Lunch and Learn: Empowering Businesses through People, Process, and Technology

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Presented by:
Bruce Tyson – President & CEO
Dan Petley – Director Digital Solutions Delivery

KZenEdge
Strategic Program Execution

403-984-6370
info@kzenedge.com
www.KZenEdge.com

KZenEdge Adaptive Methodology

Adapting for Optimal Business Outcomes

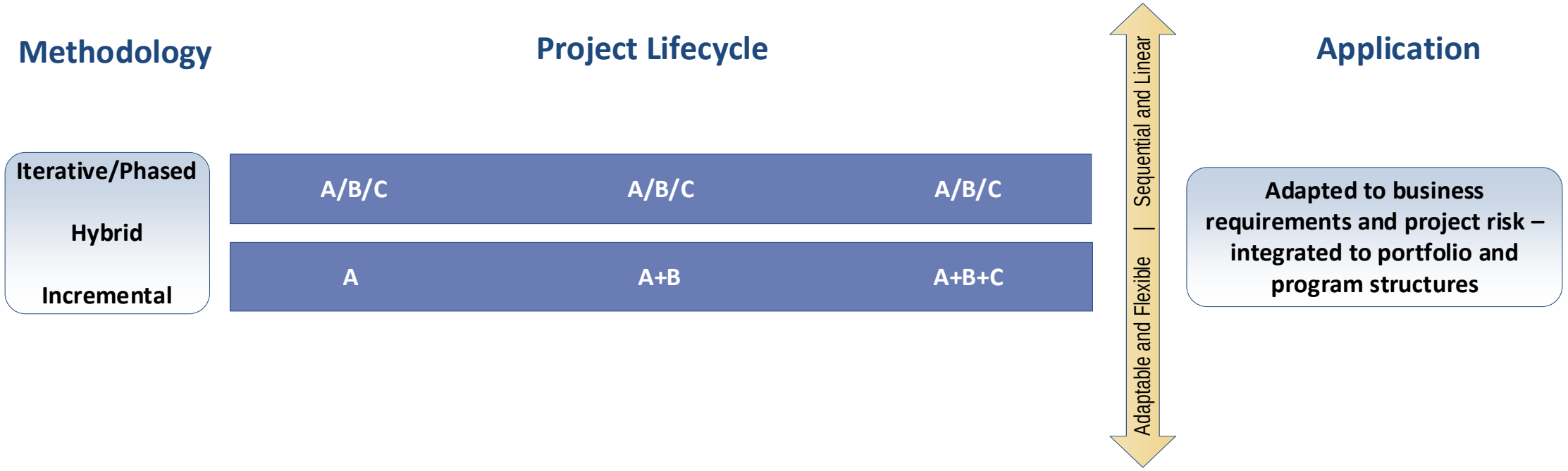
KZENEDGE
STRATEGIC PROGRAM EXECUTION

KZE Adaptive Methodology
Spanning All Approaches

Methodology	Project Lifecycle	Application
Waterfall	A/B/C	Known requirements/Predictable templated/consistent projects Cannot accommodate change easily
Iterative/Phased Hybrid Incremental	A/B/C A/B/C A/B/C A A+B A+B+C	Adapted to business requirements and project risk – integrated to portfolio and program structures
Agile	A_1,B_1,C_1 A_2,B_2,C_2 A_3,B_3,C_2	Evolving requirements And final end solutions Progress outweighs perfection

