



Unlocking value: How ABB leverages AI to transform projects

2025

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ENGINEERED
TO OUTFIT

ENGINEERED TO OUTFRAN

With our leading technologies in electrification and automation, we help all industries run at high performance and become more productive, efficient and sustainable to outperform.

At ABB, we call this **'Engineered to Outrun'**.



Software, digitalization, AI

Embedded in products to create customer value

More than **250** AI-focused projects² across the ABB Group.

~55% of our R&D employees¹ are focused on digital and software development.

STRATEGIC PRIORITIES



Involvement of Customers



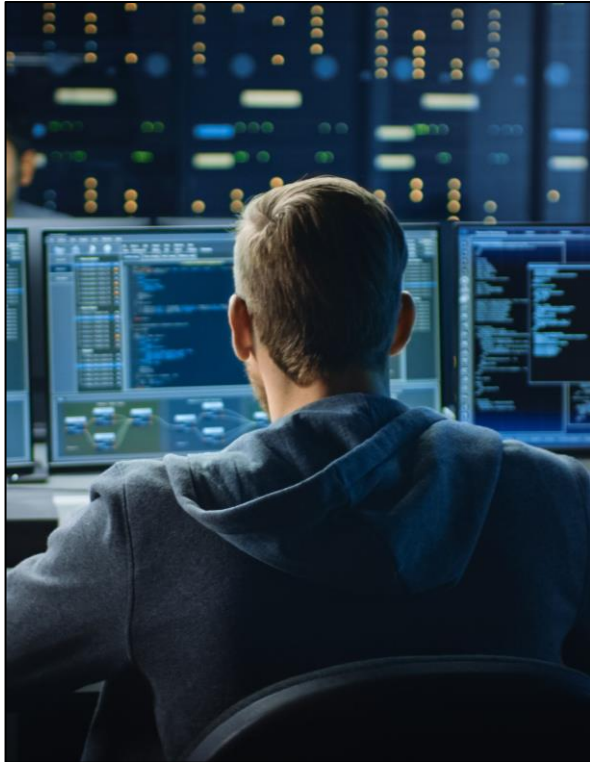
Data-driven & Domain Focused



Seamless Integration

How AI can be utilized throughout the project cycle

Create, realize and optimize value



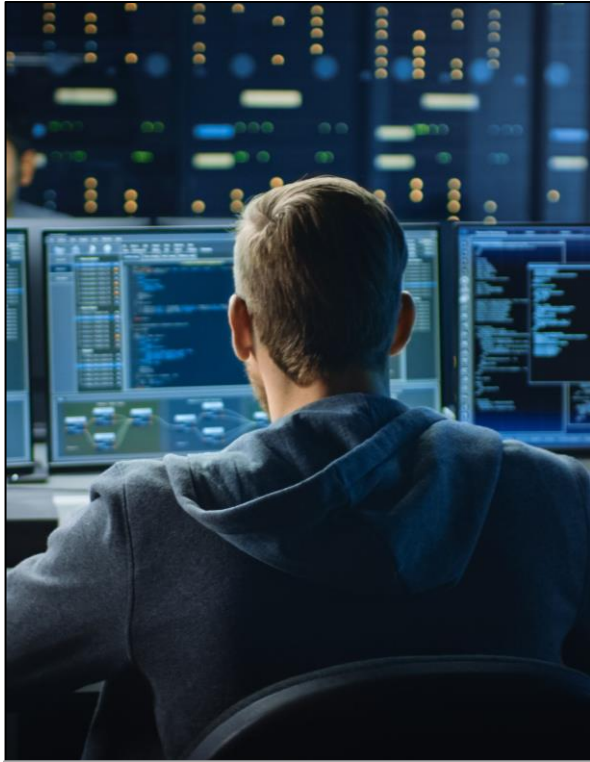
Concept & FEED

Project Execution

Operations

How AI can be utilized throughout the project cycle

Create, realize and optimize value



**Generative AI for
Engineering**

Project Development

Use of Generative AI



Automate



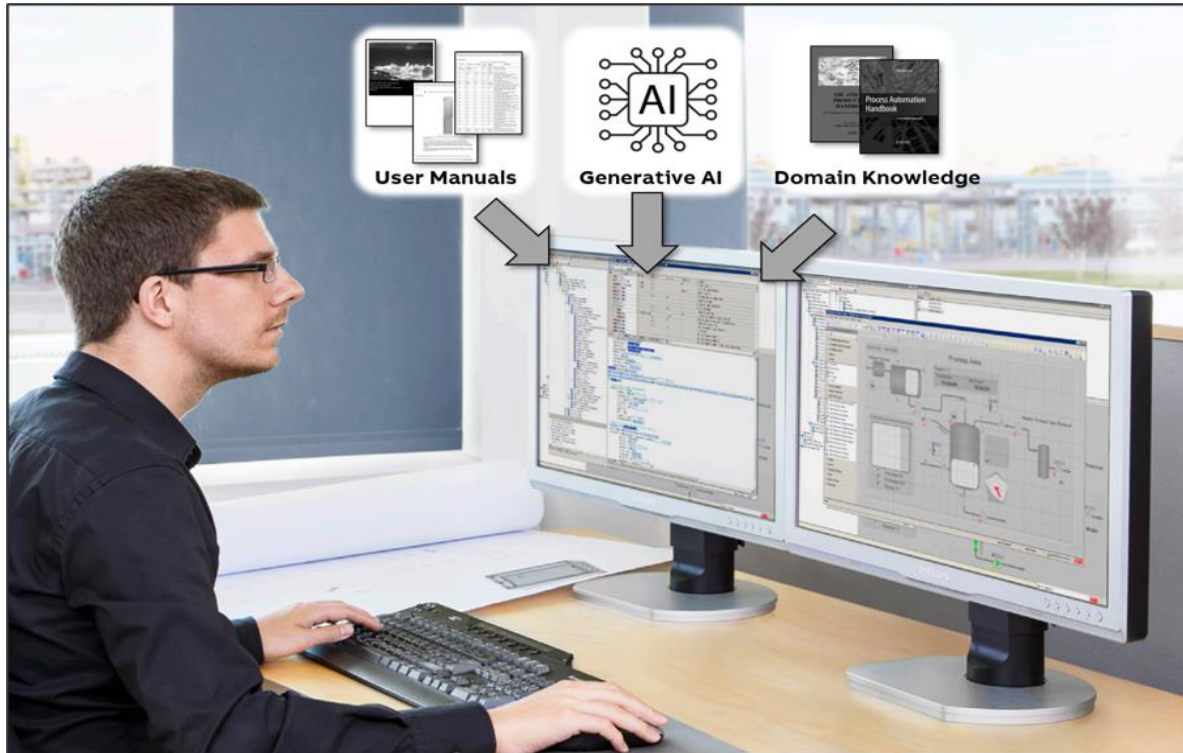
Generate control logic



