The Benefits of Artificial Intelligence in Buildings:

**ENERGY EFFICIENCY & SUSTAINABILITY**
Improves energy efficiency in buildings by optimizing energy usage, predicting and preventing inefficiencies, and enabling smarter decision-making for energy management.

- Optimizes energy consumption by analyzing data from sensors and smart devices within a building, reducing waste and carbon footprint and optimizing energy usage.
- Predicts maintenance needs and potential failures. By proactively identifying and fixing issues, buildings can reduce energy waste and improve the efficiency of their systems.
- Conducts lifecycle assessments of building materials and products to identify more sustainable options and guide decision-making in construction and renovation projects.

**SPACE, WELLBEING & PRODUCTIVITY**
Creates healthier environments that enhance occupant well-being and productivity.

- Enables sensors to monitor indoor air quality parameters to detect air quality issues and recommend actions like adjusting ventilation systems or changing building operating setpoints.
- Powers digital building systems to create comfortable, optimized indoor environments. This can include recommendations to adjust temperature, humidity, and other building parameters that in turn maximize occupant health, wellness, and productivity.
- Contributes to decarbonization commitments by optimizing the energy usage required to ensure indoor spaces are healthy and risk of airborne infectious disease spread is low.

**OPERATIONAL EFFICIENCY & EQUIPMENT OPTIMIZATION**
Delivers smarter, more efficient, and cost-effective in-building operations through optimization of equipment, energy usage, occupancy awareness, and automation.

- Optimizes energy usage in buildings, optimizing the operation of systems to minimize energy waste while maintaining occupant comfort and productivity.
- Optimizes space utilization in buildings and provide insights on peak usage times, identify underutilized areas, and optimize resources, leading to energy savings and improved operational efficiency.
- Detects faults or inefficiencies in building systems to identify deviations from normal operation, diagnose the root causes and provide insights for corrective actions, optimizing equipment performance and reducing energy waste.

**K-12 SCHOOLS**
K-12 schools can become safer, more resourceful and provide an improved educational experience for students and teachers.
- Student safety
- Indoor air quality
- Energy efficiency
- Classroom design

**HIGHER EDUCATION**
Campuses can become more efficient, safe and student focused, providing a better learning and living environment.
- Resource management
- Student safety
- Campus navigation
- Intelligent campus services

**HEALTHCARE**
Healthcare facilities can become smarter, more efficient and safer, enhancing the experience for patients, staff and visitors.
- Building automation
- Predictive maintenance
- Space utilization
- Navigation

**GOVERNMENT**
Government buildings can become more secure, efficient and service-oriented, enabling increased focus on the needs of its constituents.
- Resource management
- Workflow optimization
- Space design
- Visitor management