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Artificial Intelligence in Construction: The Case of ACCIONA's Safety Control Center



ADB BUSINESS OPPORTUNITIES FAIR

09/17/2025

MICHAEL SAM LOPEZ

Emotional, Relational, and Social Intelligence

- To encourage a culture of care, collaboration, and psychological safety at all levels.

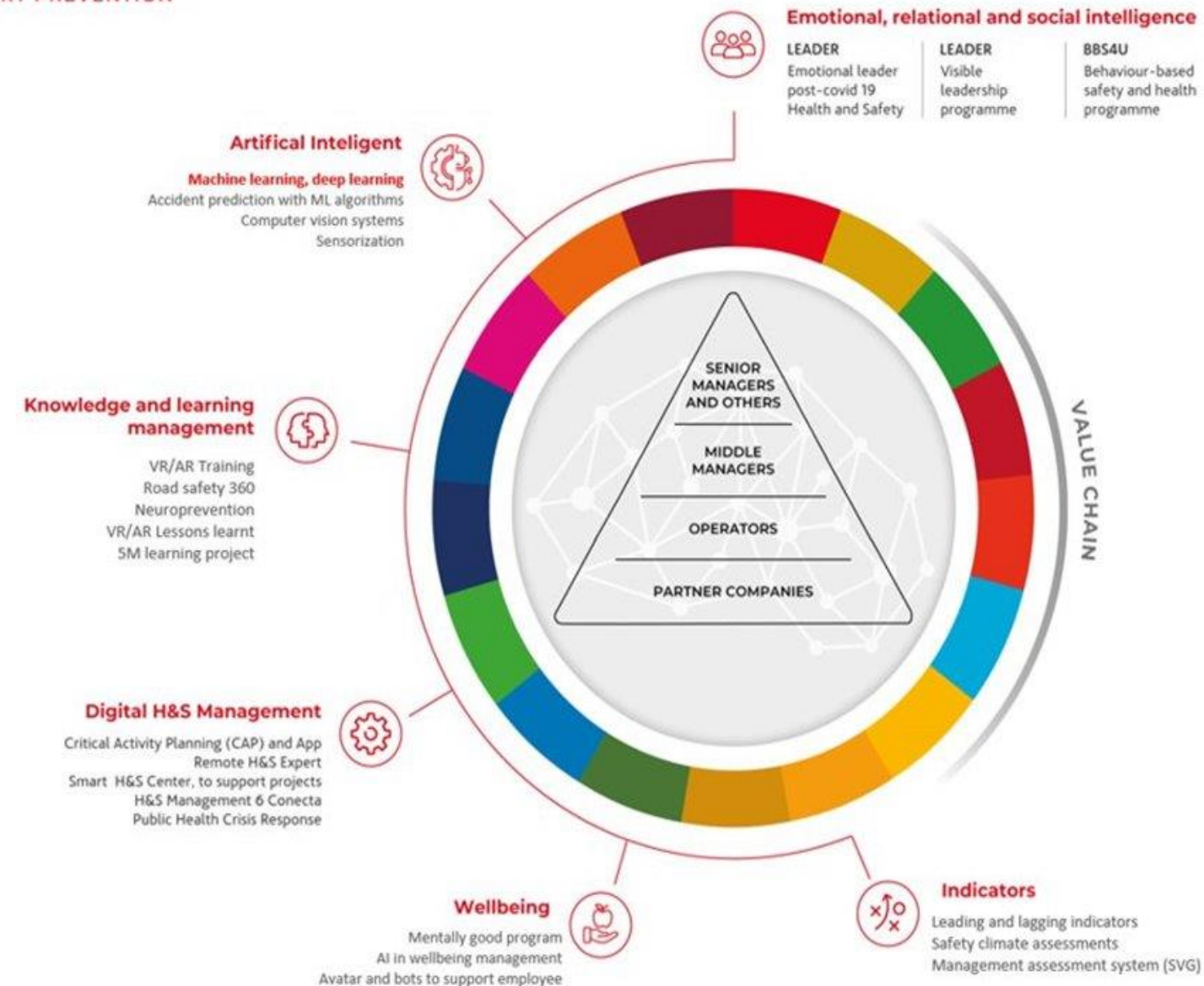
Artificial Intelligence (AI) in Safety

- To utilize AI technologies such as machine learning, computer vision, and sensorization to predict, detect, and prevent safety risks, enabling data-driven and proactive safety management

Knowledge and Learning Management

- To enhance workforce capability and safety awareness through immersive and continuous learning tools (e.g., VR/AR), structured knowledge sharing, and cognitive-based prevention strategies.