Adaptable and Flexible | Sequential and Linear

Adapting for Optimal Business Outcomes



Balancing the Adaptive Methodology

People

Process

Technology

Structure Program Governance Framework

Develop Prioritization Decision Model – Scope, Risk & Value

Select & Prioritize

Execute Monitor, Report & Close Out

Adapting the Methodology with QMS

People

Process

Technology

Structure Program Governance Framework

Develop Prioritization Decision Model – Scope, Risk & Value

Select & Prioritize

Execute Monitor, Report & Close Out

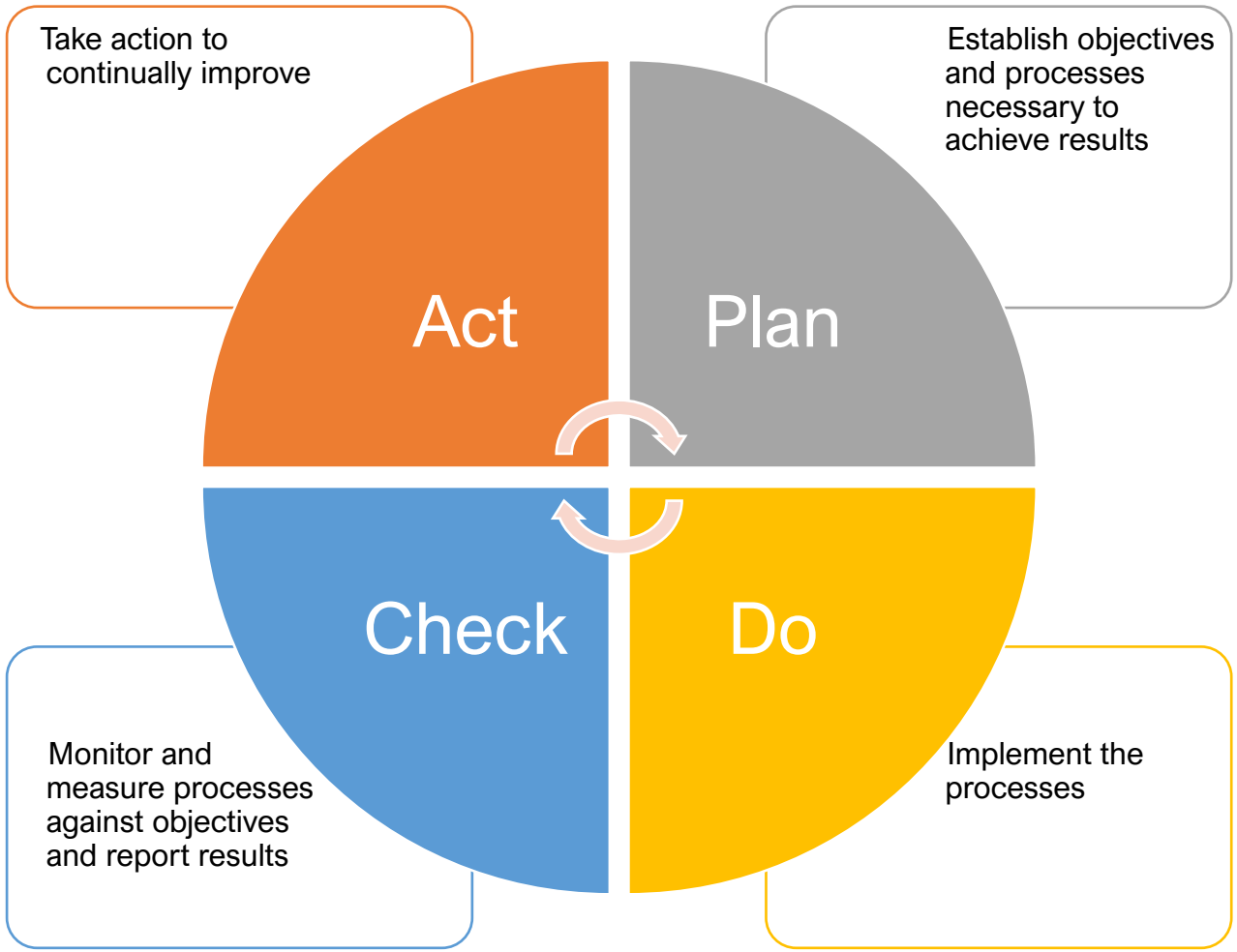
Reassess & Realign

QMS

Continuous Improvement

Applying the QMS Model to Program Execution

Applying the QMS Model to Program Execution



Adapting the Methodology with OCM

Strategic Program

People

Process

Technology

Structure

Model

Select & Prioritize

Execute

QMS

OCM

BUSINESS LIFECYCLE

Decide

Initiate

Change

Operate

Data Asset → Evidence Based Decisions

People

Process

Technology

Continuous Improvement

Critical Data Asset

The ten guiding principles of change management are:

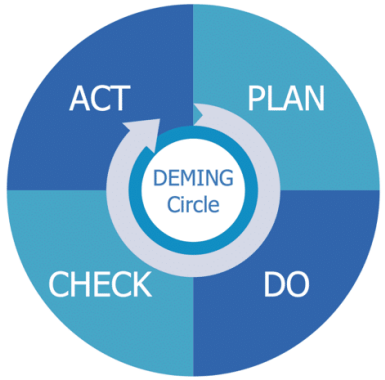
1. Active leadership
2. Structured approach
3. Detailed change plans
4. Impact assessment
5. Strong team
6. Employee participation and engagement
7. Open and regular communication
8. Sustainability
9. Managing resistance
10. Evaluating progress

Change Management Principles

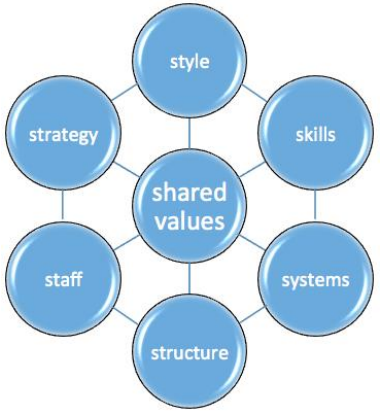
Change Management Models

Processes to manage change in organizations. They give a structured outline that can be followed, serving as a blueprint to help apply the common change management principles.