AI Research

Generative AI for Engineering

Generation of Control Logic



Reduce time



Increase productivity

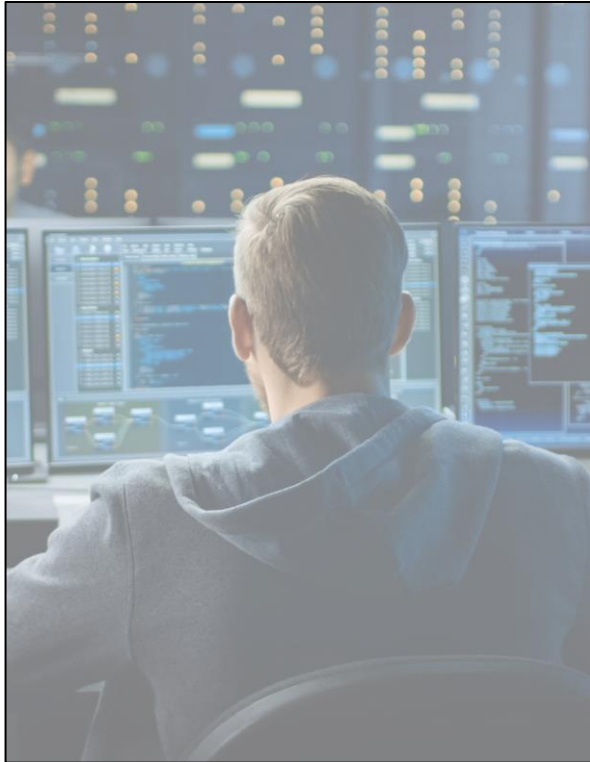


Ensure quality

Value creation and streamlining with AI

How AI can be utilized throughout the project cycle

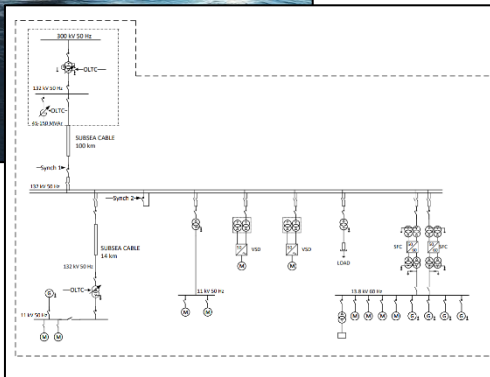
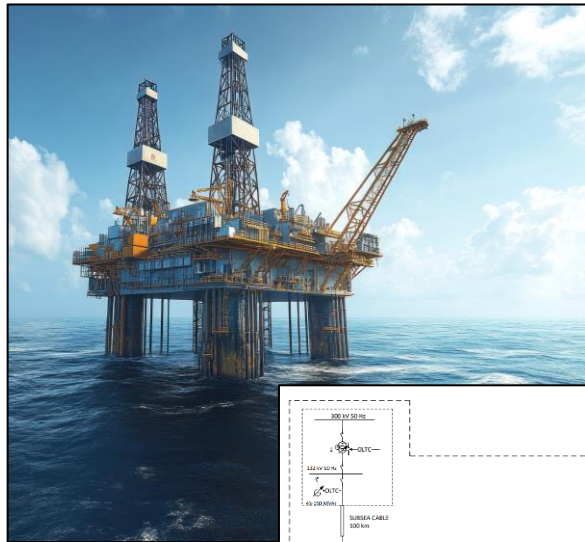
Create, realize and optimize value



Digital Twin

Digital Testing System

A collaboration between Aibel and ABB



Modification Offshore



Digital Twin of the System



Hardware in the loop

Digital testing of the “real world”