SMART PREVENTION



Digital Health & Safety Management

- To implement digital platforms and tools that enable real-time monitoring, centralized coordination, and agile response to health and safety issues across project sites and operational teams.

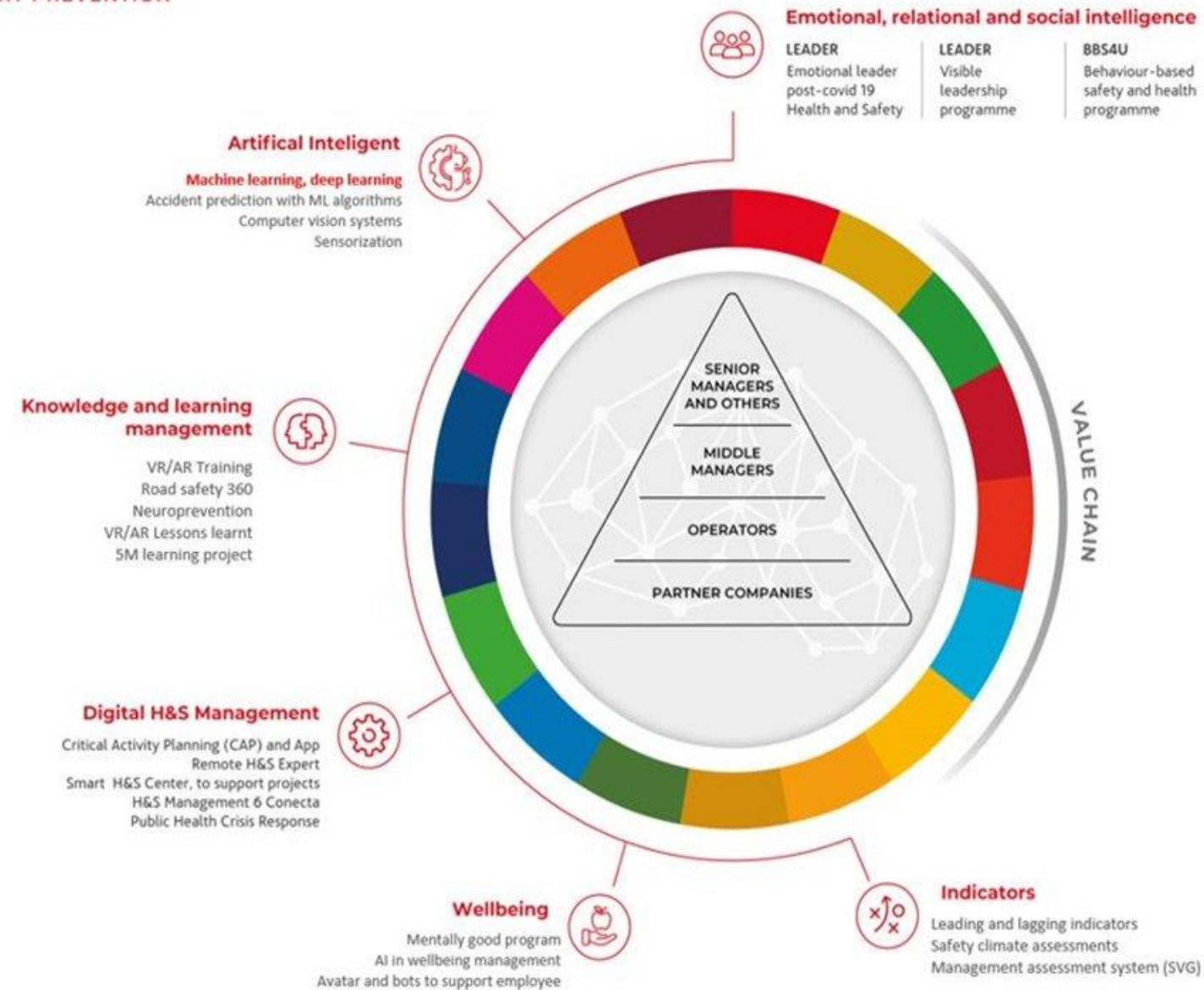
Wellbeing

- To integrate mental and emotional well-being into safety programs, ensuring a healthy, supported, and resilient workforce through accessible AI tools and structured well-being initiatives.