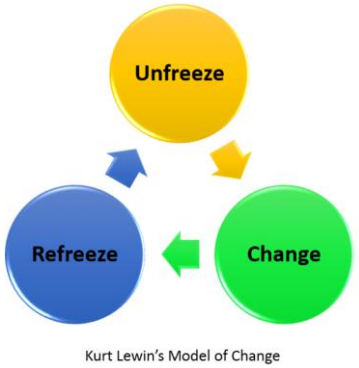
Kotter's 8-Step Process



Deming's Plan-Do-Check-Act Cycle



McKinsey's 7S Framework

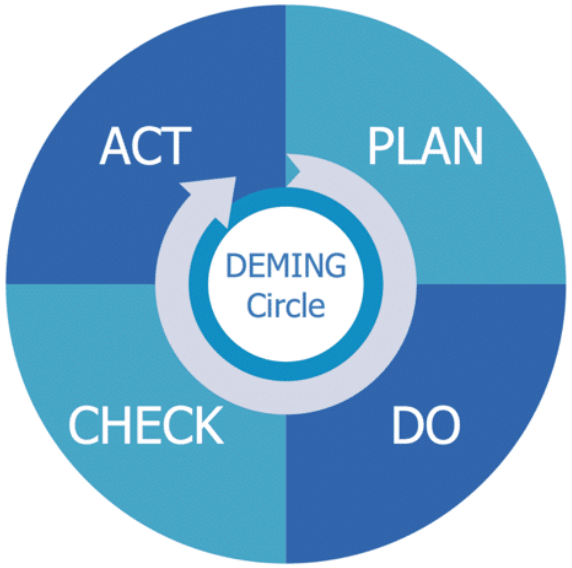


Kurt Lewin's Model of Change

Lewin's Change Model

Prosci ADKAR Model

Change Management Models

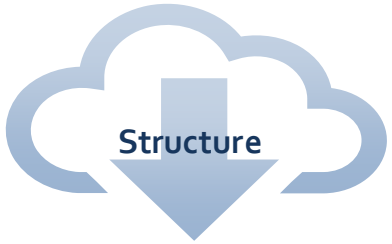


Deming's Plan-Do-Check-Act Cycle

Awareness
Desire
Knowledge
Ability
Reinforcement

Prosci ADKAR Model

Applying Methodology on Programs



Program Initiation

Create Program Steering Committee

- Decision Model
- Communications and Reporting
- Financial Allocation and Controls
- Escalation Triggers
- Resource Strategy
- Prioritization Model

Validate Required Project Lifecycle Standards

Ensure Project Execution Includes Expectations for efficient:

- Risk Management
- Change Management
- Document Controls
- Project Reporting
- Budget Management
- Resource Management
- Schedule Management

Project Prioritization and Selection

Methodology Selection

Monitor and Reporting

Forecasting

Performance Analysis

Project #1 Execution (New)

Project #2 Execution (New)

Project #xx Execution (New)

Re-aligned Existing Projects

Success Principles

Fit for purpose, efficient project management
Reuse
Scalability
Avoid bureaucracy
Consistent stakeholder engagement
Clear RACI
Standardization
Centralized administrative support

