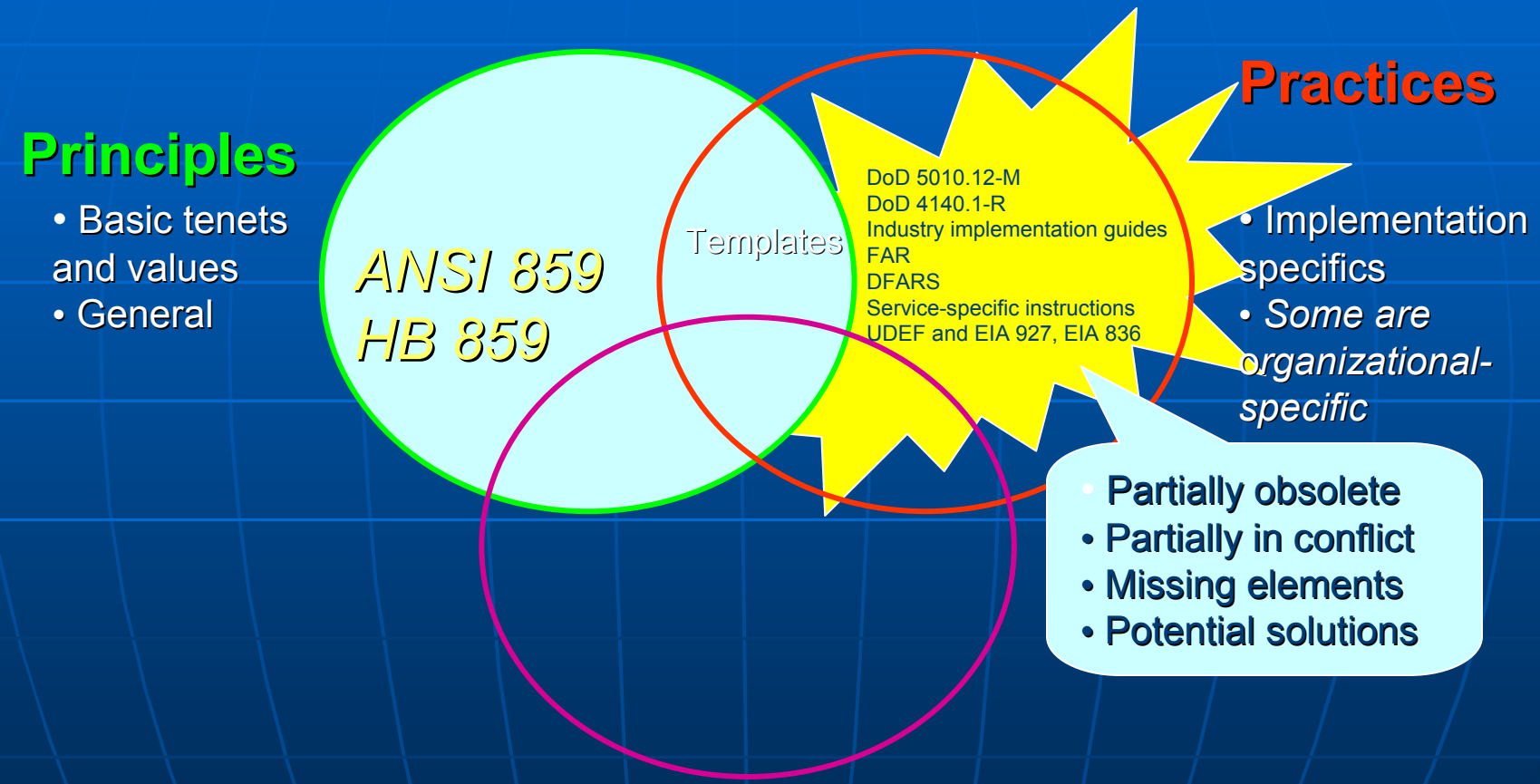