Indicators

- To establish a robust system for measuring safety performance through leading and lagging indicators, workforce perception assessments, and structured evaluation tools for continuous improvement.

SMART PREVENTION



ACCIONA HEALTH & SAFETY

Real case: AI cameras in Malolos-Clark CPN04



ACCIONA HEALTH & SAFETY

Real case: AI cameras in Malolos-Clark CPN04

 infinityneural

 EN  remorante@acciona.com

 Home / Dashboards 

☒ Mostrar todos los Eventos  

> Acciona (General) 0 

∨ Acciona - Filipinas 2 

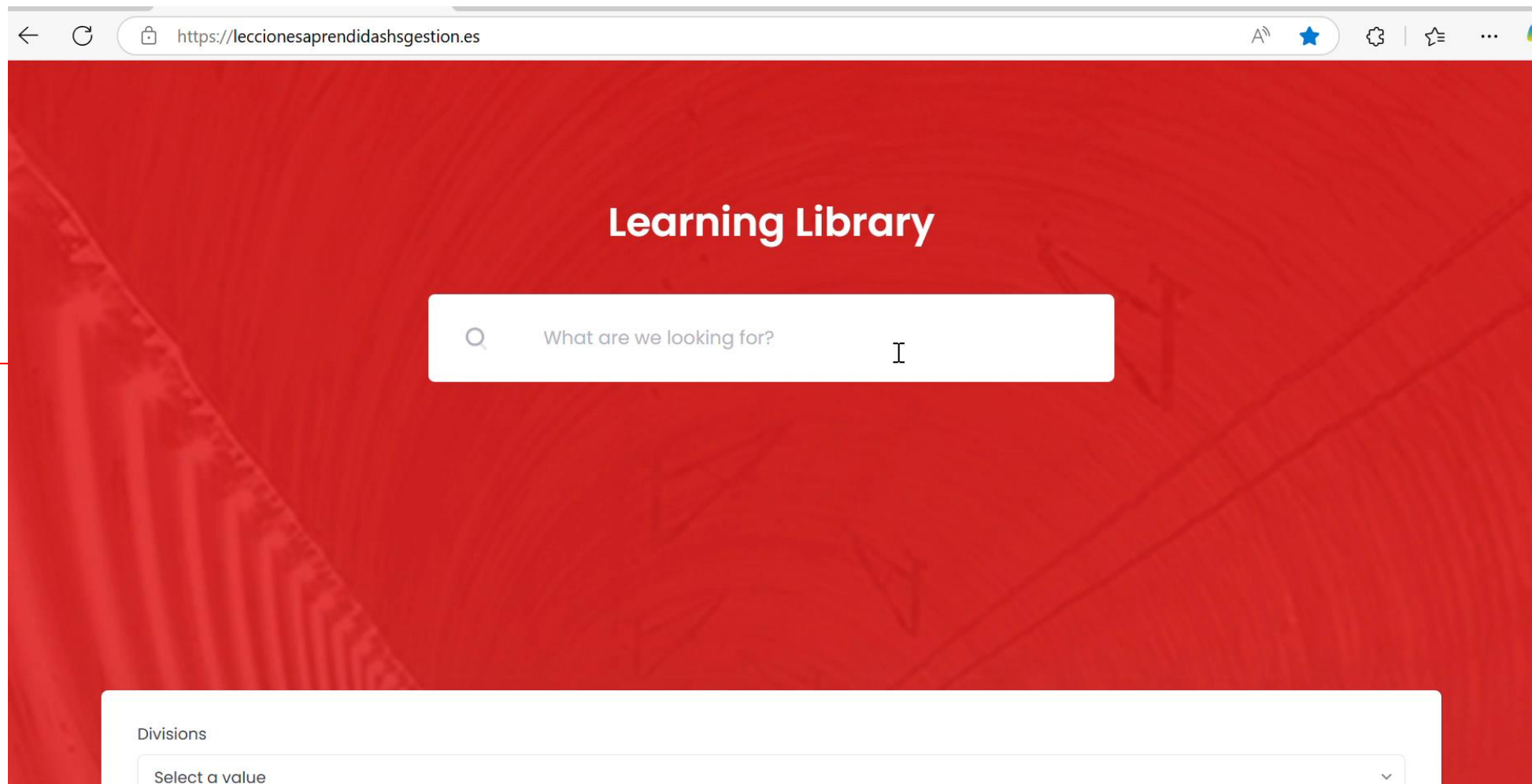
Viewer	Name
	Malolos Clark Railway Project - CPN04 - Detalles alertas
	Malolos Clark Railway Project - CPN04 - Análisis por fecha y hora

