SORACOM

Smart Buildings, Smarter Connectivity:

Real-World Case Studies in IoT

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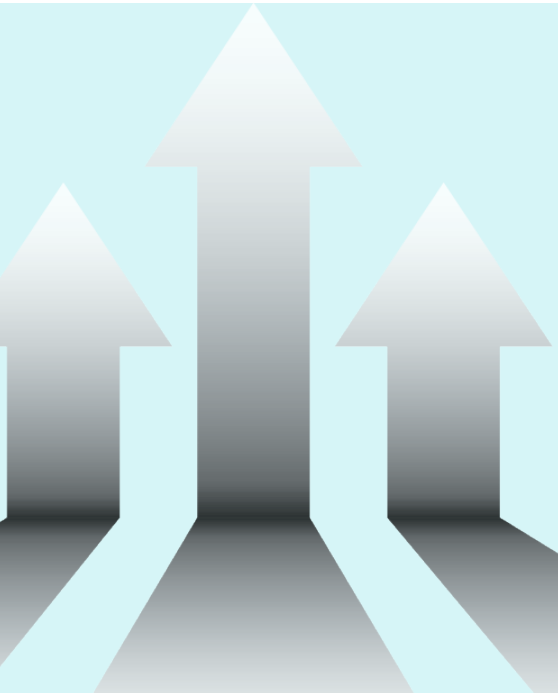
The Smart Building Imperative

Buildings are much more than bricks and mortar. From office blocks and retail stores to residential developments and city infrastructure, buildings are increasingly expected to be connected, intelligent, and sustainable.

For facilities managers, property owners, and operations leaders, this shift brings both opportunity and complexity. Smart technologies can cut costs, enhance safety, and support sustainability goals but integrating sensors, devices, and systems across existing structures can be costly, technically challenging, and hard to scale.

Enter Cellular IoT.

Unlike Wi-Fi or wired networks, cellular IoT provides a secure, always-on, and scalable backbone for smart building solutions. With coverage across multiple sites, flexible deployment, and centralized management, it ensures reliable data flow, whether you are monitoring energy usage in city center offices, managing smart locks across multiple properties, or keeping elevators running safely in residential towers.



According to Global Market Insights, the global smart building market is expected to **exceed $247 Billion (USD) by 2030-2032**, driven by the need for energy efficiency, compliance with net-zero goals, and improved tenant experience.

Why Cellular is Integral to Smart Buildings

Smart building systems depend on reliable, continuous data flow, but Wi-Fi and wired networks can be impractical in real-world building environments. Physical obstructions, aging infrastructure, and hard-to-reach areas create internal coverage gaps that undermine reliability and increase maintenance overheads.

Cellular IoT overcomes these challenges by offering:

- Reliable coverage independent of building IT networks and available across multiple sites.
- Simple scalability, allowing new devices or locations to be added without major reconfiguration.
- Secure networking with options for private network integration.
- Centralized control to manage thousands of devices from a single platform.
- Cost efficiency through flexible, pay-as-you-go pricing tailored to low-data IoT workloads.

This makes cellular IoT the connectivity of choice for facilities managers, property developers, and urban planners looking to create smarter, more resilient buildings.

As a global leader in IoT connectivity, Soracom enables smart building innovators to bring these solutions to life, turning complex, siloed systems into intelligent, connected environments.

Soracom: Enabling Smarter Buildings

Soracom is a leading IoT connectivity platform, trusted by global organizations to connect millions of devices across sectors such as energy, real estate, retail, and infrastructure.

In the smart buildings sector, Soracom provides the tools and connectivity needed to bring systems together and unlock real-time insight from connected devices.

Key features for smart building applications include:

- Global IoT SIMs with usage-based billing.
- Private networking for enhanced security.
- Protocol translation and data routing to simplify integration.
- Cloud dashboards for monitoring and visualizing IoT data.
- Centralized SIM management for visibility and control across thousands of connected devices.

With Soracom, facilities managers and technology providers can move quickly from pilot to scale, ensuring that smart building solutions are secure, affordable, and future-proof.

