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SOLUTIONS SUMMIT



WELCOME!





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SUMMIT SCHEDULE

9:00 – 9:45 a.m.	Welcome & Keynote Speaker*
9:45 – 10:00 a.m.	Transition to Breakout Room
10:00 – 10:45 a.m.	Breakout Session #1
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11:45 – 1:00 p.m.	Lunch with Partner Panel*
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1:15 – 2:00 p.m.	Breakout Session #3
2:00 – 4:00 p.m.	Smart Solutions Showcase and Networking



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SOLUTIONS SUMMIT

✓ **FOLLOW YOUR PERSONALIZED
SUMMIT SCHEDULE**

✓ **STAY FUELED AND HYDRATED
ON THE JOURNEY**

✓ **CONNECT WITH A VAN METER
GUIDE WITH QUESTIONS**

KEYNOTE PRESENTER



JOHN STECKLER

Archer Daniels Midland Company
North America Process Automation Director, Retired



VAN METER



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THE ROAD TO INDUSTRIAL TRANSFORMATION

John Steckler, NA Director Process Automation (Retired), ADM



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X Introductions

Meet the keynote speaker
and the attendees

X The ADM Journey

Legacy DCS and
obsolescence challenges

X Industrial Transformation

I4x and the journey

GET TO KNOW JOHN

John Steckler, NA Director Process Automation (Retired), ADM



37 YEARS WITH ADM



LEADER IN AUTOMATION



VAST PROJECT EXPERIENCE



BACKGROUND & VISION

ADM

Leader in global nutrition who unlocks the power of nature to envision, create and combine ingredients and flavors for food and beverages, supplements, animal feed, and more.

Three Core Segments: Ag Services and Oilseeds, Carbohydrates, Nutrition

400+
LOCATIONS GLOBALLY

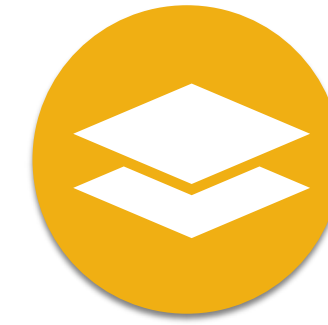
#35
Of Fortune 500 Companies



WHERE ARE YOU & WHERE ARE YOU HEADED

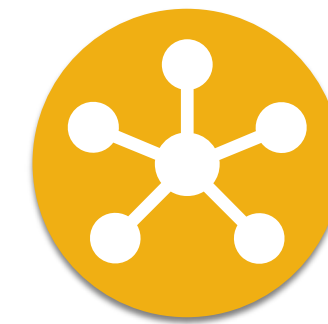
LOOKING AHEAD

SET THE FRAMEWORK



MIGRATION

- + Creating little to no value in process
 - + Mitigating risk
 - + Replacement in kind
 - + Solving obsolescence at hardware and or software level
-