Digital Twin meets AI

A future synergy

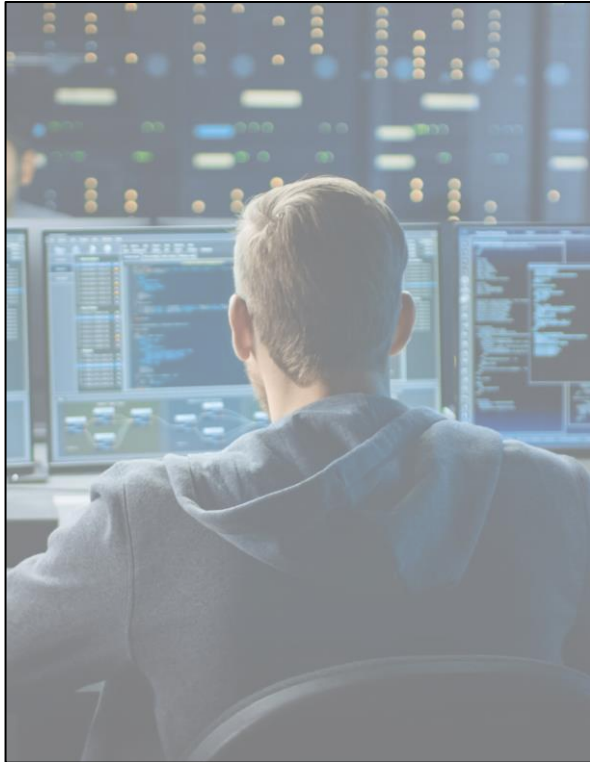


Artificial Intelligence

Digital Twin

How AI can be utilized throughout the project cycle

Create, realize and optimize value



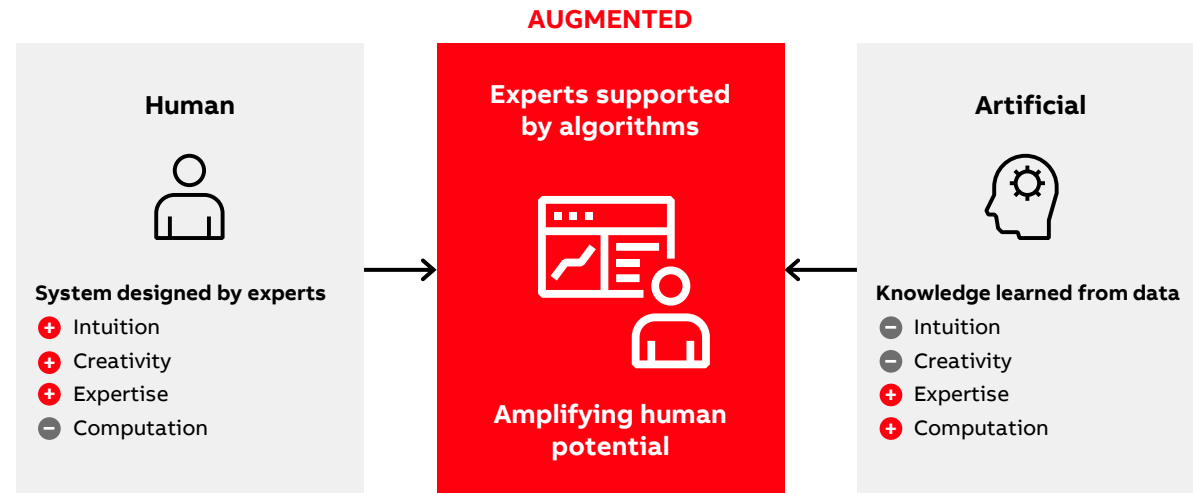
AI in Operations

Augmented Operator

Towards autonomous systems, building trust

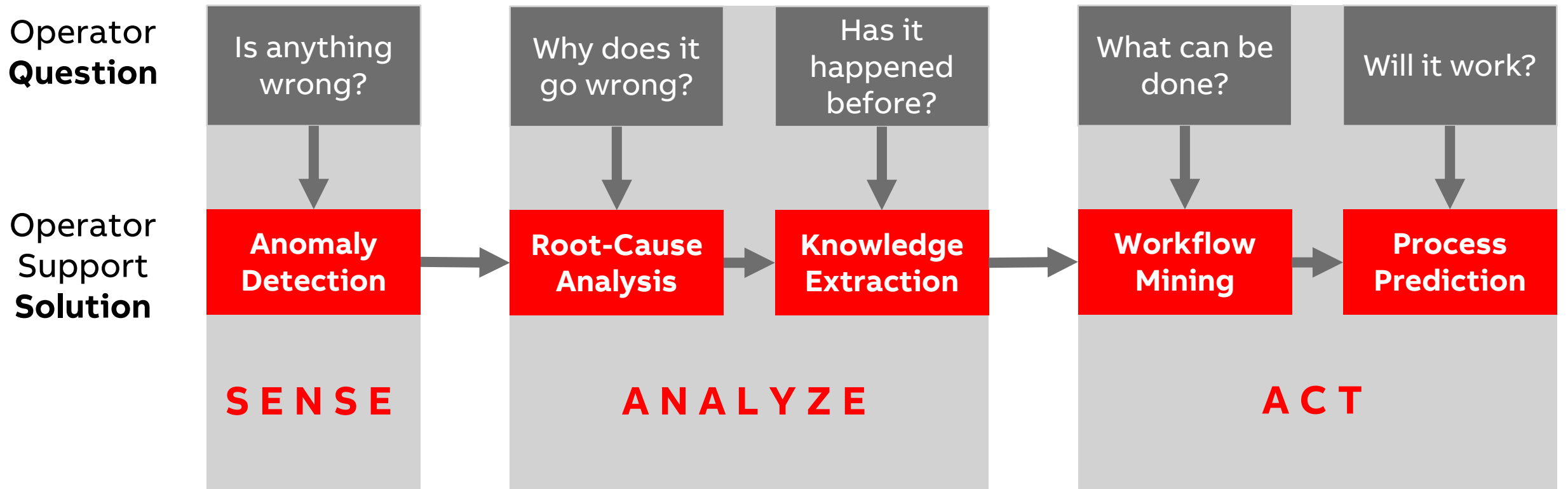
Amplifying human potential

Autonomous operations and Industrial AI will revolutionize work by augmenting human cognitive capabilities to amplify human potential.



