

## Reading 3

### Skills:

- Details
- Scanning
- Connect information

**Getting started:** Where is smart technology most needed, at an office building or at a stadium? Why?

## INTELLIGENT BUILDINGS

  

# INTELLIGENT BUILDINGS

The diagram features a central 3D rendering of a modern city skyline with several skyscrapers. Surrounding the buildings are five circular icons, each connected to a label: 'COMFORT' (blue circle with a thermometer), 'SECURITY' (purple circle with a padlock), 'SAFETY' (blue circle with a fire and a person), 'EFFICIENCY' (yellow circle with a lightbulb), and 'ENERGY' (green circle with a recycling symbol). A red circle with a recycling symbol is also positioned near the base of the buildings.

While we may not have the flying cars and time machines that sci-fi movies promised us, futuristic smart buildings have definitely arrived. Using a mix of sensors, artificial intelligence, and the internet of things, the smart buildings of today make traditional buildings seem like more than piles of concrete. Smart tech improves occupants' day-to-day lives while cutting down on maintenance costs, improving energy efficiency, and creating eco-friendly solutions for their cities.

Thus, here are two of the most impressive intelligent buildings from around the world. These smart buildings make the most of today's technologies to not only improve building owners' operational efficiencies but deliver great visitor experiences as well.

#### **The Edge - Amsterdam, The Netherlands**

Described as "the smartest building in the world," The Edge has the kind of life-improving smart systems that most office buildings could only hope to offer. Employees who work there have access to a smartphone app that keeps track of their schedule and acts as a pass to all the building's facilities. But that's just the beginning. The app also helps workers find a parking space and a workspace since there are no assigned desks or offices at The Edge. This concept promotes new encounters and helps colleagues build relationships, but it also ensures that the building's space is used as efficiently as possible.

Imagine this: after parking your car, you get to your desk for the day, and the space automatically adjusts the lighting and temperature to match your preferences. You walk to meetings under a "digital ceiling" of LED panels with 28,000 sensors for motion, light, temperature, humidity, and more. The Edge is not only cool and futuristic, but it's also green, having earned a 98.4% sustainability rating from British agency BREEAM, the highest percentage ever awarded.

#### **Tottenham Hotspur Stadium - London, England, United Kingdom**

It's not just office spaces joining the smart building revolution. Tottenham Hotspur Stadium, which hosts both British football (note to Americans: soccer) and the occasional NFL game, has been called "Europe's most technologically advanced stadium." An integrated network is the heart that supports the gates, CCTV, point-of-sale systems, and even back-office computers. There are 1,800 screens with zone-specific content, which are used to help guide visitors, while in the dressing room, screens will replace the player names and numbers that normally sit above the players' seats. This allows the information to change depending on which team is playing and where supporters need to be directed. Monitors assess the activity in the stands, ensuring that lines don't get out of control. Fans at the stadium can connect to the official app from one of 1,641 Wi-Fi access points.

These technological advancements are designed to create an unforgettable experience for sports fans, encouraging them to show up early, stay late, and spend money. As IT director Sanjeev Katwa

explained, "Technology has enabled those new revenue opportunities... We're opening up three hours before kick-off to aid revenue but also to improve the flow of people around the building." That certainly helps to control thousands of other people to get out of the stadium once the game ends.

*\*Adapted from <https://www.resonai.com/blog/4-best-intelligent-buildings>*

**Pronunciation note:**

Tottenham Hotspur / ,tɔ:tənəm 'hɔ:tspɜ:r/

**Glossary:**

- **CCTV (Closed Circuit Television):** It is a video system that consists of strategically placed video cameras around an area for security purposes.
- **Hotspot:** A place in a hotel, restaurant, airport, etc. that is fitted with a special device that enables you to connect a computer to the internet without using wires.

**Read the descriptions and match them with the building they refer to.** Write **TE** (The Edge) or **TSS** (Tottenham Spur Stadium)

1. People can move from one place to another thanks to an app.
2. People can find different types of topics displayed on several monitors.
3. Multiple cameras, integrated into a central system, will guarantee that people feel safe.
4. The place and its technology ensure people will be able to get to know each other on a daily basis.
5. The technology of the place will guide you to park your car.
6. The place has more than a thousand internet **hotspots**.
7. Once you sit at your spot, the place will adjust the thermal conditions based on what you prefer.
8. Technology at the place has been vital to increase profits.

**What do you think?**

Where in your hometown would you like to see more of this smart technology?