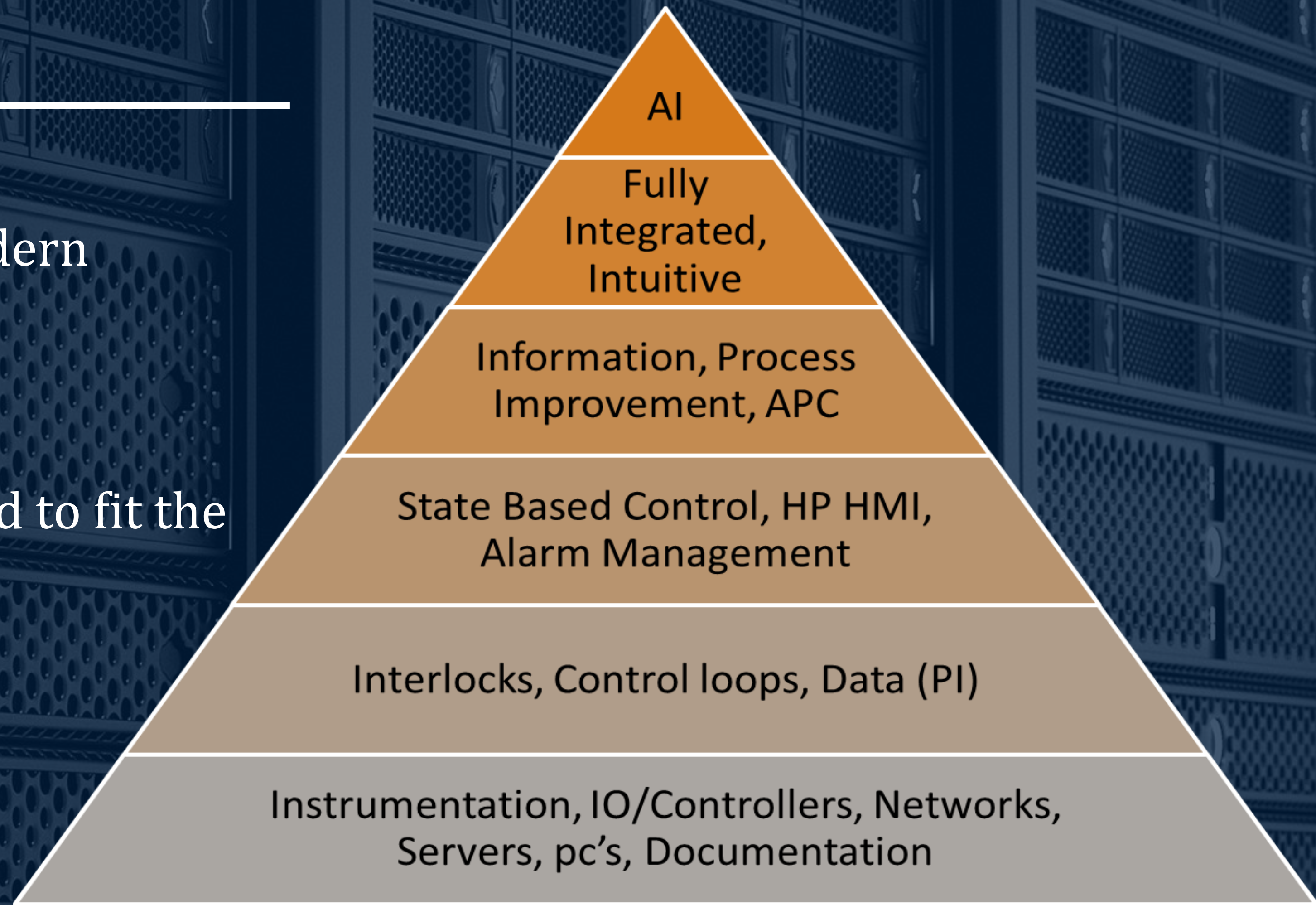
MODERNIZATION

- + New systems will create value
- + Sustainable, maintain value
- + Solving obsolescence
- + **Foundation for 'Industry 4.0'**

SET THE FRAMEWORK

Does this represent a modern system?