Case Studies in Smart Buildings

These case studies demonstrate how organizations are using cellular IoT to tackle real-world challenges in energy efficiency, security, infrastructure management, and retail operations.

Case Study:

Zan Compute

Energy Efficiency & Operational Insights

The Company

Zan Compute is an IoT technology provider focused on enabling smarter facilities management, particularly in commercial office environments where operational costs and energy consumption are high.

Challenge

Office buildings often consume far more energy than necessary. Legacy infrastructure and a lack of real-time data meant facilities managers struggled to identify specific causes of energy waste. In many cases, HVAC systems, lighting, and appliances were left running unnecessarily, driving up bills and the carbon footprint. Zan Compute needed a solution to provide real-time visibility of energy consumption and help businesses reduce costs whilst meeting sustainability targets.

Solution

Zan Compute developed a platform using IoT sensors connected via Soracom cellular SIMs. These devices:

- Monitor energy usage across HVAC, lighting, and office equipment.
- Transmit usage data securely to the cloud for analysis.
- Trigger alerts when unusual consumption patterns are detected.
- Provide facilities teams with dashboards to act on insights.

Results

- Energy consumption is reduced by up to 20%.
- Facilities teams could act immediately on abnormal consumption alerts.
- Rapid deployment without the need for new cabling or IT infrastructure.
- Improved sustainability metrics and compliance with energy-saving regulations.

Why Soracom?

- Reliable coverage across multiple sites, without depending on Wi-Fi.
- Scalable SIM management via the Soracom User Console, supporting roll-out across many offices.
- Secure transmission of operational data through encrypted networking features.
- Cost control with Soracom's flexible, usage-based pricing model.

"Service companies will benefit because they can deliver more bang for the buck, the property owners will benefit because they can save money as well as provide better experience to their occupants, and occupants will benefit because they get a much better experience in the property,"

K. Sridharan
Chief Product Officer, Zan Compute

Key Insight

Cellular IoT enables real-time monitoring without reliance on existing IT networks. This gives facilities managers the tools to reduce costs, cut waste, and demonstrate sustainability credentials.

Case Study:

Smart Kitchen

Connected Appliances & Occupant Experience

The Company

Smart Kitchen is a consumer IoT company developing connected kitchen appliances for residential and commercial buildings.

Challenge

Property developers and building operators wanted to offer modern, connected living experiences without placing additional strain on shared Wi-Fi networks or building IT infrastructure. Appliances needed to remain connected even when tenants changed or local networks were unavailable.

Solution

Smart Kitchen embedded cellular connectivity into its appliances, allowing them to connect directly to the cloud via Soracom. This enables remote monitoring, usage analytics, firmware updates, and fault detection without reliance on tenant Wi-Fi.

Results

- Seamless user experience regardless of local network conditions.
- Reduced support and maintenance costs through remote diagnostics.
- Faster product deployment for property developers.
- Improved long-term reliability and customer satisfaction.

Why Soracom?

- Embedded cellular connectivity ensures appliances are always online
- Pay-as-you-go pricing suits low, intermittent data usage.
- Centralized device management across thousands of units.
- Global connectivity supports deployment across multiple markets.
- Dedicated network environment via Virtual Private Gateway (VPG).

"From the very beginning, Soracom provided good help and advice in getting started... Implementation of VPG was quick and has resulted in significant business benefits... There have been no communication interruptions, which is very important to our customers."

Matti Verkasalo
SmartKitchen

Key Insight

Cellular IoT is not just for infrastructure. It plays a vital role in delivering consistent, high-quality occupant experiences in modern smart buildings.

Case Study:

Omniflow

Intelligent Public Infrastructure

The Company

Omniflow is a European provider of smart urban infrastructure, specializing in intelligent lighting, environmental monitoring, and renewable energy systems.

Challenge

Urban spaces are under pressure to improve quality of life for residents whilst reducing costs and environmental impact. Traditional outdoor lights and monitoring systems are expensive to run and maintain, and they provide no data. Omniflow wanted to create multi-purpose smart infrastructure that could be deployed at scale without complex cabling or bespoke networks.