Operational Enhancements

The Issue & Opportunity

Operational Enhancements

Project #1
Standardization

Project #2
Gas Analyzers

Project #3
Network

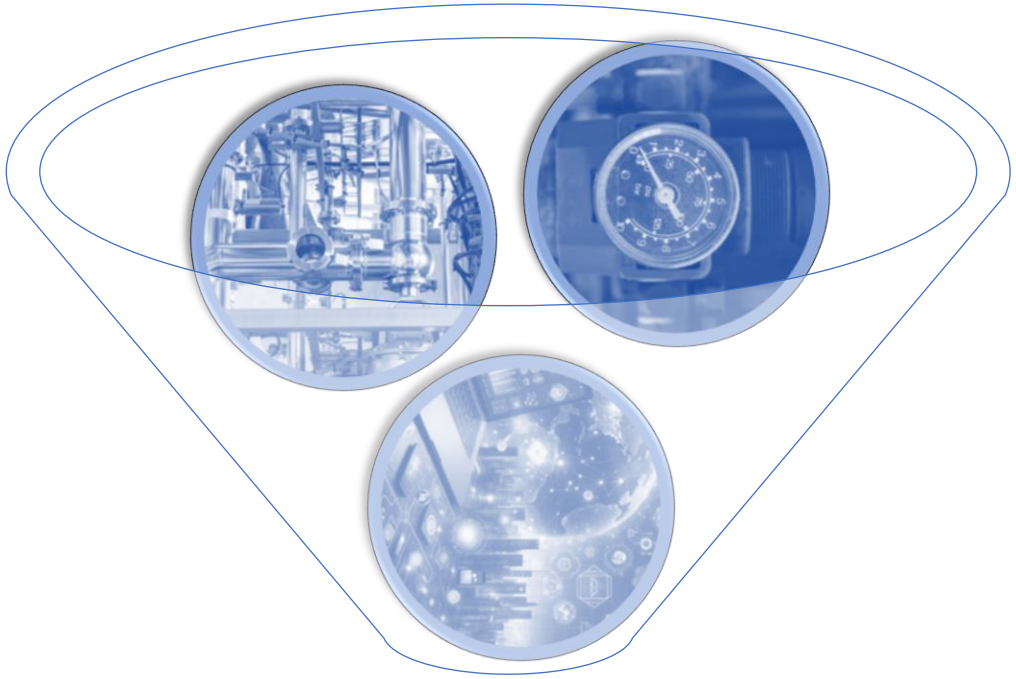
The Issue

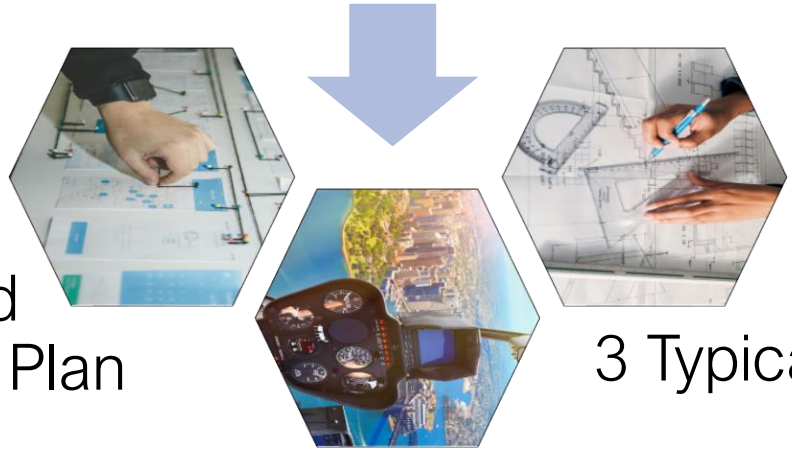
- 3 Projects with different scope applicable to same locations
- Operations, Engineering and IT Sponsors
- Clear scope on 2 out of 3 projects, but variability/risk on implementation specific details
- Execution strategy needed to leverage synergies to optimize cost and schedule

The Opportunity

- Single project management team (PM/PC)
- Agile planning and waterfall execution
- Integrated schedule and resource plans
- Strong Risk (Uncertainty) Mitigation

The Solution





Integrated Execution Plan

3 Typical IFCs

3 Pilot Sites

The Details

Integrated Execution Plan

Integrated all 3 projects to one plan (note – 3 different financial and 2 different governance models/management). Single managed project with common schedule and resources.

3 Pilot Sites

Conducted 3 pilots to narrow the variability in the on-site detailed execution plan (CWP and SOW's)

Typical Issued For Construction Drawings (IFC)

Issued 3 different "typical" IFCs by type of facility (vintage) and equipment.

Site Construction Work Package

Issued 3 different “typical” IFC’s by type of facility (vintage) and equipment with instructions for:

1) As-Builts of In-Scope Work
2) Small corrections within effort/budget contingency
3) High risk findings – corrections applied with approval – might be outside of scope and budget
4) Normal findings – identified and captured for future evaluation and execution

Savings and Efficiencies Achieved

Instead of going to 55 locations per project (165 visits) for site surveys, IFCs and As-Builts, the project went to 3 pilot stations.

- Eliminated 150+ site surveys and IFCs.
- Eliminated 110 As-Built Drawings and completed 55 Redline and As-Builds.

Assumed on site task work to be relatively even, saved 110 site travel costs.

The project was able to adhere to schedule and budget using contingency to fix small findings, load future projects with scope opportunity and use governance to address any high-risk findings.

Asset Management Data Integrity

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Facility Operations

Asset Management Data Integrity

Equipment Catalogue

- Name
- Vendor
- Type/Version
- S/N
- S/W
- Location
- System

Operational History

- Maintenance Activity
- Lifecycle
- Reliability
- Availability
- Spares

Maintenance

- Risk Ranking
- Maintenance Plan
- PM's
- Support Framework

Reporting

- Operations Work Assessment
- Regulatory
- Finance (tax)
- Engineering Standards & Projects

The Challenge

Data Integrity

Facility – Point of Execution

Manual Data Capture

Time Elapses

Location Changes

Manual System Entry - Same Actor?