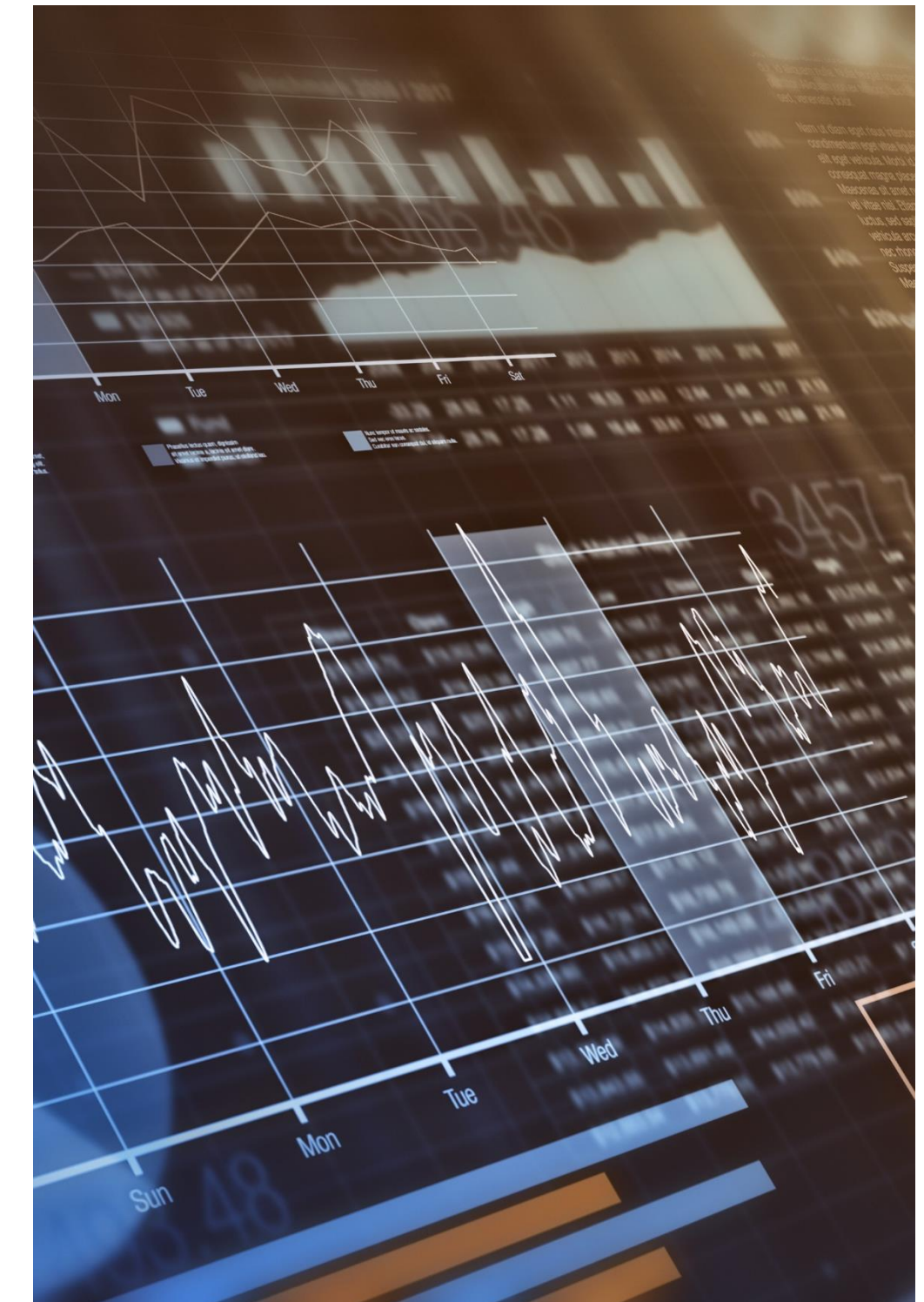
Details within the pyramid to fit the technical knowledge



CHALLENGE #1

LEGACY DISTRIBUTED CONTROL SYSTEMS (DCS)