Solution

Omniflow designed smart lights powered by renewable energy and connected via Soracom cellular IoT. These units:

- Measure air quality, CO_2, and noise pollution in real time.
- Monitor traffic and pedestrian flows for safety and planning.
- Deliver lighting only when required, reducing energy usage.
- Send continuous data to the cloud for analysis and dashboards.

Results

- Planners gained actionable insights into air quality, traffic, and energy usage.
- Operational costs for lighting and monitoring fell significantly.
- Deployment was faster and more flexible than traditional wired systems.
- Public safety and resident satisfaction improved.

Why Soracom?

- Global SIM coverage ensures units work reliably outdoors, even in remote areas.
- Simple device onboarding enables rapid deployment across new locations.
- Private networking and VPN services protect sensitive city data.
- Edge computing support reduces latency for time-critical functions.
- Multi-carrier SIM reduces need for multiple providers.

"Before Soracom, we were lacking a uniform and global connectivity service. We were working with a wide range of solutions, which was time consuming."

Pedro Ruão
Founder and CEO, Omniflow

Key Insight

By combining renewable energy with cellular IoT, Omniflow shows how urban infrastructure can become self-sustaining, intelligent, and cost-effective, giving planners better insights whilst lowering overheads.

Case Study:

Linough

Smart Locks for Real Estate Viewings

The Company

Linough is a real estate technology provider that developed a smart lock system to facilitate property viewings without physical keys.

Challenge

In a competitive housing market, coordinating viewings is a major bottleneck. Traditional approaches required an agent to be present, physical keys to be exchanged, and schedules aligned between multiple parties. This created delays and reduced efficiency. Linough needed a secure way to enable unmanned property viewings whilst maintaining control and oversight.

Solution

Linough designed a system called Smart Viewing, which includes:

- A cellular-enabled smart lock that can be fitted to existing property doors.
- An online booking system: prospective tenants or buyers reserve slots and receive a unique digital key.
- Lightweight connectivity: locks only send small bursts of data (open/close commands, plus occasional “keep-alive” signals).
- Integration with Soracom IoT SIMs for low-cost, flexible connectivity.

Results

- More efficient property viewings with no need for staff to attend.
- Faster deal cycles due to reduced scheduling friction.
- Cost-effective connectivity for vacant properties.
- Increased customer satisfaction with flexible, digital-first property access.

Why Soracom?

- Pay-as-you-go pricing reduces costs for properties that remain empty for long periods.
- Visibility through the Soracom Console allows Linough to monitor device status and connectivity.
- Private network options enhance data security.
- API automation supports features like switching SIMs on or off remotely.

“Soracom is an ideal application for Smart Viewing, and pay-as-you-go for data communication fit our needs perfectly. I also like the flexibility of the contract where I can subscribe to one SIM for one day. I also appreciate their kind and courteous support team, seminars and hands-ons demos.”

Mr. Shiina
Chief Web Programmer, Linough

Key Insight

With cellular IoT, Linough transformed property viewings into a frictionless, scalable process, enabling estate managers to save time and cost whilst improving the customer experience.

Case Study:

Fujitec

Remote Elevator Monitoring

The Company

Fujitec is a global leader in the manufacture and maintenance of elevators, escalators, and moving walkways, operating in high-traffic buildings worldwide.

Challenge

Elevator downtime is disruptive, costly, and potentially unsafe. Traditional maintenance relied on fixed schedules or emergency call-outs, leading to inefficient servicing and unpredictable failures. Fujitec needed a predictive maintenance solution that would improve safety and reduce service interruptions.

Solution

Fujitec integrated Soracom-enabled IoT sensors into elevator systems to:

- Continuously monitor components and performance.
- Transmit diagnostic data to the cloud in real time.
- Detect anomalies before they develop into critical issues.
- Alert maintenance teams immediately when intervention is required.

