Artificial Intelligence in Buildings

Unlock the performance of your building – your gateway to your sustainability and business goals

Johnson Controls at a glance

Nearly
140 Years
of innovation experience

More than
9,200
active patents

Named in
40+
leading sustainability

We are in
90%
of the world's most iconic buildings

100,000
experts globally

4+ million
customers globally

More than
+35.2M
metric tonnes of CO_2e reduced for our customers since 2000

Customers saved more than
$7.2 billion
in energy and operational savings since 2000

150 countries offering a local service from
2000 locations

$78 million
in charitable contributions in the past 5 years

+1.86 million
volunteer hours in the past 5 years

100% increase
in energy productivity since 2022

Johnson Controls is a world leader in smart buildings, creating safe, healthy and sustainable spaces

HEALTHCARE

Helping patients heal and doctors cure

SPORTS AND ENTERTAINMENT

More connected experiences for fans

AIRPORTS

Enhanced travel experiences

CAMPUSES

Better learning experiences

DATA CENTERS

Smarter, more efficient and resilient data centers

COMMERCIAL BUILDINGS

High performing, future ready buildings

LIFE SCIENCES

More time for science

SCHOOLS

Inspiring spaces for learning

CITIES

Smarter, more sustainable cities

Smart

Powering buildings to think and respond

There are three parts to what experts call the ‘smart building trifecta.’ This is creating a new class of buildings — they’re the architectural icons of the net zero age.

Efficiency. Electrification. Digitalization.

Healthy

Enhancing experiences, wellbeing, delivering greater productivity

By using technology that responds to the changing needs of people and the environment, your buildings become spaces that unlock the full potential of people, resources and investments.

Sustainable

Accelerating the journey to net zero

We are an expert partner in sustainable building solutions.

We make net zero leadership easy with a proven path delivering your sustainability goals.

OpenBlue helps unlock building performance across key outcomes

Energy Efficiency & Sustainability

Your gateway to net zero and improving your bottom line. Take realistic steps with digital solutions that track, optimize and control energy use and accelerate progress to net zero emissions.

Space, Wellbeing & Productivity

Drive space efficiency, optimal occupant health and experiences. Create world-class spaces and experiences that engage tenants, attract and retain talent, boost health and increase occupant productivity.

Operational Efficiency & Equipment Performance

Efficient building system optimization and smart facility management. Operational consistency, risk mitigation and lower lifetime costs across your assets and building portfolio.

Security, Safety & Compliance

Holistically protect people and property. Holistic management of all systems and processes critical to the safety and security of your building, people and assets.

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Use Case example

Central Utility Plant Optimization

Inputs and predictors

- Utility market rates
- Load predictions
- Weather forecasts
- Equipment modeling / digital twins
- Calendar / maintenance

PREDICTIVE COST OPTIMIZATION

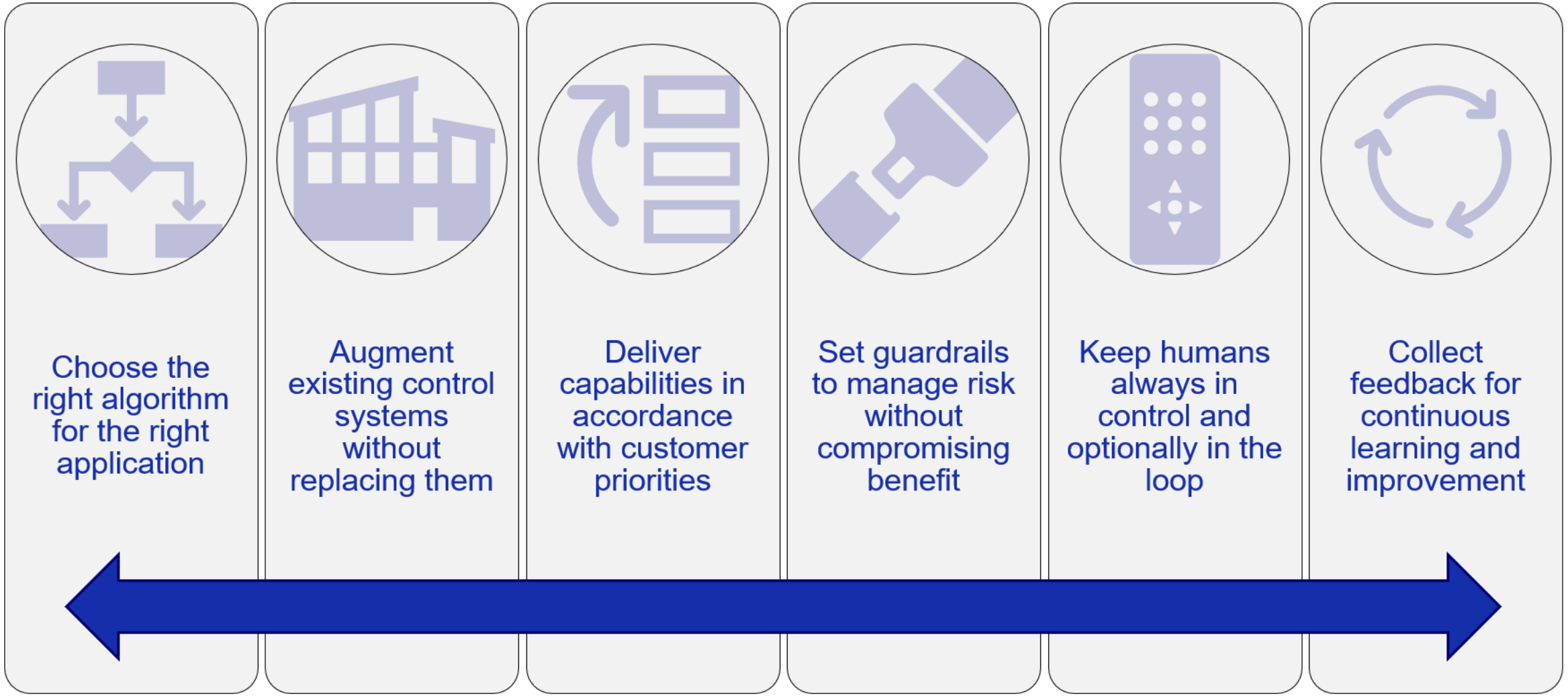
MONITOR AND ADAPT

Control and command
Any brand equipment

- Chillers
- Cogeneration
- Boilers
- Pumps
- Battery storage
- Cooling towers
- Heat exchangers
- Heat pumps

Predictive, real-time control and machine learning make the difference.

Core Principles of AI for Autonomous Buildings



Johnson Controls: Confidential

Questions?