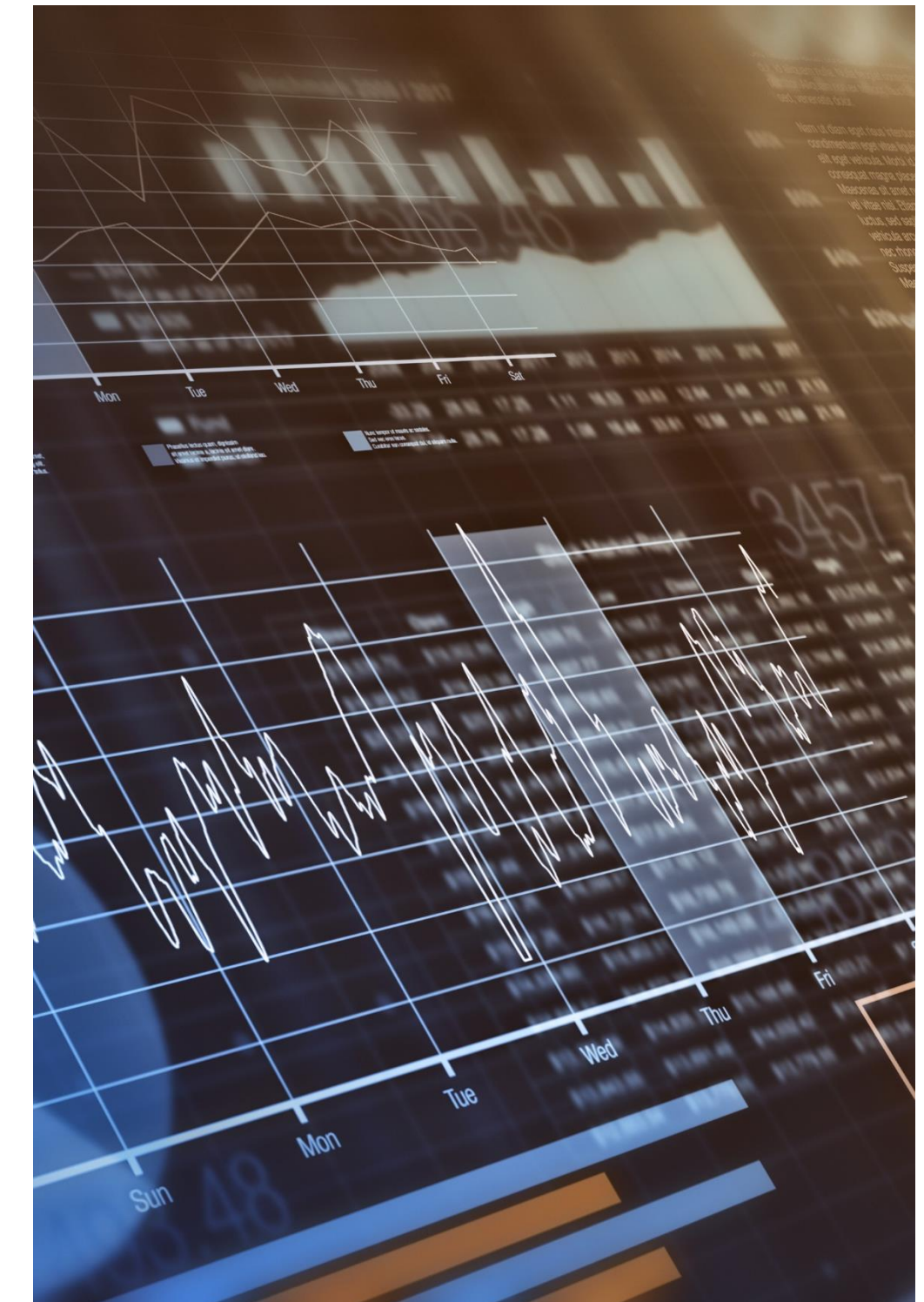
- Lacking progress towards a modern system in 40+ of largest production plants.
- Automation resource challenges: skilled workforce in house, limited contract resources, limited DCS supplier.
- Still training on legacy system and only updating system version/hardware – **migration not modernization.**



CHALLENGE #1

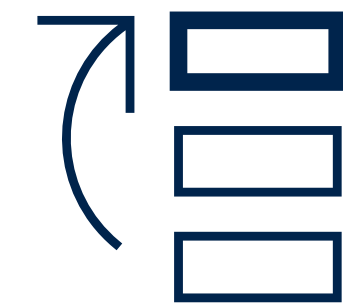
FILLING GAPS OF LEGACY DCS

- Standardization with site-to-site replication and removal of site preferences
- Conduct consistent and formal training for workforce.
- Outline reasoning for **cost vs. value.**



Evaluation process of DCS systems.

LEGACY DCS TO MODERN SYSTEM



CURRENT & FUTURE REVIEW

Internally rank current DCS system.

Create list of criteria for modern system.

DISCUSS SYSTEM OPTIONS

Meet with DCS suppliers.

In house review and collaboration.

