

# AI is reshaping industries — not just screens.

Most AI debate centres on language models and content generation. The deeper strategic disruption is happening in factories, power grids, logistics networks, and industrial infrastructure.

*Physical AI: when algorithms connect directly with machines, sensors, and industrial systems — enabling them to sense, learn, and decide autonomously in the real world.*

# Not all AI creates the same **impact**

## GENERATIVE AI

### Words & images

- Automates communication
- Accelerates knowledge work
- Operates in the digital layer
- Error cost: manageable
- Industries: all sectors

## PHYSICAL AI

### Machines & systems

- Controls real processes
- Optimises production & logistics
- Operates in the physical layer
- Error cost: critical
- Energy, industry, mobility

The strategic lever for industrial sectors sits in the right column.

# Four pillars to scale Physical AI across industries

## 01 Digital-native operations

Plants, factories, and networks designed from day one to generate, flow, and exploit data at scale

## 02 Real-time process optimisation

Algorithms making autonomous decisions on physical variables — continuously, not periodically

## 03 End-to-end data integration

Full visibility across the entire value chain — no blind spots from raw input to final customer

## 04 Customer & partner empowerment

Enabling better decisions upstream and downstream, not just internal efficiency gains

# Where does your organisation stand today?

Level	System characteristics	Learning capability
Automated	Rigid, programmed instructions. No adaptation to change.	None. Cost-reduction focus only.
Digitalised	Cloud data capture, plant monitored visually.	Reactive. Humans interpret results.
Intelligent	Advanced AI integrated with physical systems. Autonomous.	Proactive. Anticipates failures. Optimises efficiency & sustainability.

Most organisations sit between level 1 and 2. The gap to level 3 is where competitive advantage is built — and where most boards are not yet having the right conversation.

# Technology moves fast. Organisations move at a **different pace.**

Deploying Physical AI in critical systems is a leadership decision. Four executive levers that determine success:

## **Build AI literacy**

Critical thinking & AI understanding at all levels

## **Govern data & AI**

Responsible AI with board-level accountability

## **Embed in strategy**

AI is infrastructure, not a pilot project

## **Measure outcomes**

Translate complexity into financial & operational results

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