ACCIONA HEALTH & SAFETY

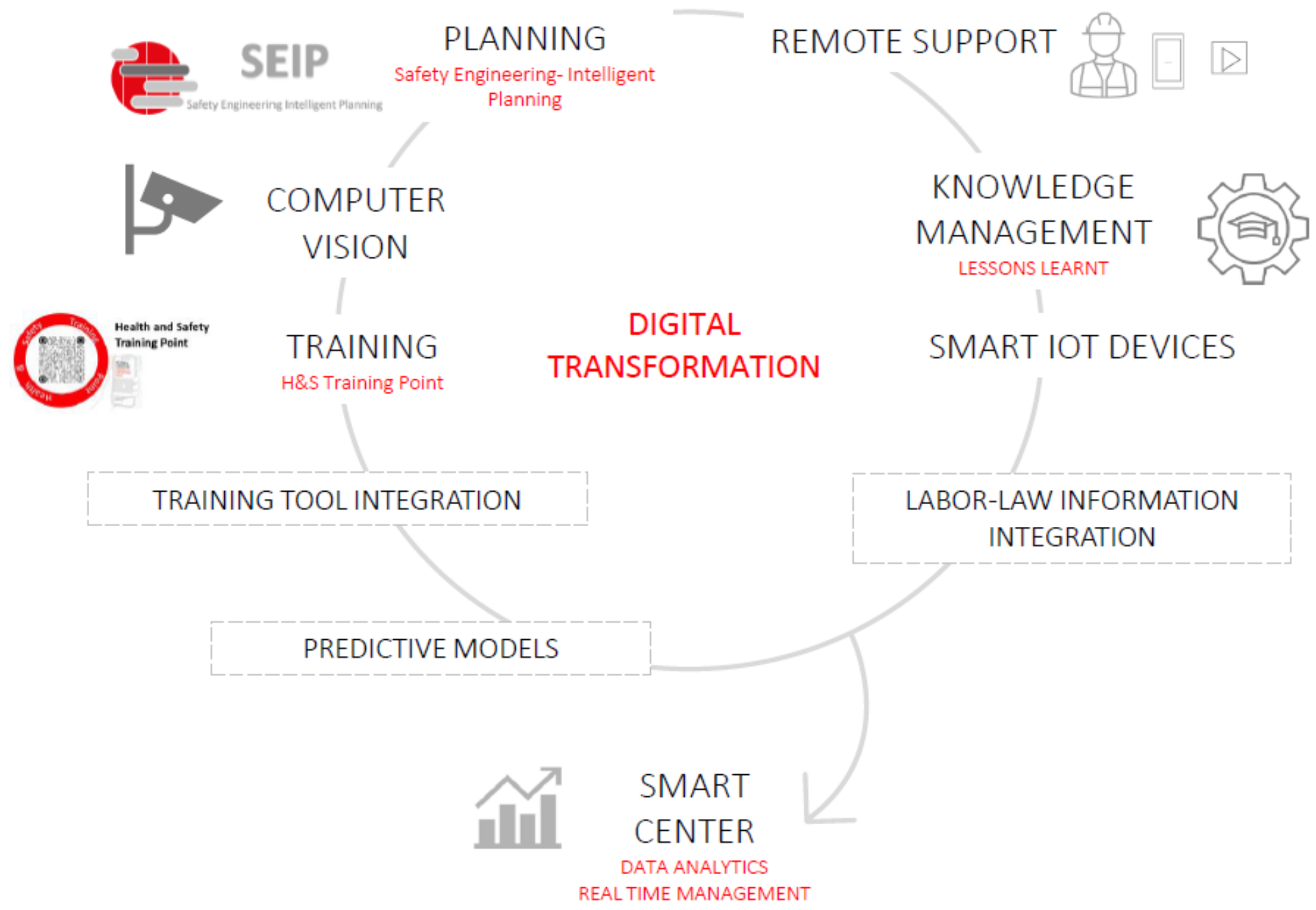
- Evolution and Implementation in Philippines