COMPLETE RANKINGS

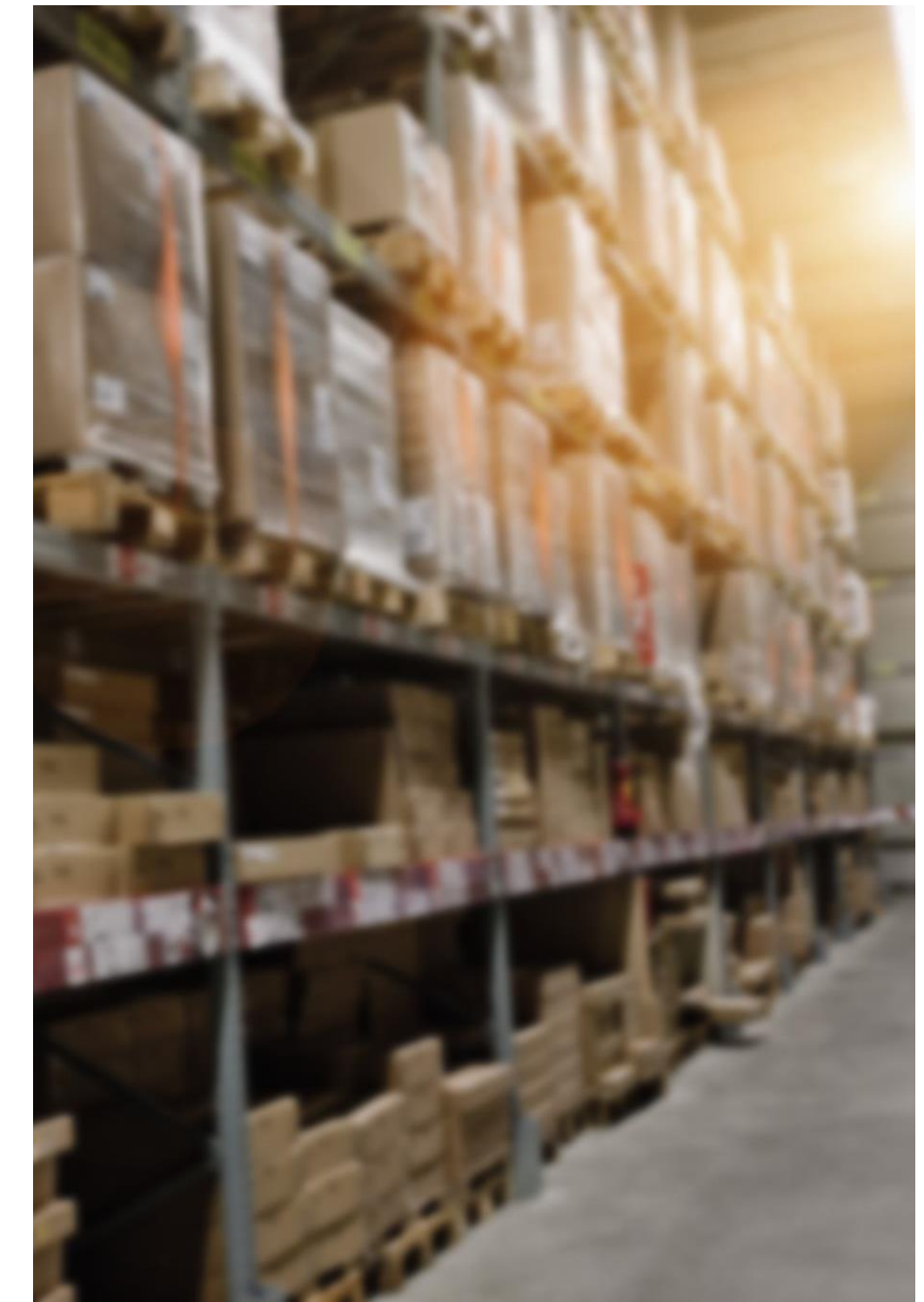
Excel based ranking system.

Complete independent ranking to avoid bias.

