



NORTH

Smarter IoT
Solutions

Delivering IoT solutions to drive
efficiencies, reduce costs and
improve lives

Stronger networks, smarter places

We make your world a smarter place.

We design, deliver and manage integrated systems that improve people's lives – keeping them better connected, safer, more secure and healthier.

We build stronger, more efficient, robust and reliable networks from the ground up. And our core portfolio of smarter place solutions can help you find efficiencies you didn't know were possible, dramatically reducing your operating costs, whilst also helping you meet compliance regulations and sustainability goals.

Our people are industrious and inventive, and we take great pride in what we build. We work closely with our clients as part of their team, to better understand their sectors, their environments and their challenges. However complex the places we work in may be, we use technology to make them simpler to manage, safer to be in and more efficient to run.

Internet of Things

+70%

Percentage of UK public sector organisations planning to increase investment in IoT and smart infrastructure by 2026*

*Public sector technology trends report 2024

The Internet of Things (IoT) is transforming how we understand and interact with the world – using smart sensors to source new, previously unattainable data points. At North, we harness the power of this data to deliver cutting-edge solutions that tackle real-world challenges across buildings, campuses, organisations and even entire cities – making environments smarter, safer and more efficient.

With long-running experience in the IoT space, we provide access, expertise and guidance, connecting physical objects and sensors to networks and the internet in new and powerful ways. Our solutions improve your operating performance, increase the value you offer to customers, and reduce your costs.

We are focused on delivering fully managed IoT solutions that just work, and are designed to make it easy for businesses and organisations to adopt, scale and benefit from these technologies. Wherever you are, we can collaborate with you in a variety of ways – from simple connectivity and cost-effective pay-per-sensor pricing models, through Gateway as a Service, to bespoke end-to-end solutions.



Smarter IoT Solutions

Our core portfolio of smarter IoT solutions is built to flex to meet a broad set of demands – from individual buildings to city-wide infrastructure. Whether you're looking to improve energy efficiency in a single facility or enhance operational performance across entire estates, campuses, or communities, our integrated approach delivers real-time insights and measurable impact.



Intelligent Housing

- ● Asset monitoring
- ● Retrofit analysis
- ● Void management
- ● Assisted living

North is helping Local Authorities, Housing Associations and Social Care providers create a safer and more secure environment for their tenants. We can make the management of housing simpler and more efficient as well as supporting extended independent living through smart sensor deployment.

Across the UK, providers of social housing face substantial challenges when it comes to the age, quality and condition of their housing stock. Added to this, the sheer number of differing properties they are responsible for means that consistent upkeep, management and maintenance can be problematic.

Poor property conditions, caused mainly by undetected damp and mould, can have serious and long-lasting impacts. Whether that be costly repairs, the increased risk of fines and legal action, or, most importantly, the detrimental effect that it can have on the health and wellbeing of tenants.



£400,000

Saving a data-driven approach to managing property disrepair achieved in just one year*

*Wandle Housing case study

In response to the sad death of Awaab Ishak, 'Awaab's Law' (Social Housing Regulation Act, 2023) was introduced to impose legal obligations on social landlords to promptly investigate and rectify any damp and mould concerns. These regulations are now embedded within tenancy contracts, empowering tenants to legally demand decent living conditions from their landlords.

North was one of the first organisations to leverage discrete connected devices coupled with extensive domain expertise and a unique AI platform to accurately identify and monitor unhealthy conditions across a large number of properties in a cost effective way.

Real-time data is captured on a continual basis, tracked against set parameters and presented back to you via our web-based management platform, with automated alerts allowing you to prioritise and address issues more effectively. Using the same set of sensors, we can also highlight fuel poverty issues and ensure the property is not being left vacant when it shouldn't be or, indeed, is occupied unexpectedly.

In Assisted Living environments, these solutions can be extended to provide extra support for those who need it most. Be it smart lighting and thermostats that adjust to preferences or schedules, to help those with limited mobility; fall detection sensors that notify caregivers when an accident occurs; even doorway and motion sensors that provide alerts if a door is left open or a person leaves a facility at unusual hours.



