

WHY WE NEED TO MAKE BUILDINGS SMART?



To Save the Environment - We Have No Choice but to Go Smart

The environment is facing unprecedented challenges, from climate change to biodiversity loss, and the built environment is contributing to these issues. To address these issues, we must take action to reduce our impact by being a bit smarter.

The construction and operation of buildings account for a significant portion of global energy consumption and carbon emissions, exhausting **1/3 of the world's energy and 60% of the world's electricity.**

As the world's population continues to grow and urbanise, there is an urgent need to reduce the environmental impact of the built environment. **The global population is set to increase 70% by 2050.**

Approximately **70% of the EU Building Stock is deemed energy inefficient by the EU Commission, with commercial buildings accounting for 20% of all energy used and as much as 30% of that goes to waste.**

Smart buildings offer an effective way to reduce wastage while also improving sustainability, wellness, lowering costs and increasing productivity and user experiences.

Sustainability and wellness are key drivers in the adoption of smart buildings. But it's not just the environment that benefits from smarter buildings.

By using smart building technologies, building owners, operators and tenants can reduce energy costs. This not only helps to reduce operational costs, but also creates a healthier future for us all



Another benefit of smart buildings is the impact they can have on user experiences.

According to a study by Deloitte, 85% of office workers believe that their workplace environment can have an impact on their wellbeing. By creating a comfortable

and healthy environment for employees, building owners can improve productivity and ultimately increase profits.

Smart buildings achieve all these benefits through the use of advanced technologies such as the Internet of Things (IoT), system integration, middleware, cloud services and analytics not forgetting the emerging machine

learning and artificial intelligence capabilities.

By integrating these technologies into the building's infrastructure, building owners, operators and tenants can gain real-time insights into how the building is being used and make data-driven decisions to optimise energy consumption and enhance the user experience.

The adoption of smart building technologies can have a significant impact. Below are some statistics and workflows to support this:

1

ENERGY EFFICIENCY

According to the US Green Building Council, green buildings can save up to 30% in energy costs and reduce CO2 emissions by 35%. Smart building technologies can help reduce energy consumption further, with the use of analytics and system integration leading to up to 50% reduction in energy costs.

2

WELLNESS AND PRODUCTIVITY

According to the World Green Building Council, improving indoor air quality can lead to an 8-11% increase in productivity. Smart building technologies can help ensure a healthy indoor environment by monitoring air quality, temperature, and lighting levels, leading to improved occupant wellness and productivity.

3

USER EXPERIENCE

According to a study by Johnson Controls, 5% of occupants in smart buildings reported a positive experience, with better control over their environment and improved comfort. Smart building technologies, such as mobile apps and voice assistants, can provide occupants with greater control over their environment, leading to a more personalized and enjoyable experience.

4

SUSTAINABLE REPORTING

The EU Taxonomy and the Corporate Sustainability Reporting Directive (CSRD) require companies to report on their sustainability practices, including energy use and emissions. Smart building technologies can provide the data needed to comply with these regulations, leading to increased transparency and accountability for building owners and operators.

So in 2023 making buildings smarter is no longer a luxury, but a necessity.

The benefits are clear –healthier and more sustainable buildings, reduced energy consumption, lower costs, improved user experiences, and increased productivity. As a society, we must take steps to ensure what we create today creates a future for generations to come.

At Ethos Digital, we are committed to helping building owners, operators and tenants create smarter buildings.

Our digital team aligned with our sustainability and engineering colleagues are dedicated to implementing cutting-edge technology to reduce waste and lower costs.

By leveraging our expertise, building owners, operators and tenants can take advantage of the latest smart building technologies and create a more sustainable and healthier environment.

Are you ready to make your building smart?...

Let's chat ...



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