CHALLENGE #2

RISK OF OBSOLESCENCE

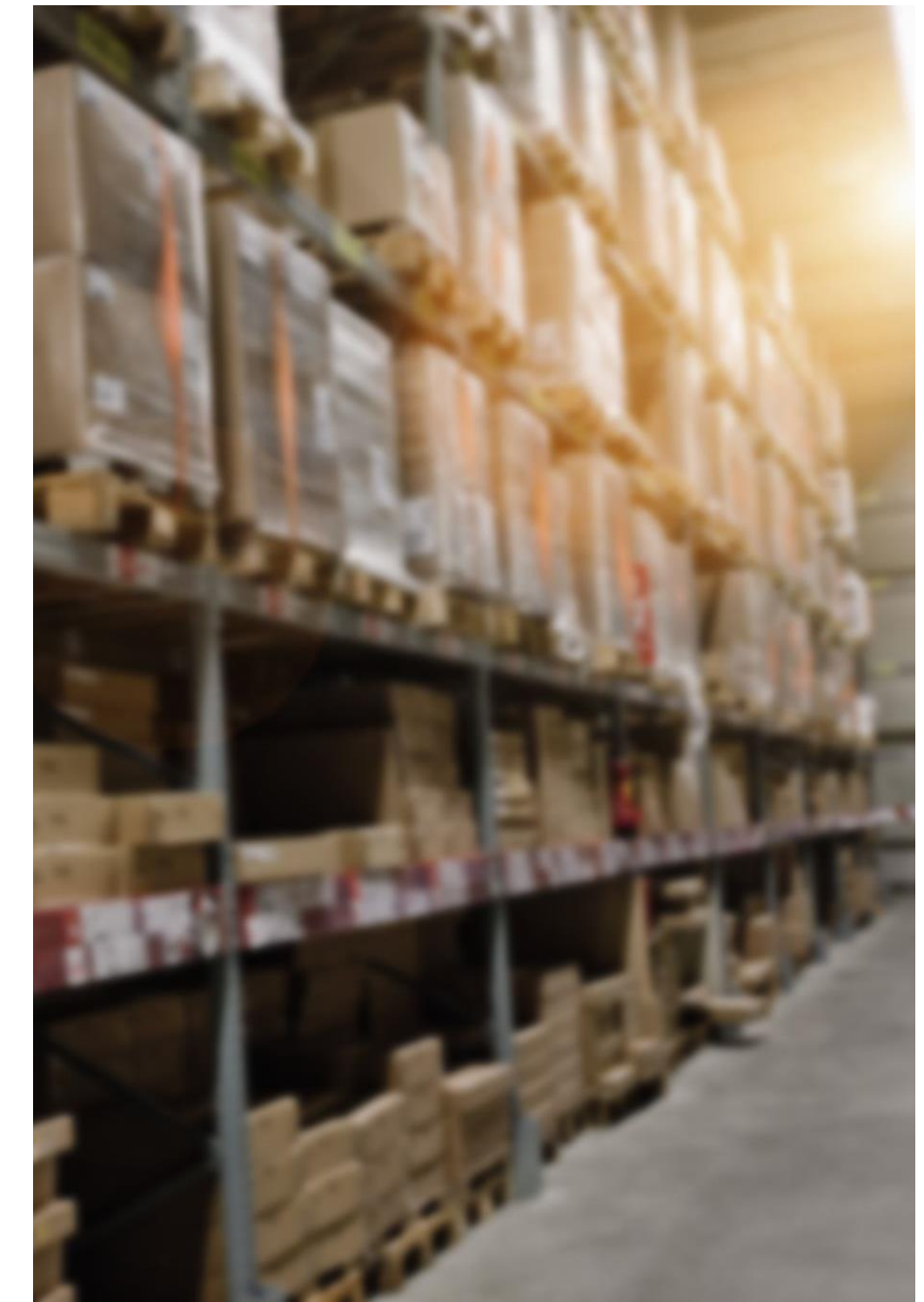
- Prioritize production over updating large installed based of obsolete control systems.
- Lacked understanding and visibility into automation systems at the corporate level.
- Had the **wrong framework** – tough to define ‘obsolescence’ risk vs. ‘other’ risk in the plant.



CHALLENGE #2

OVERCOMING OBSOLESCENCE

- Conduct comprehensive site-level audits.
- Initiate continuous improvement projects surrounding process and procedures.
- Establish readiness initiative and ‘ability to execute’ training to **set common framework and way of working.**



CHALLENGE #3

COMPANY REORGANIZATION

- Late 2019 – ADM reorganized using ‘Centers of Excellence’ (COE) structure.
- All automation reporting up to ‘Process Optimization’ in COE model.
- Teams supports goals to meet **operations objectives**: obsolescence data and reporting, modernization roadmap and automation training.



SMART MANUFACTURING PRIORITIES



FOCUS AREAS



Do we have bandwidth to maintain existing AND modernize plants?



Who do we need to partner with for success?



How will we fund modernization with a finite budget for capital?