UNTRUSTED DATA

Maintenance Records

Equipment Catalogue

The Solution

Maintaining Data Quality

Technology
- ✓ Private Cellular
- ✓ Industrial Tablets
- ✓ Clean AM Data Set

Facility – Point of Execution

Data Capture
- Provide Data Entry Control
- Remove Time Delay
- Single Actor

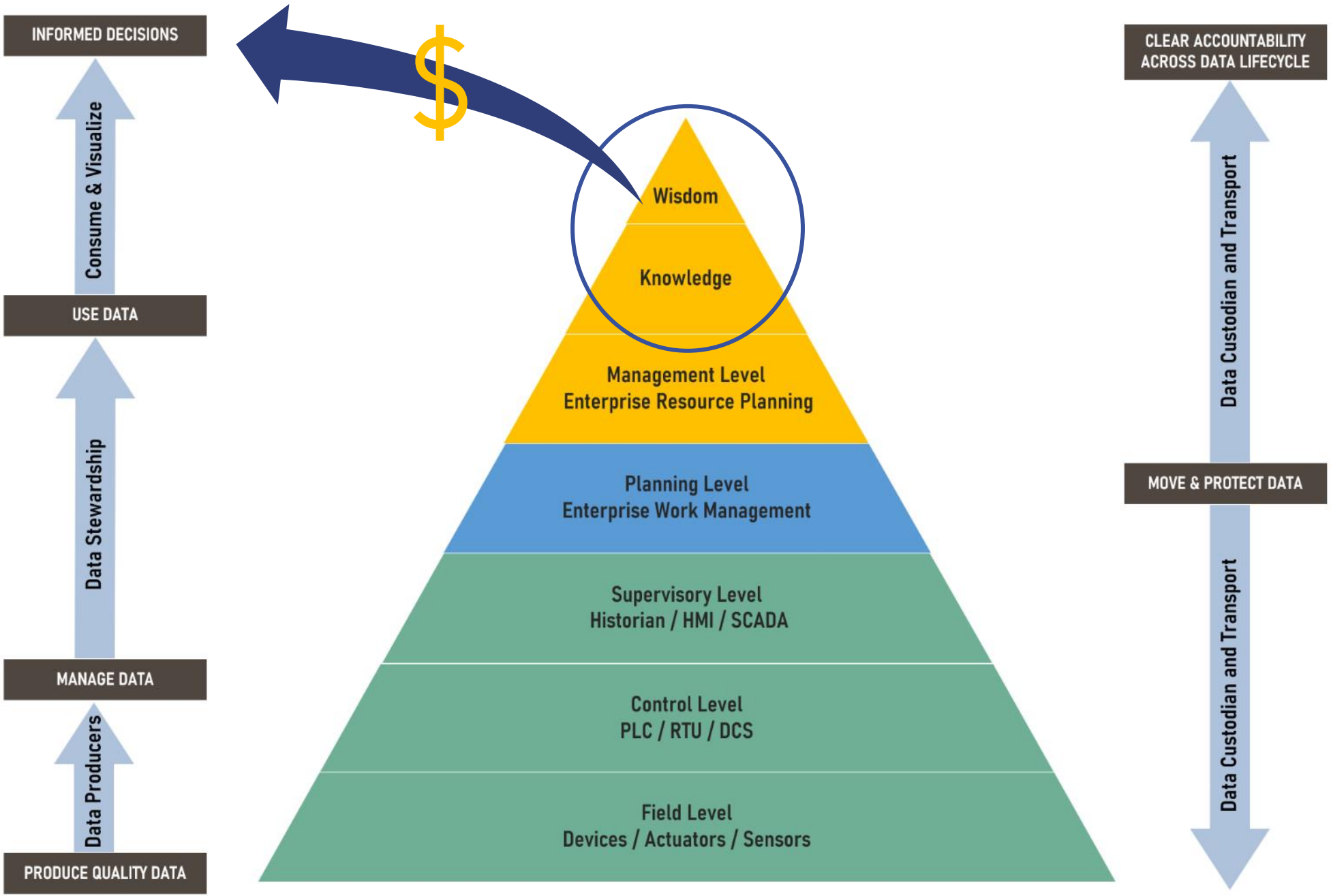
INCREASED DATA INTEGRITY

Maintenance Records

Equipment Catalogue

