

Smart buildings

The four pillars of a smart building strategy

There is a common misconception that intelligent buildings are a pure-play technological consideration. While there is certainly a technological aspect to the concept, intelligent buildings can be much more than that. Smart buildings, in fact, can also be viewed as a long-term strategy to better understand the relationship between the built environment and its occupants. Optimally, the smart building allows owners and operators to better understand occupant needs and behaviors. This drives the multiple goals of enhancing both well-being and productivity while simultaneously saving operational costs and increasing building efficiencies. In essence, smart buildings can be a wise and forward-thinking investment.



The four pillars of a smart buildings strategy

1. Creating a better customer experience
2. Enhancing energy efficiency
3. Making operational improvements
4. Establishing a more sustainable environment

Any one of these drivers taken separately will contribute to the above-mentioned goals, and indeed, our global network of professionals believes that these drivers must be tailored to the specific application and the goals of the client. For instance, the needs of a shopping mall on the outskirts of London will be vastly different from those of a mid-rise office asset in Atlanta.

What is the potential impact of these four facets of a smart building strategy? Consider this: in a typical building, energy represents

a cost of \$1 to \$9 per square foot; lease maintenance and operations represent a cost of US\$10 to US\$99 per square foot; and people (occupants) represent a cost of US\$100 to US\$999 per square foot.^{1,2} The work we have done with our global clients to develop long-range smart building strategies has proven that the potential for bottom-line savings can be significant.

There is yet another goal of a smart building strategy: understanding how to enhance and protect your systems can help to secure your assets and your people from current and future criminal activity. In other words, smart buildings can serve as a frontline form of cybersecurity.

1 "Analytics: What Problem Are We Trying to Solve?," *Automated Buildings website*, <http://automatedbuildings.com/news/dec16/articles/oswald/161121105808oswald.html>, accessed 1 May 2017.

2 All dollar references in this smart building series are in US dollars unless noted otherwise.

As we work with our global clients to address all of the above-mentioned goals, it becomes clear that the implementation of a long-term intelligent building strategy will far outlive the useful life of any specific technology. It also reveals that a successful strategy is one of communication, not only between systems, but in fact between systems and the people monitoring those systems and implementing the data collected for its highest and best purpose.

For all of these reasons, and however your needs are defined, smart buildings carry great potential and are a wise investment.

Regardless of industry and application, real estate is a place of communication for the good of all stakeholders, whether they be your customers, your employees or your CFO. In this smart building series, we connect the dots of the drivers to your business through a better understanding of the smart commercial building, exploring how to drive profitability and better secure your enterprise.

As we continue this EY focus series on smart buildings, we will be discussing the overarching definition of what a smart building is; the goal of occupant satisfaction; driving operational efficiencies; energy management and smart buildings; sustainability of the smart building environment; and the interface between cybersecurity and smart building systems.

To access EY's complete seven-part focus series on Smart Buildings, please [click here](#).

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