PARTNERS ON THE JOURNEY

HELP TO CREATE LASTING VALUE



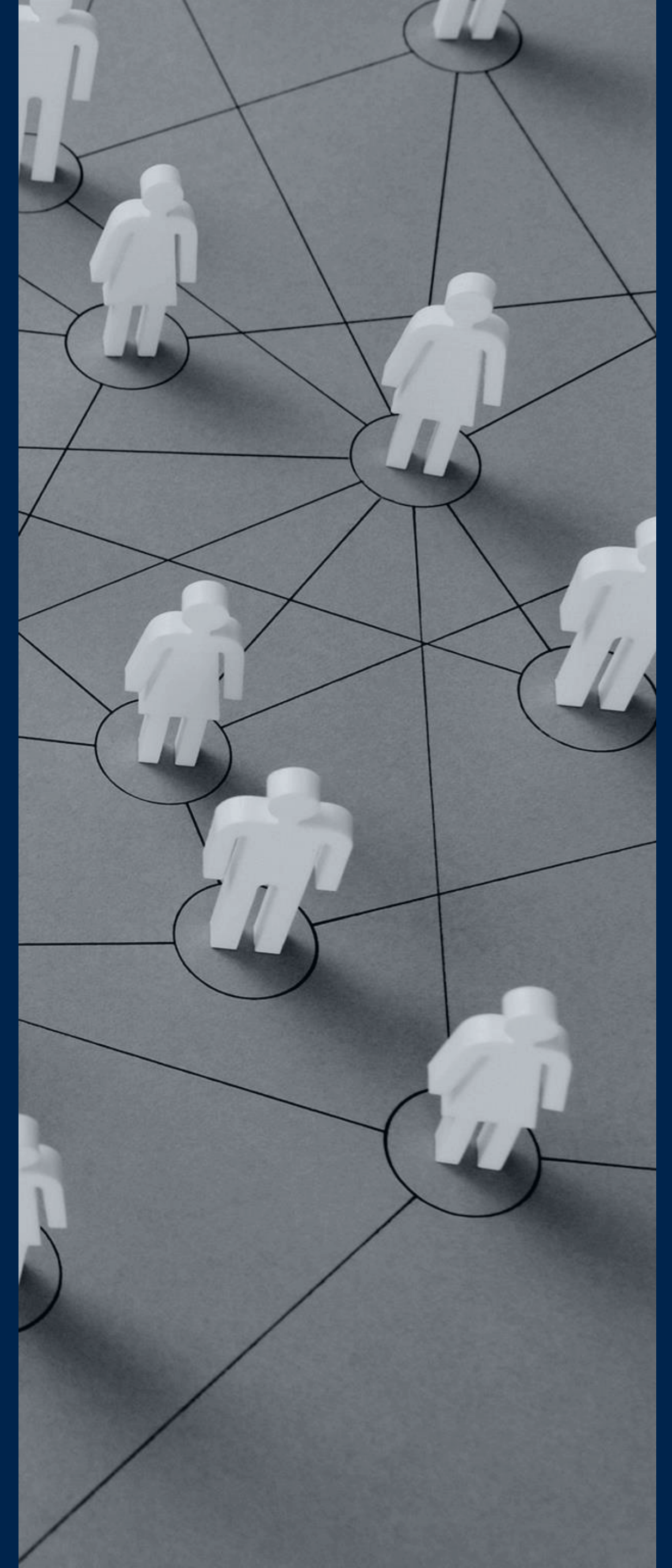
Be realistic about what can be accomplished and how quickly. This is where partners are valuable along the way.



Internal partnership and inter-departmental alignment was critical to be a valuable partner.



Partnerships don't always just happen, expect challenges along the way.