2025
Learning library
Lessons learnt

2024



AI – Current use (Integration)



AI – Current practical use

DATA MANAGEMENT AND ANALYSIS



Patterns and
predictions



Probabilities
and trends

EVENT MANAGEMENT



Alarms



Alerts

PREDICTIVE MODEL



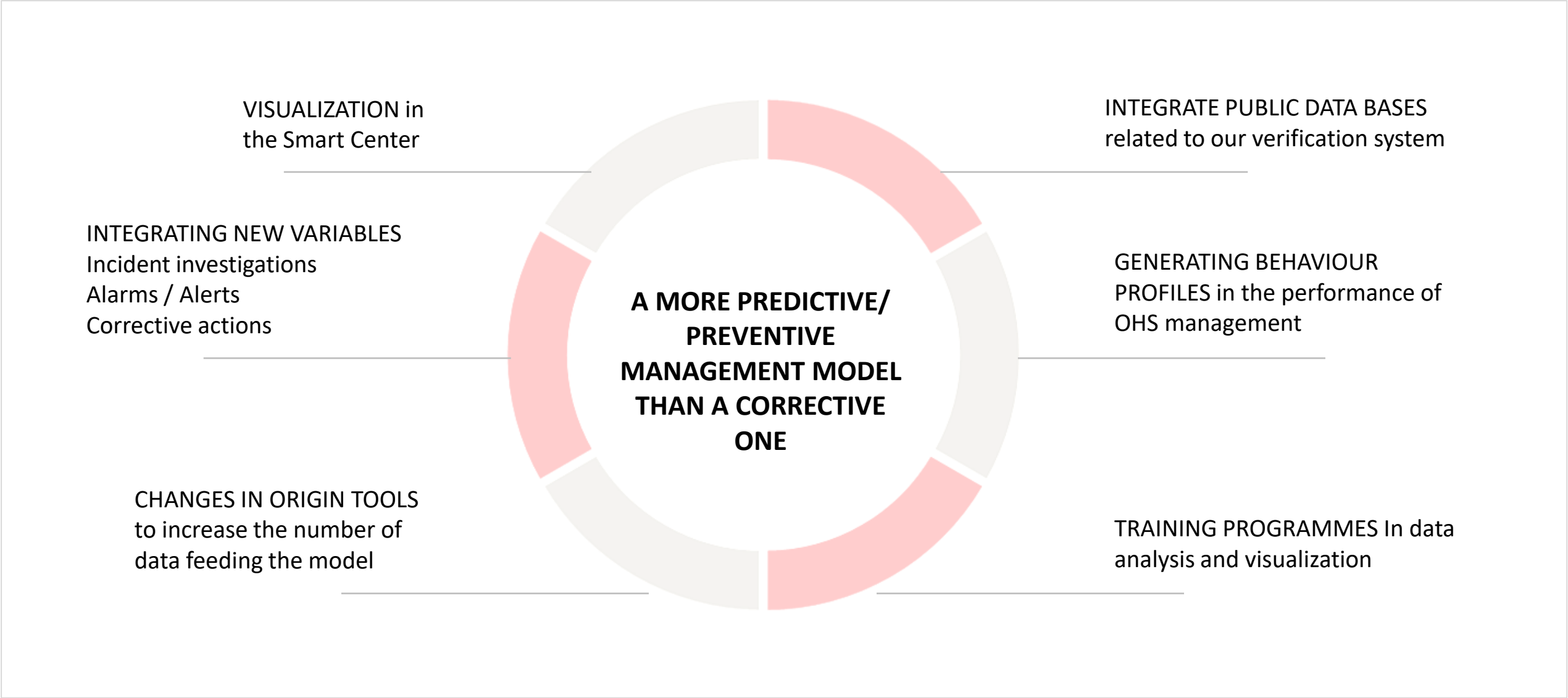
Inspection



Accident rate

- Preventive management model rather than corrective management model
- Optimization of time and resources
- Identifying opportunities for improvement and adopting new strategies
- Market differentiation
- Predictive analytics, use of historical data to identify patterns and trends

AI - NEXT STEPS





BUSINESS AS UNUSUAL