Highway Management



- • Drainage management



- • Traffic monitoring



- • Grit bin monitoring



- • Highway temperature

Increasing traffic volumes, new methods of transport, and the impacts of climate change are all increasing pressures on highway infrastructure. North's Highway Management solution equips authorities with the data needed to make informed decisions and better target investment.

Our offering supports local authorities, highway agencies, and infrastructure operators move from reactive to proactive management.

The solution leverages advanced sensors and real-time analytics to continuously monitor critical infrastructure - from gully monitoring to reduce the risk of flooding, to grit bin and road surface temperature monitoring to support efficient and sustainable winter operations, and vehicle speed monitoring to improve safety and inform long-term planning.

The benefits of these solutions are far-reaching and have been proven to drastically reduce the cost of highway and flood management through operational efficiency improved compliance, and progress towards sustainability goals.

With automated alerts, real-time dashboards, and integration with asset management systems, authorities can prioritise interventions, deploy resources faster, and respond faster to emerging issues. Ultimately enabling smarter, safer, and more sustainable approach to highway management – helping to future-proof the UK's road networks in line with the Government's ambitions for digital infrastructure and Net Zero.



Urban and Campus Management



• • Smart lighting



• • Waste management



• • Air quality



• • Footfall

As UK cities and towns face increasing pressures from population growth, climate targets, budget constraints, and evolving citizen expectations, there is a growing need for smarter, more sustainable approaches to Urban Management. North's solutions bring together powerful technologies to help tackle these challenges head-on. Solutions that can also be applied to large-scale campus sites, including universities and military bases.

By deploying smart lighting, cities and campuses can typically achieve energy savings of up to 50-70% through LED retrofits and adaptive lighting controls, significantly reducing both carbon emissions and long-term operational costs. With street lighting accounting for 20-30% of a local authority's energy bill, these savings can be immediately redirected toward other public services.

Footfall monitoring offers real-time insights into people movement patterns – critical for shaping high street regeneration strategies, improving safety, and supporting local businesses. In the UK, high streets have seen footfall decline by 20-40% in some areas since 2015, and dynamic data is now key to informing place-based economic recovery plans.



Smart waste management solutions, using fill-level sensors and route optimisation, can reduce collection costs by 30-40%, while cutting CO₂ emissions from waste fleets and decreasing complaints about overflowing bins.

Air quality monitoring plays a vital role in public health and compliance with clean air targets. Poor air quality contributes to an estimated 28,000-36,000 premature deaths annually in the UK, with urban areas being disproportionately affected.

35%

Typical reduction in
waste collection costs
when using smart
technologies*

*Smart sight innovations

Smart sensors enable hyperlocal monitoring, allowing authorities to take targeted action, inform residents, and support active travel or Clean Air Zones.

Together, these smart systems form a connected infrastructure that delivers measurable improvements in efficiency, sustainability, and citizen wellbeing. With integrated dashboards, automated alerts, and data-sharing capabilities, our solutions help city leaders and facility managers move from reactive service delivery to a proactive, insight-led model – ensuring that the cities and campuses of tomorrow are not just smarter, but also greener and healthier for all.



Compliance Management



- • Water safety



- • Emergency lighting



- • Fire door



- • Fire appliance

In today's increasingly regulated world, maintaining compliance with industry standards, legal regulations, and internal policies is more complex than ever. Traditional compliance management is often reliant on manual processes and audits which can be time-consuming, error-prone, and costly. North's smart solutions can reduce the overhead of carrying out regular physical tests on key regulatory requirements.

Our Compliance Management offering includes the remote validation of emergency lighting operation, fire-door status tracking and water safety monitoring. All these solutions provide a compelling business case for implementation and typically provide a return on investment within twelve months.