FIRST STEPS

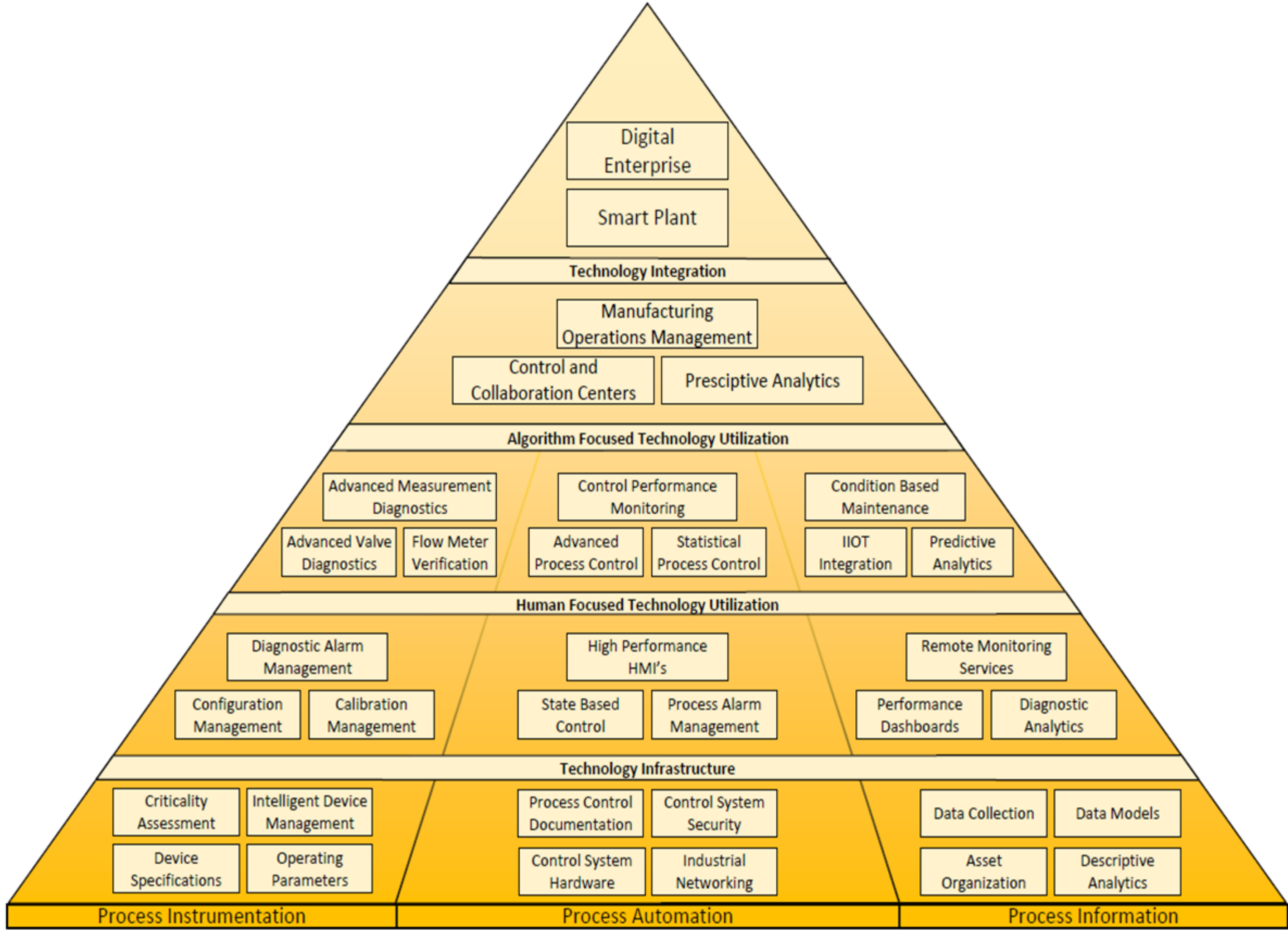
TOWARD INDUSTRIAL TRANSFORMATION

- ✓ Updated Documentation
- ✓ Modern Control System based on Narratives, Rewrite
- ✓ Alarm Management (Alarm Rationalization)
- ✓ CyberSecurity, part of transformation NOT a separate Initiative
- ✓ WiFi across whole production plant (and Wireless Hart)
- ✓ Training
- ✓ Loop Performance / Analytics



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INDUSTRIAL TRANSFORMATION



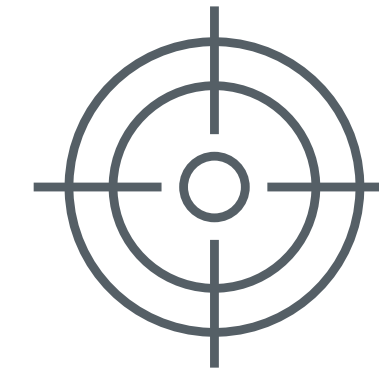
SUMMARY



ESTABLISH THE FRAMEWORK



**REVIEW CURRENT AND
FUTURE STATE**



FOCUS ON CREATING VALUE



QUESTIONS?

THANK YOU!



JOHN STECKLER

NA Director Process Automation (Retired), ADM



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WELCOME TO THE

PARTNER PANEL

PARTNER PANELISTS

Why are partners important on a smart manufacturing journey?



ANDREW FRIEND

Automation Team Lead

CIRAS



DAN RILEY

Analytics Manager

Interstates



JACKIE LAFLEUR

Smart Manufacturing Manager

Van Meter



CLOSING REMARKS





CONNECT AND EXPLORE

SOLUTIONS SHOWCASE