OT Data Lifecycle

Automation Pyramid and Data Lifecycle



The Challenges

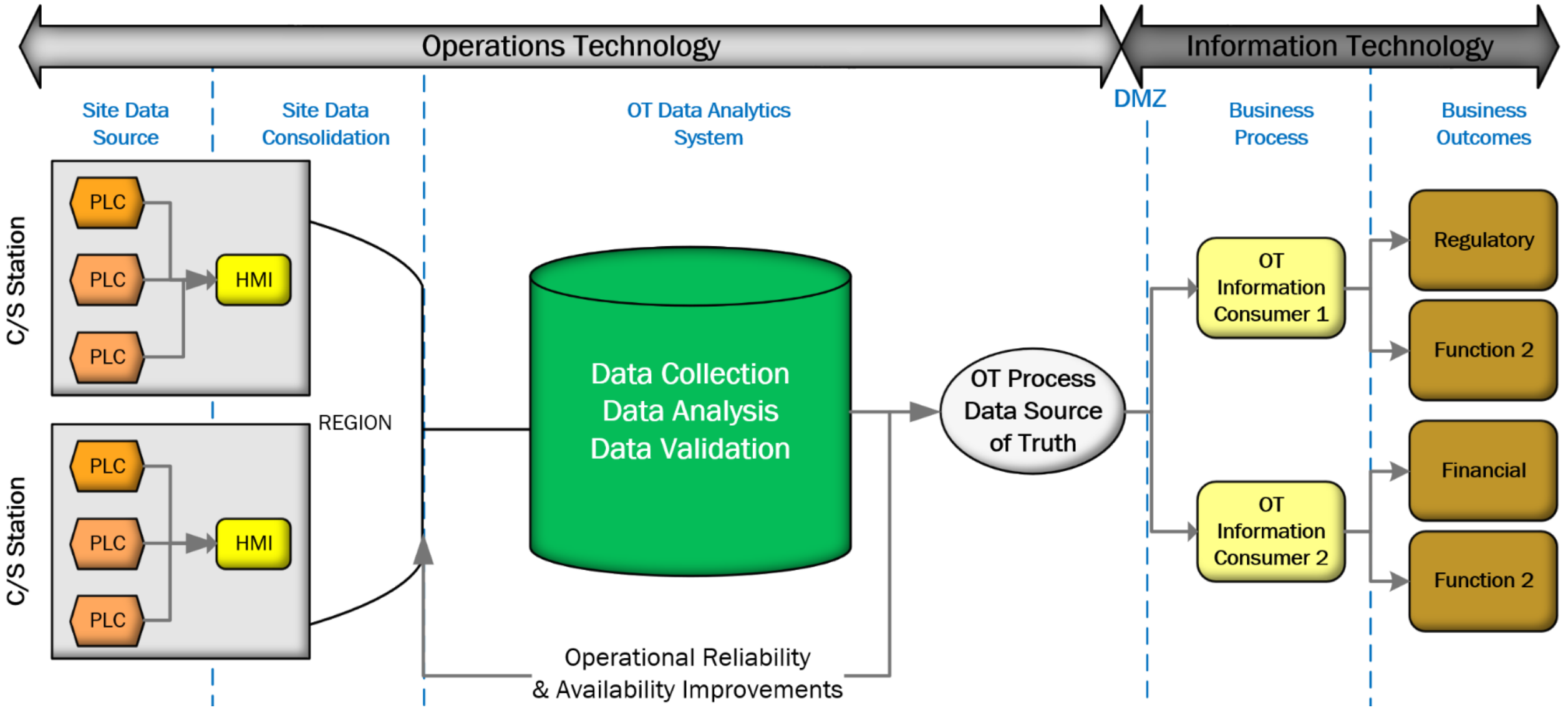
Accountabilities & responsibilities

Data Availability

Data Integrity

Source of Truth for OT Information

The Solution for OT Data Quality



Fired Hour - AI Use Case

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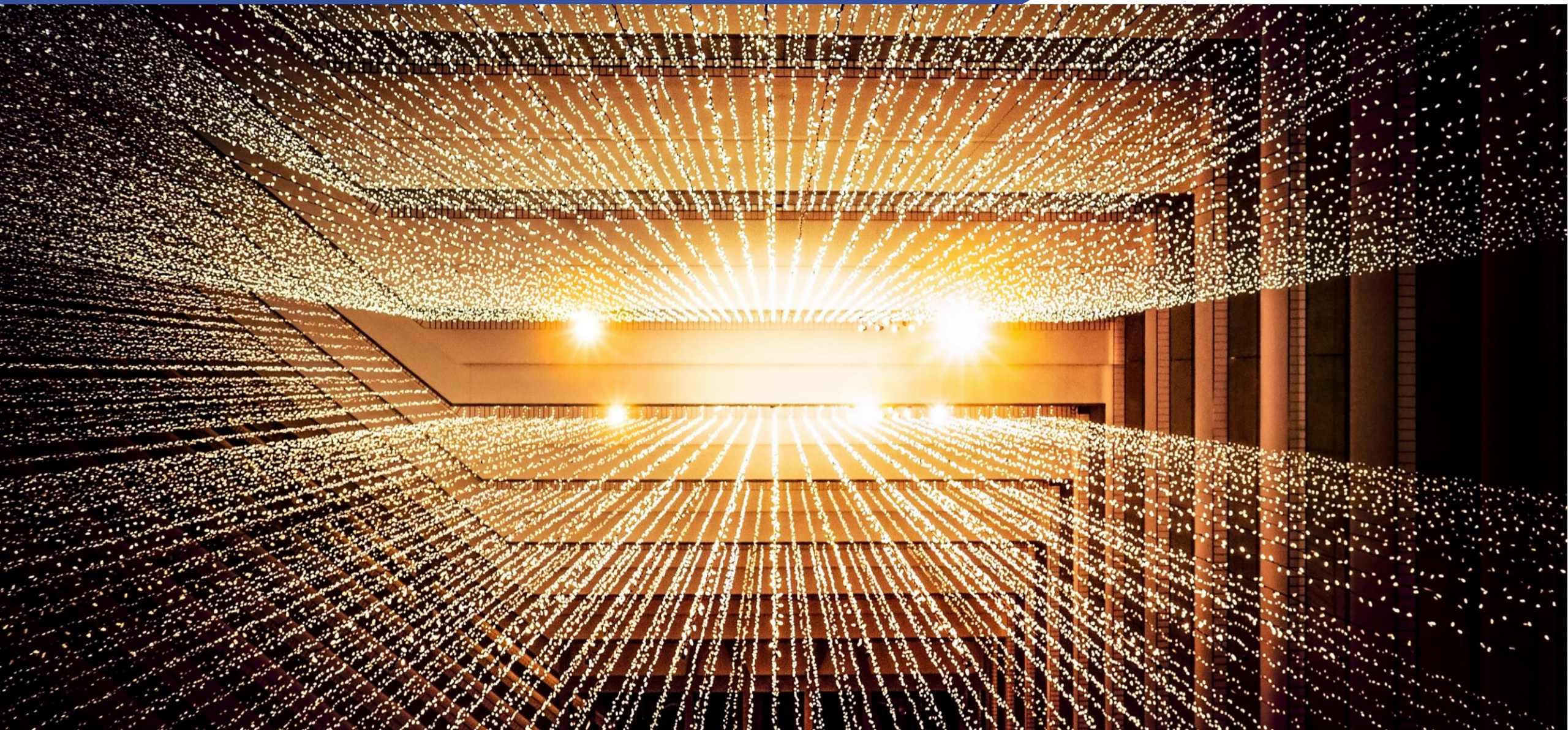