Results

- Significant reduction in emergency breakdowns.
- Higher elevator uptime, improving tenant satisfaction and safety.
- More efficient maintenance schedules, reducing unnecessary call-outs.
- Faster and more accurate diagnostics for engineers.

Why Soracom?

- 24/7 connectivity for uninterrupted monitoring, even in areas with unreliable Wi-Fi.
- Secure data transmission ensures sensitive safety data is protected.
- Scalable deployment across multiple geographies with a single provider.
- Centralized management of thousands of IoT connections via Soracom's platform.

"When expanding internationally, this allows for rapid deployment without the need to negotiate separate contracts with local telecommunication carriers in each country. The closed network enables secure data collection, and a major advantage is the ability to scale flexibly as the number of units increases."

Fujitec

Key Insight

Cellular IoT allows critical infrastructure like lifts to be monitored continuously and proactively maintained, shifting the model from reactive repairs to predictive, data-driven service.

Case Study:

Enerbrain

Smart Building Energy Management

The Company

Enerbrain is a smart building solutions provider delivering IoT-based energy management systems for commercial and mixed-use buildings.

Challenge

Building owners and operators needed greater visibility into energy usage across HVAC, lighting, and electrical systems. Existing systems relied on fragmented data sources or manual reporting, making it difficult to identify inefficiencies or demonstrate compliance with sustainability targets.

Solution

To this end, Enerbrain deployed a network of cellular-connected IoT sensors using Soracom to monitor energy consumption across multiple building systems. Data is transmitted securely to the cloud, where it is analysed and visualized through dashboards for facilities teams.

Results

- Improved visibility into real-time and historical energy usage.
- Faster identification of inefficiencies and abnormal consumption.
- Reduced operational costs through data-driven optimization.
- Better reporting to support ESG and sustainability initiatives.

Why Soracom?

- Reliable cellular connectivity independent of building networks
- Simple scaling across multiple buildings and locations
- Secure data transmission and private networking options
- Flexible data plans aligned to low-bandwidth energy monitoring

"Soracom, first of all, helped with solving technological challenges we were facing for our wireless and 3G devices and in parallel to this we had good cooperation with the Soracom team."

Mauro Dulla
Operations Director, Enerbrain

Key Insight

Cellular IoT enables building owners to move from reactive energy management to proactive optimization, delivering cost savings and measurable sustainability outcomes.

Building the Connected Future

Smart buildings are no longer some kind of futuristic science fiction, they are here today. Companies are already using cellular IoT to unlock efficiency, safety, sustainability and improved occupant experiences.

From reducing energy waste in office blocks to enabling unmanned property viewings, from predictive lift maintenance to connected appliances, cellular IoT provides the secure, scalable connectivity that modern buildings demand.

With Soracom's platform, facilities managers, property owners, and technology providers can go further, faster:

- Deploy solutions rapidly across multiple locations.
- Manage thousands of devices centrally with confidence.
- Reduce operational costs with custom data bundles or pay-as-you-go.
- Ensure data security and compliance at every step.
- The smart building revolution is underway. With Soracom, you have the foundation to build it.

Ready to connect?

Email sales@soracom.io - Let's make things happen together.

Soracom: IoT Cellular Connectivity Provider

Soracom is a global provider of smart IoT connectivity and a true technology partner, with a full suite of tools to help you accelerate deployment and succeed at scale.

Soracom was founded in 2015 with a mission to accelerate global connection. We're working to bring that future closer by making IoT connectivity more powerful, more accessible, and more affordable for the teams now building tomorrow's connected world.

Soracom's fully virtualized global platform delivers full MVNO capability alongside a powerful connectivity management platform—providing unified, single-pane-of-glass management across cellular, LPWA, Wi-Fi, and satellite. This includes IoT SIM and eSIM solutions, zero-touch provisioning, multiple secure networking options, and deep integrations with leading cloud providers.

Whether launching new products or hardening million-scale deployments, Soracom customers rely on leading-edge technical capabilities and expert support to anticipate field challenges and reduce the cost of operating IoT networks at scale.

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