



The Top 3 Components of a Building Automation System

A smart building in the true sense covers the three components of lighting control, access control, and HVAC systems. People know it collectively as the Building Automation System, or BAS, where staff enjoy more control over its operations. Read ahead to learn more about these elements in detail and how they contribute to a smart building ecosystem.



Everyone is aware by this point that [building automation](#) systems increase security, occupant comfort, and energy efficiency. This is probably why it has gained traction. Credit goes to AI, IoT, big data, and blockchain technology. Things that were once inconceivable have become realities today. From smart cities to space travel, everything is possible!

An industry where technology is driving change is the construction and architectural sectors. Have you heard of [building automation](#) before? It's exactly what is powering this paradigm shift. New to this term? Unfamiliar with the components making it up? Continue reading, as we have shed some light on the concept for you to gain insights.

What is Meant by Building Automation System (BAS), and What Constitutes it?

It's a distributed control system that unifies many building system types, allowing users to seek control in a single, central place. With the BAS in position, you can monitor and control the

various parts of a smart building, including the security system, lighting, HVAC, CCTV, and alarms. Almost all types of structures, from residential to commercial to governmental, can benefit from it.

Looking at the component level, three systems empower BAS the most. We have them enlisted for you to gain a firm understanding of [building automation](#).

1. **Access Control and Security Systems**

It's a system that grants and restricts access to a building through smart doors, sensor barriers, smart cards, and digital locks. Powered by robust software, IoT devices, and efficient hardware, it authorises access to only those considered harmless. It is mostly banks and government buildings where such a system is installed, as security is of paramount importance there.

2. **Lighting Control Systems**

The simplest way to explain it is through smart lighting systems that turn on when they sense the presence of someone walking into the room and switch off automatically when there is no one. Here, BAS employs occupancy and photosensors to control the lighting.

3. **HVAC Systems**

One of the most popular components of [building automation](#) is HVAC. It stands for Heating, Ventilation, and Air Conditioning, and people recognise it mostly for its wide range of functionality. With this one at your disposal, you can not only set the temperature of a room but also alter the wind speed and, likewise, adjust all ventilation parameters.

Which Sector Will Benefit the Most?

It's apparent from the discussion that the construction sector will benefit the most, especially after the pandemic. With the adoption of automation, it will witness unprecedented growth opportunities and boom again to contribute to a smarter world.