DATA SOURCES

AI Use Case for Pipeline Fired Hour Optimization

Facility

Asset

Commercial

External

FACILITY

Generator or Turbine

- Efficiency
- Compressor Discharge
- CO & NOx Emissions
- Lifecyle
- Zero 2050

Compressor

- Performance
- Wheelcurve
- Velocity Management
- Lifecycle
- Zero 2050

Balance of Plant

- Fuel Consumption
- Discharge Pressure Management
- Safety & Regulatory Management
- Fuel Management

ASSET

Pipeline System

- Line Pack Optimization
- Compressor Optimization
- Contract Integration
- HP Support
- Ambient Temperature

Internal Business

Commercial

- Nomination Analytics
- Electrical Forecasts
- Green House Gases
- Fuel Economy

External Drivers

External

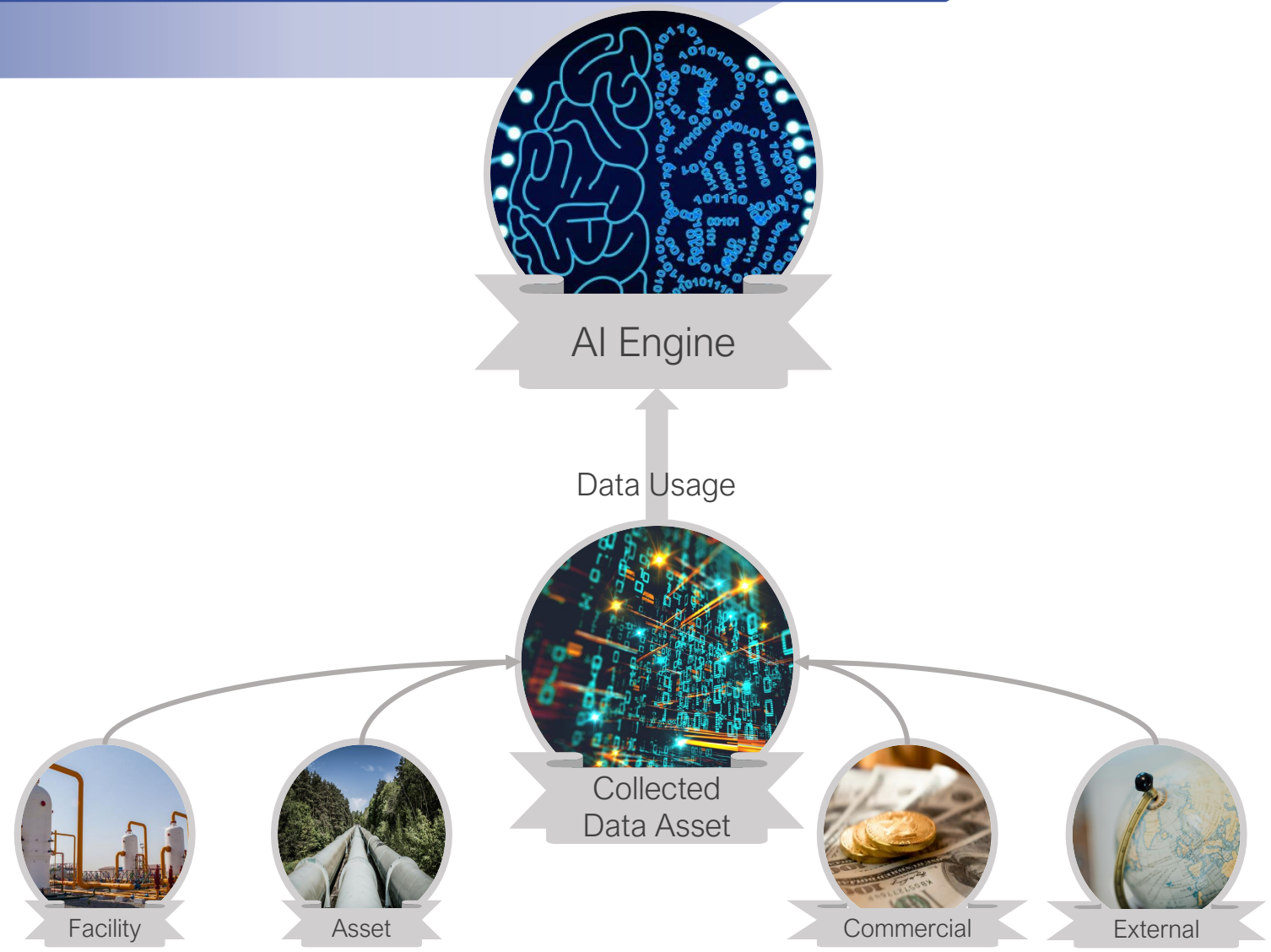
- Geopolitical Environment
- Global Economy
- Market Financials