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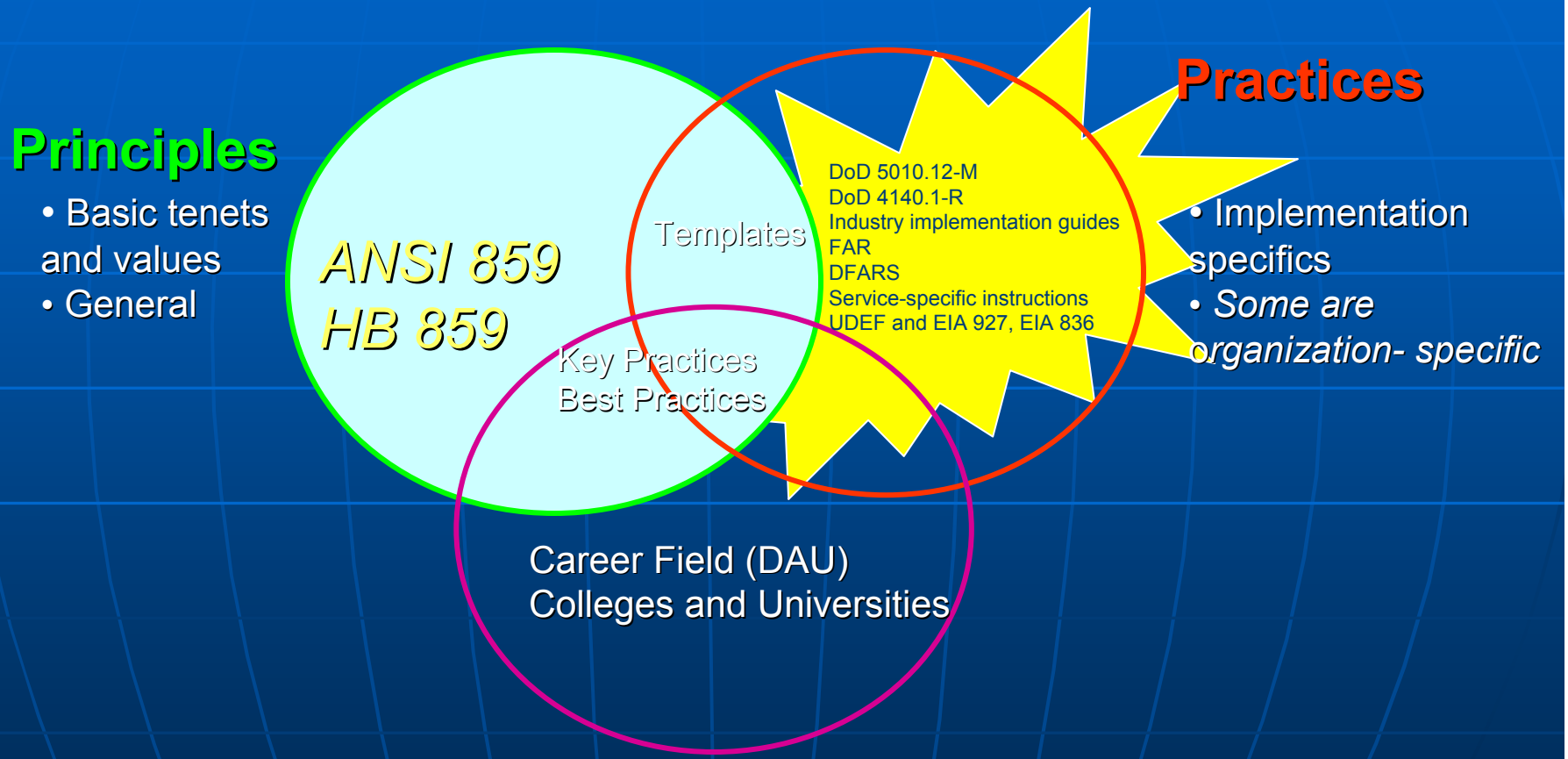

