



INTELLIGENT SYSTEMS GUIDE

IGNOVA

SYSTEMS INTEGRATION

The background of the entire image is a deep blue space filled with stars. In the center, a vibrant city skyline is shown at night, with numerous skyscrapers illuminated in various colors like blue, green, and yellow. The city is reflected in a body of water below it. Overlaid on the city and the water is a complex network of glowing white and purple nodes connected by thin, translucent lines, suggesting a global or smart infrastructure network. A large, pale moon is visible in the sky behind the city.

From Traditional, To Smart Buildings

The Journey of KNX, BMS,
DDC, PLC, HMI & SCADA

A Simplified Guide to Understanding
Modern Control Systems

IGNOVA



WHY SMART BUILDINGS?

Imagine a building where lights stay on all day, HVAC runs non-stop, and energy bills soar.

Now compare this with a smart building: lights turn on only when needed, HVAC auto-adjusts for comfort, and blinds close automatically at sunset.

Highlights:

Traditional Building → Dark, inefficient, energy-wasting.

Smart Building → Bright, comfortable, efficient, safe.

Key Point:

Smart Buildings



Comfort



Efficiency



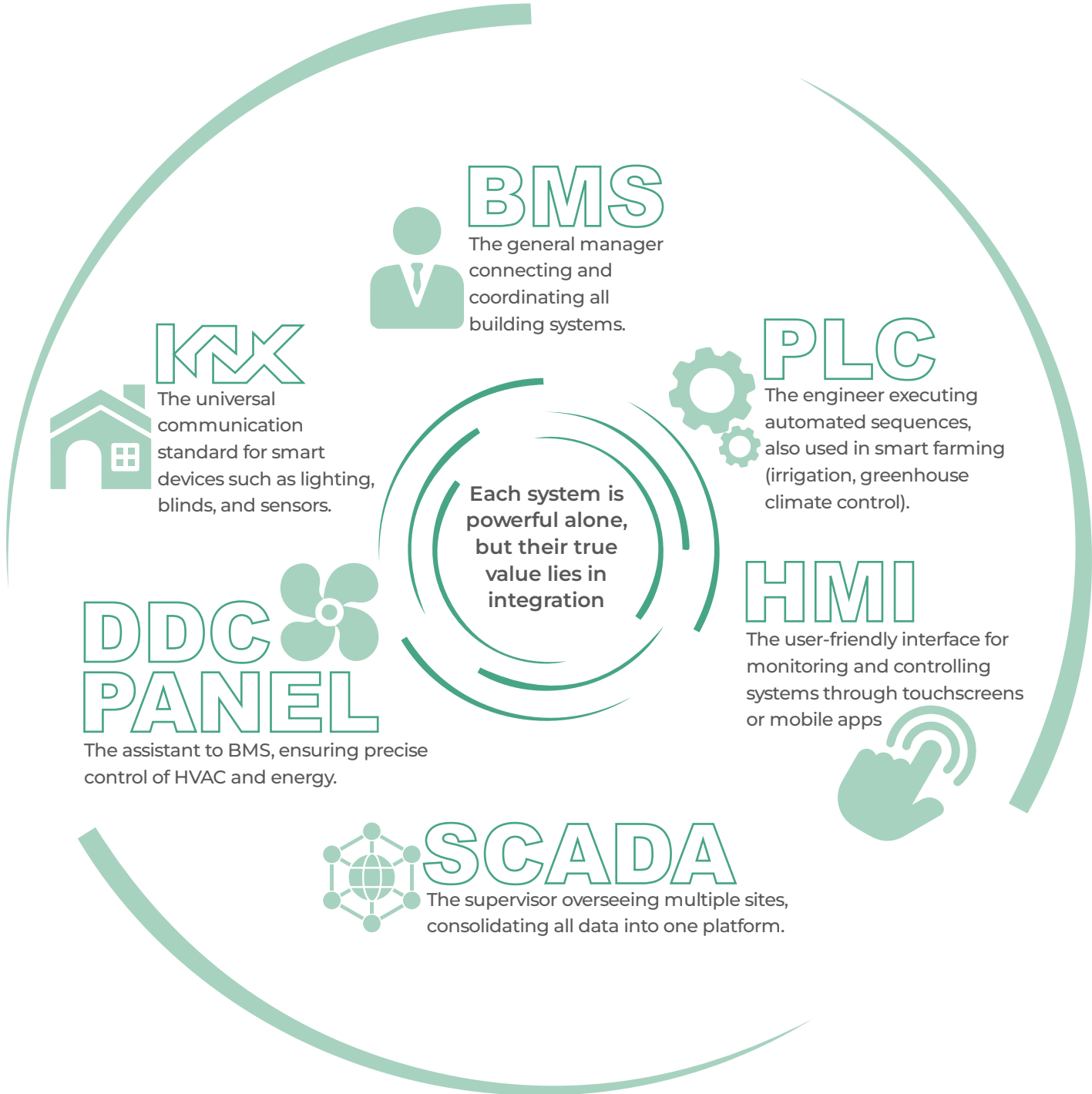
Savings



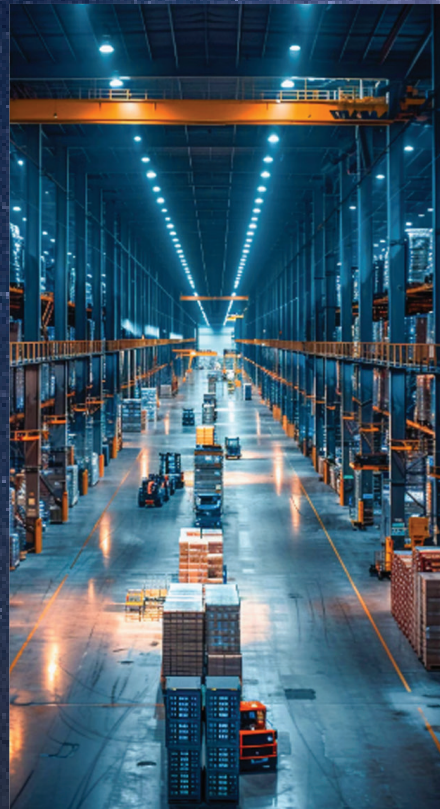
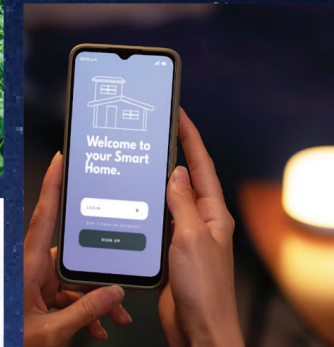
Safety

Smart buildings can reduce energy costs by up to 40% while improving occupant comfort.