Collected Data Asset

Consolidated Data

Real Time? Validated?

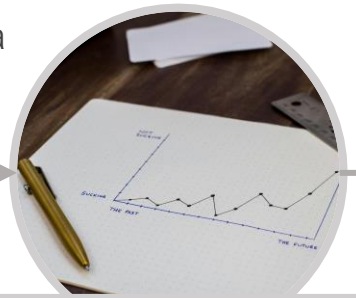
Data & Business AI Transformation



Data & Business AI Transformation

AI Engine

Realizing Data Driven Decisions



Asset Optimization Recommendations

Manual Discrete System Optimization

Future Continuous Automated Optimization

KEY TAKEAWAYS

Adapt your delivery methodology and program/project structure to the client's environment and needs

Balance people, process and technology to meet the outcomes of the project. Deliver sustainable value!

Incorporate the client ecosystem requirements for **change management and quality management** to ensure smooth transition, adoption and continuous improvement for operations (post project)

Gather data to ensure that **risk, KPI's and decisions are based on data** that is gathered and validated with discipline.

THANK YOU!

KZenEdge Introduction

Who We Are…

KZenEdge is a dedicated team of business professionals who continually demonstrate successful program and project execution utilizing our adaptive methodology. During 12 years of exciting growth and evolution, KZenEdge has maintained a culture of integrity that balances client, corporate and staff objectives. This principle-based teamwork and continually improving process focuses on assisting clients to achieve their goals. Our vision is to be a trusted advisor with the right expertise that can help ensure our client's objectives are always successfully delivered.

What We Do…

- Program and Project Management (IT, Engineering and Operations)
- Project Administration and Coordination
- Business Analysis
- Risk and Quality Management
- Governance and Controls
- Regulatory Compliance
- IT/OT Network, Security and Data Architecture
- System Implementation/Management
- Process Design/Implementation
- Portfolio and Program Design and Execution
- Business Process Improvement
- Automation and Digital Transformation Strategy and Execution
- Data Lifecycle Management
- Artificial Intelligence Evolution Playbook
- Strategic Road Mapping

How We Are Different…

- Always ensure Safety, Security, and Confidentiality
- Experience working within and understanding IT and OT functions – supporting the drivers, boundaries, and relationships of all stakeholders
- Consistent Delivery – honouring client commitments
- Strategic Perspective – initiatives holistically aligned to the end goals
- Transparency – accurate and honest communications/ reporting
- Scalability – fit for purpose solutions providing reduced overhead, burden, and bureaucracy
- Core team of employees that ensure consistent high performance
- Committed to Improvement – enabling continuous growth, development, and value
- Clear Roles and Responsibilities – crucial for stakeholder engagement
- Continual Risk and Quality Control – for successful delivery on objectives
- Proven success managing all aspects of VUCA (Volatile, Uncertain, Complex, and Ambiguous) environments
- Support Lean, Agile and Waterfall methods of execution adapted to client requirements

"We solve the toughest business problems associated with challenging projects and initiatives!"

Our People…

- Senior Management Consultant
- Program Managers
- Project Managers
- Project Coordinators
- Business Analysts

Our People…

- Technical Writers
- Quality Control Managers
- Project Financial Analysts
- Discipline Engineers
- SCADA Technical and Operational Specialists
- Learning Development Associates

Our People…

- Organizational Change Management Specialists
- Data Scientists
- Data Specialists
- Enterprise and Solution Architects
- AI Strategy and Development Experts