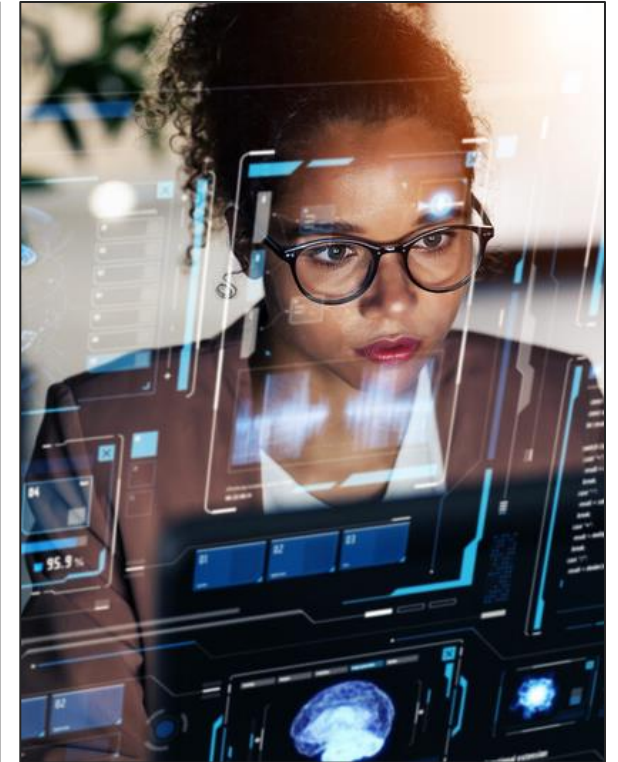
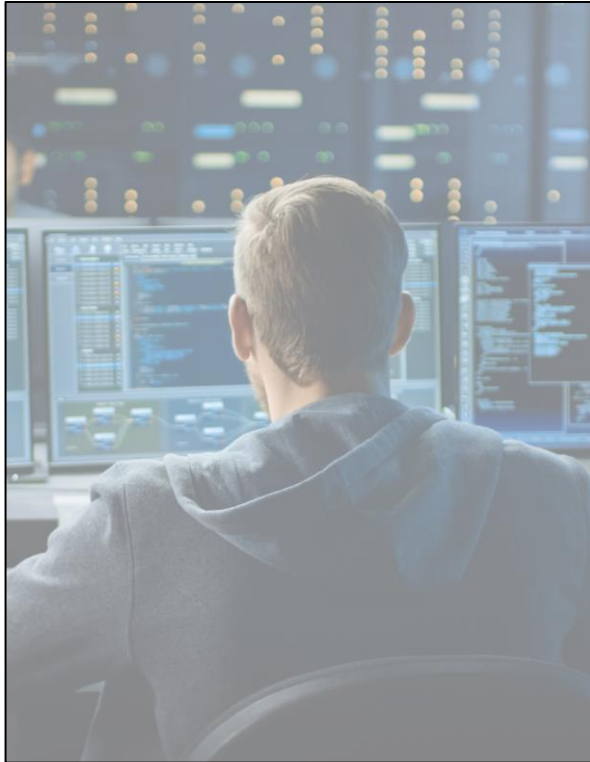
AI-based Remote Operator Support