SYSTEM DEFINITIONS

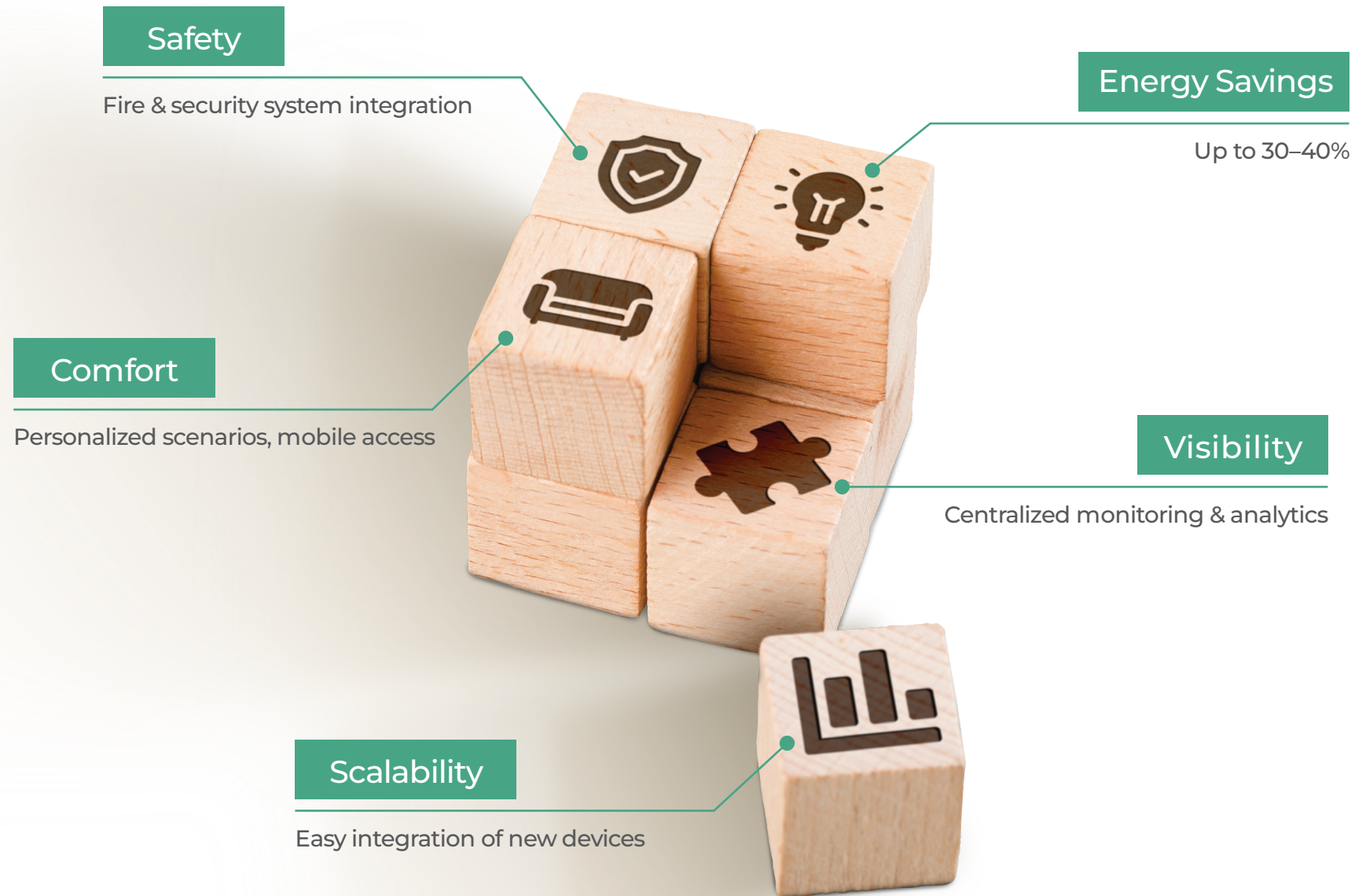


WHERE THEY ARE USED



KNX	Homes – Offices – Hotels
BMS + DDC	Hospitals – Airports – Shopping Malls
PLC	Factories – Water Plants – Smart Farming
HMI	Control rooms – Touchscreens – Mobile apps
SCADA	Energy plants – Large factories – Smart cities

KEY BENEFITS



CASE STUDY

SMART HOTEL ROOM



SCENARIO

Guest enters → Lights switch on automatically.
HVAC adjusts to optimal temperature.
Blinds close automatically at sunset.
All functions visible on HMI screen or mobile app.

OUR SOFTWARE ROLE

We do not deliver just installations, but we also develop tailored software that enhances BMS functionality. Our solutions adapt to each project, ensuring systems fit the building — not the other way around.



Ready to make your building smarter?



Smart buildings deliver comfort, safety,
and efficiency — every day.

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