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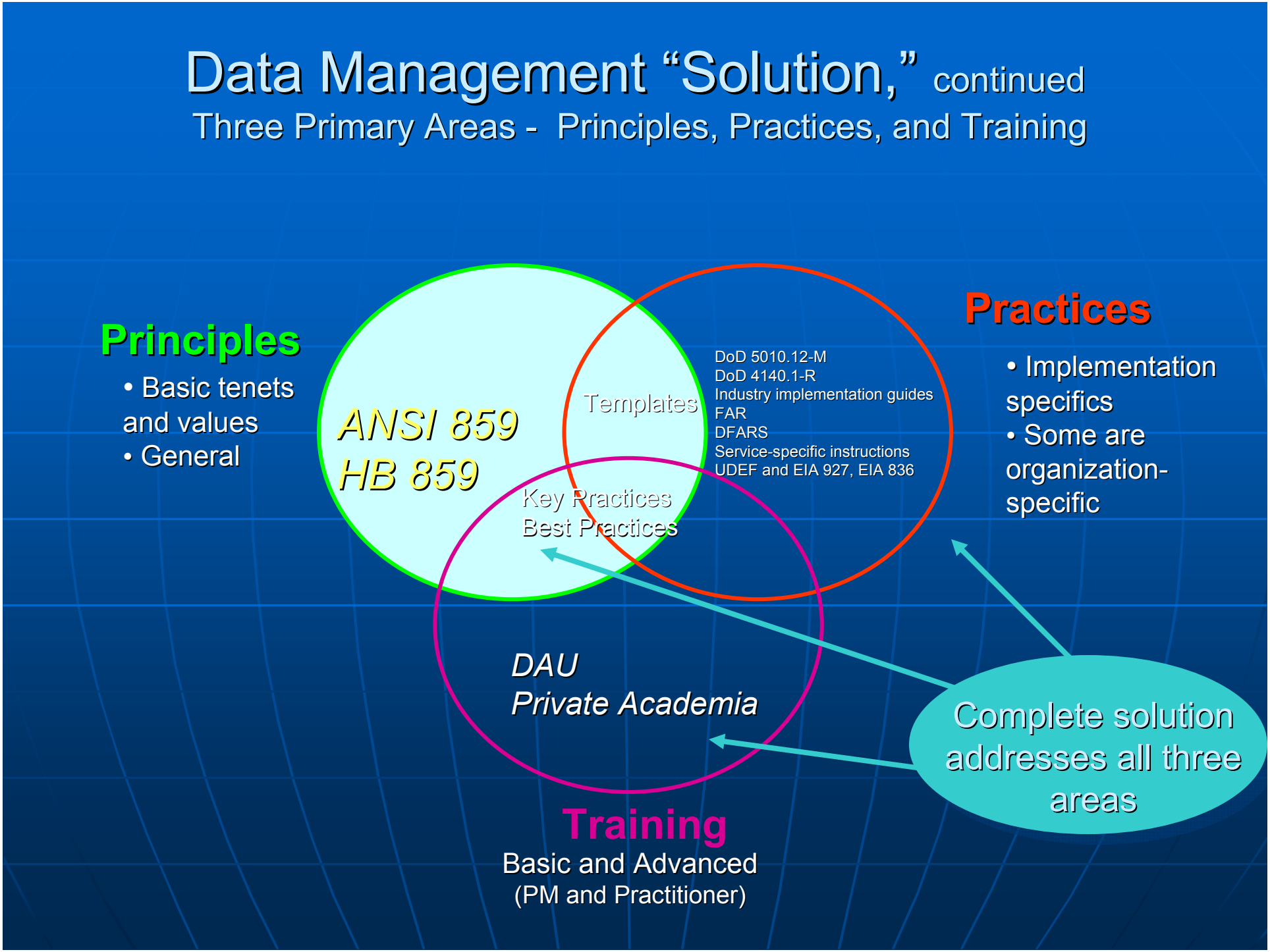