5-Step Solution to Ensure Smooth Plant Operation



How AI can be utilized throughout the project cycle

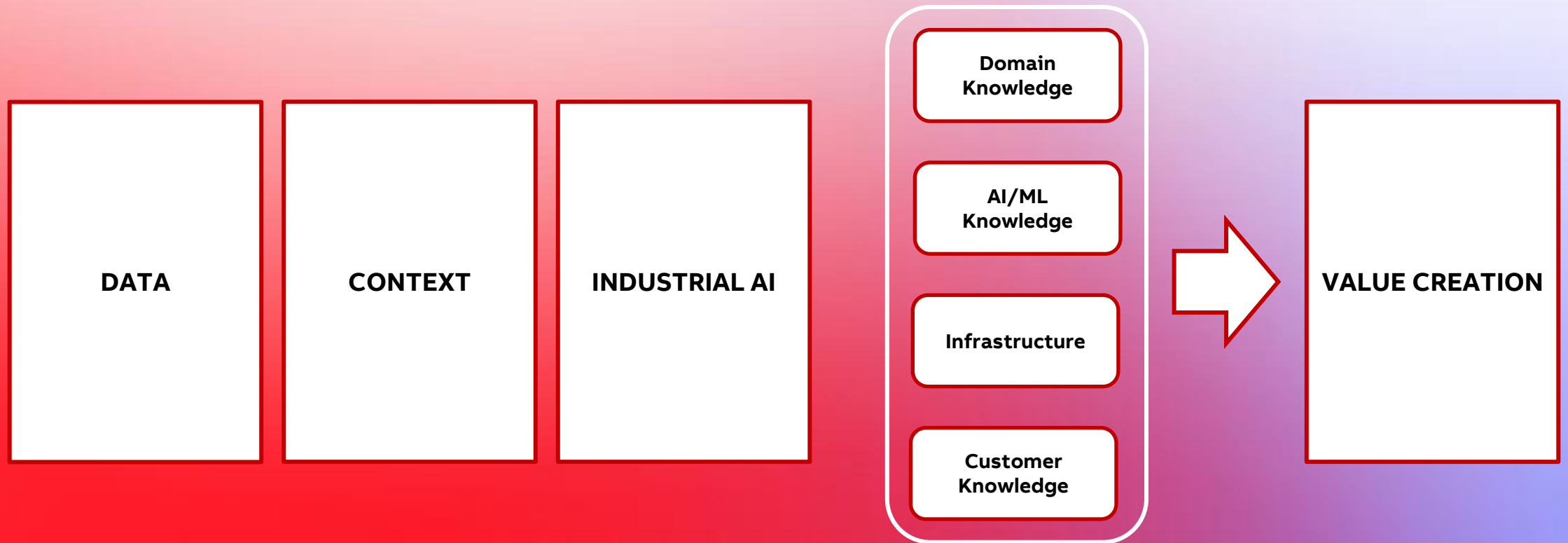
Create, realize and optimize value



**Extend Value with
Data and AI**

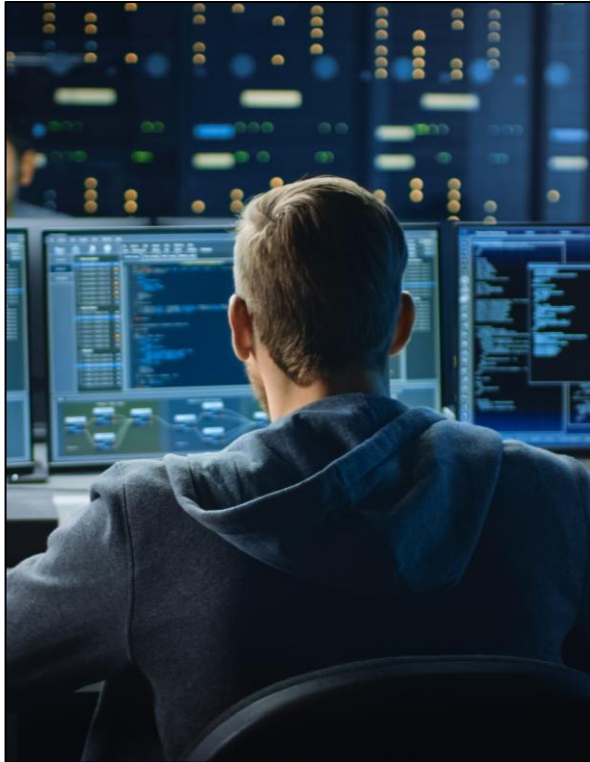
Unlocking Business Value with Data and AI