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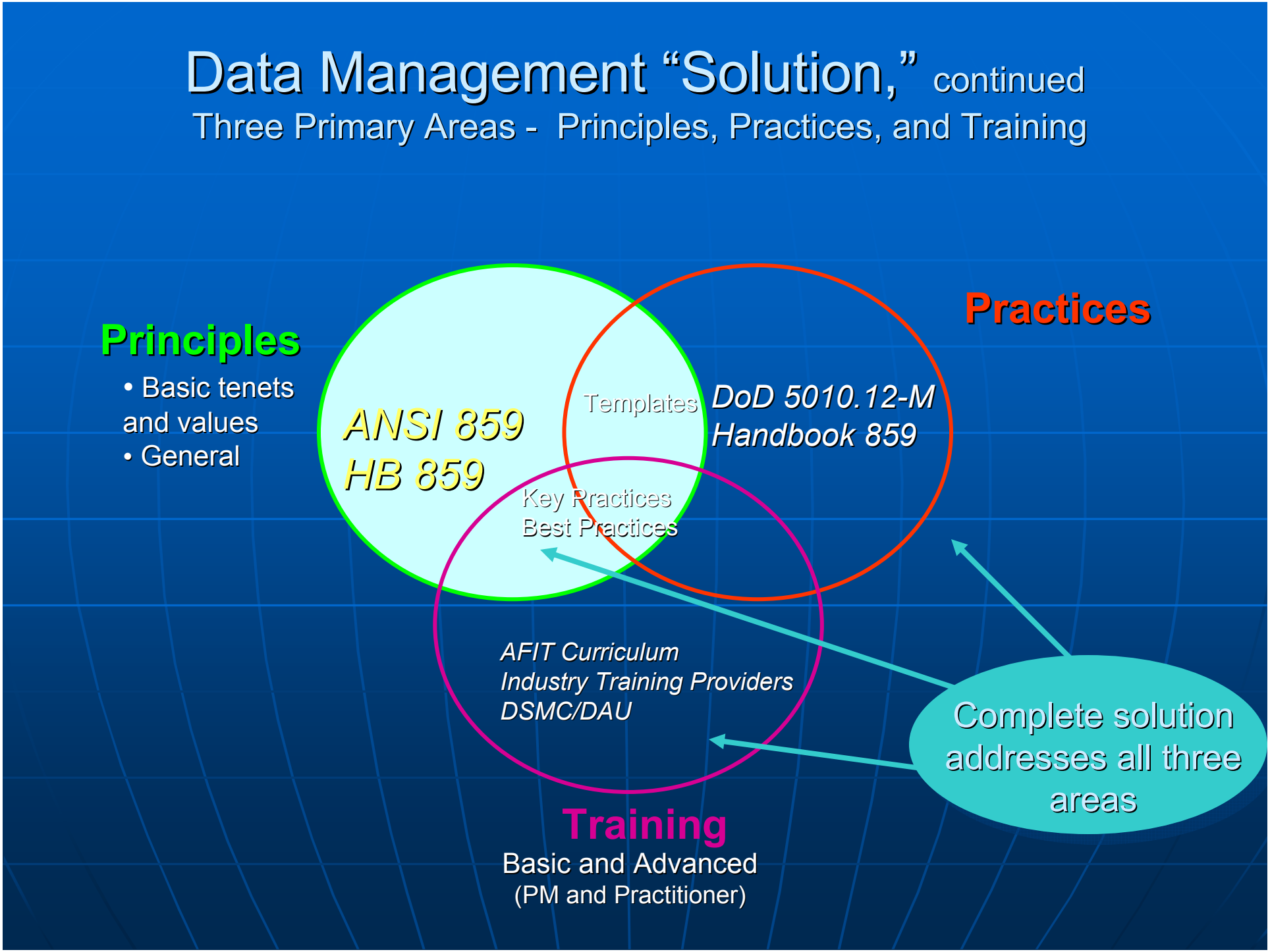

Panacea versus Process

- Adjusting the approach, not
  - Allowing it to stalemate unresolved
- Clarifying the objectives/role for DM, not
  - Wasting more money, on more data that is not required, and driving up costs, as well
- Allowed DM to make a contribution, not
  - Continuing to ignore the obvious problems for all parties
- Enabled paradigmatic changes in "acquisition", and extended them to "logistics" not
  - Ignoring the obvious cause and effect between data and end-item costs in contracting
  - Discouraging commercial suppliers from contributing high-end, niche end items
  - Allowing contractors to do business as usual

Structuring outcomes

- Addressed challenges
- Identified disconnects
- Created solutions
- Established relationships
- Crafted an accepted and value-added role
- Built credibility and acceptance

Strategic Data Management

The way forward

- Process first! then automation
- Sequencing the “push/pull” correctly
- Creating intentional, understood outcomes
- Strategic thinking
  - Enterprise focus

Challenges for the DM Practice

- Consistency
  - Expectations and practice
- Communication
  - Internal and external
- Training
  - Practitioners and other disciplines
- Synchronizing USG and industry effectively
- Finding our way towards reintegrating with associated domains

Summary

- DM goals, need, and requirements are the same as they were in 1960
- Urgency to transition DM to the digital environment increased
  - And we met the challenge
- Recognized pathway and importance for resolution identified and found
- ANSI-859 is the beginning
- Handbook 859 is complete
- DAU courseware development is underway