The Foundation for Success



How AI can be utilized throughout the project cycle

Create, realize and optimize value



Generative AI for Engineering



Digital Twin and AI



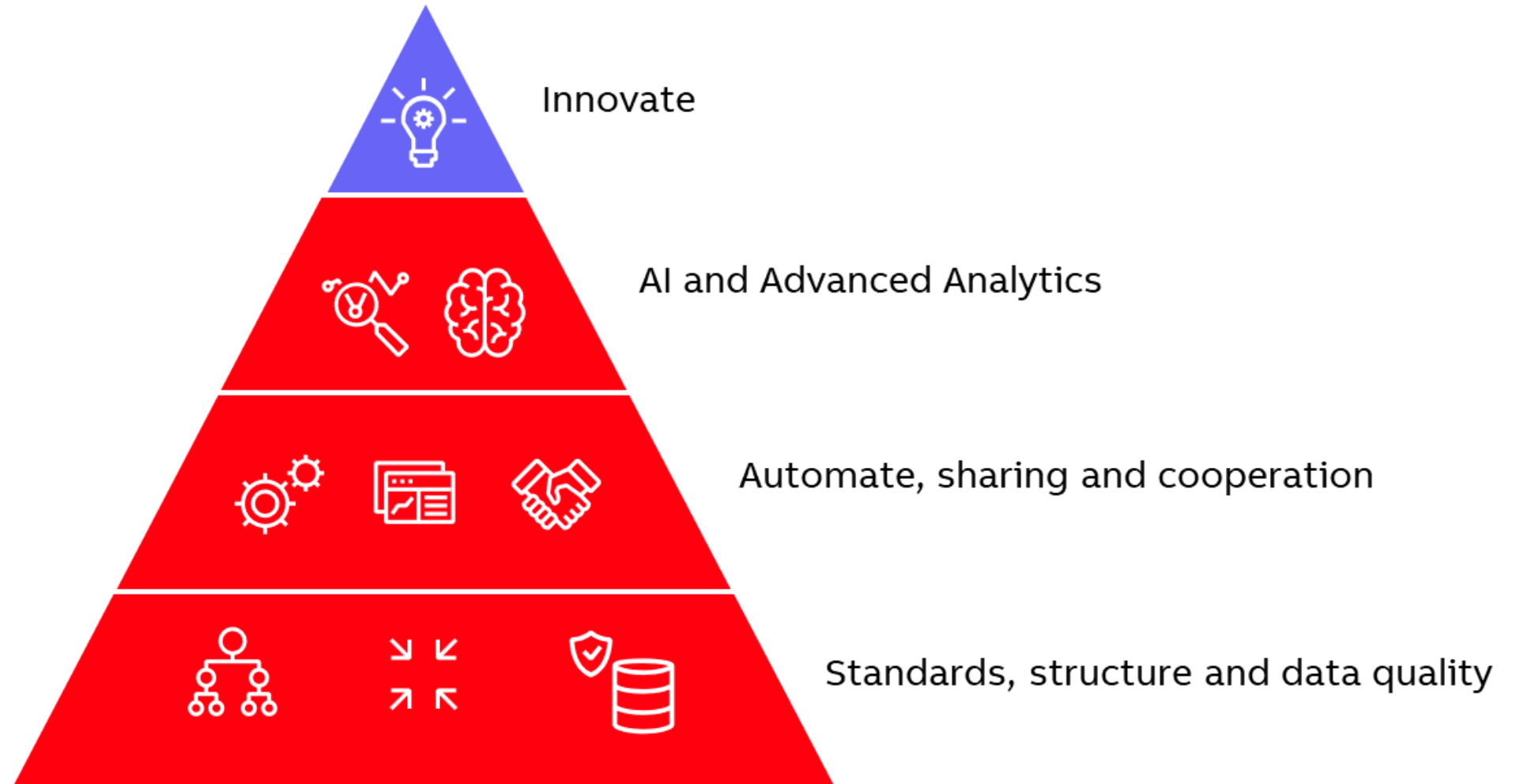
Augmented Operator



Extend Value with Data and AI

ABB: Partner for the journey ahead

Engineered to Outrun



AABB