One of the most significant advantages is the ability to monitor in real-time. Sensor-led devices can continuously collect and transmit data on environmental conditions, equipment performance, employee safety, and more. This is wholly automated, reducing human error and ensuring accurate, time-stamped and traceable records. Real-time alerts enable organisations to respond immediately to compliance breaches as they arise, minimising damage and avoiding penalties.

Monitoring the health of equipment or machinery means failures can be predicted before they occur. This capability allows for faster maintenance, reducing the risk of non-compliance due to downtime, accidents, or environmental violations.

By analysing compliance data, organisations can gain valuable insights into their operations, helping to inform better strategic decisions. These solutions can also be easily adapted or updated to reflect new or changing regulatory requirements.

Energy Optimisation



With the global push toward sustainability and rising energy costs, energy optimisation has become a strategic imperative for organisations. Implementing granular energy monitoring solutions can provide substantial insight, allowing organisations to better understand the distribution of energy usage, highlight disparities and set reduction targets that can be monitored in real-time.

North's Energy Optimisation solution uses distributed sensors across buildings or estates to collect and aggregate data for actionable insights.

Unlike traditional audits that offer only snapshots, sensor-led devices provide continuous visibility - pinpointing when and where energy is used or wasted, enabling immediate cost savings.

The ability to collect, harness, and analyse large volumes of energy data supports benchmarking, progress tracking, predictive maintenance, and long-term optimisation.

This data-driven approach empowers smarter decisions around energy use. Through continuous monitoring, organisations gain the visibility needed to optimise operations, extend equipment life, reduce carbon footprint, and drive measurable progress toward sustainability and cost-efficiency goals.

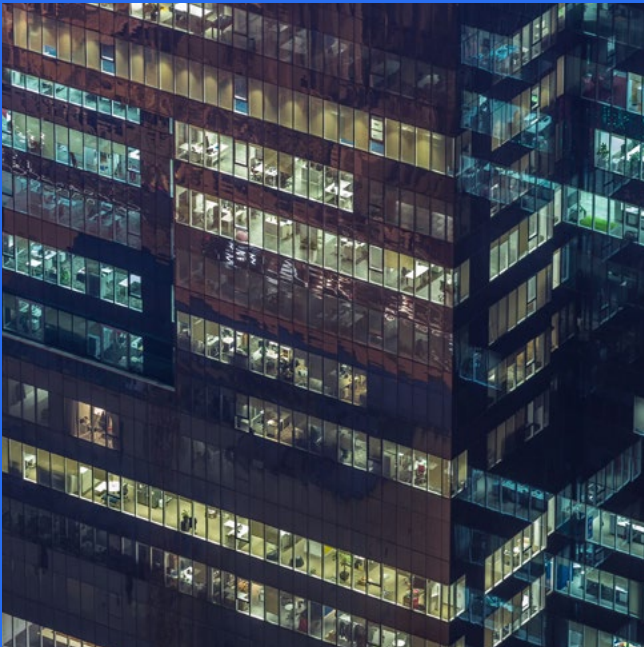
Organisations can also align energy usage with occupancy, automating lighting, heating, cooling, and equipment to reduce environmental impact and cut costs. Automated alerts and reporting support accountability and reduce the risk of non-compliance penalties.

10-30%

Typical energy reduction in UK commercial buildings when energy monitoring and actionable insights are applied*

*UK Green Building Council

Occupancy and Environmental Monitoring



As workspaces and public buildings become more dynamic and demand-driven, understanding how space is used has never been more critical. North's Occupancy Monitoring solutions involve tracking how many people are in a space, where they are, how they move, and how long they stay – helping organisations to optimise layouts, enhance safety, optimise energy utilisation, and boost operational efficiency.

North's solutions deliver holistic situational awareness and real-time, automated insights that drive smarter decision-making. We can help you understand the number of people entering and exiting buildings to drive estate efficiencies. We can give you a clearer picture of dwell times and motion trends to support energy, lighting and climate control usage – cutting your costs and reducing your environmental impact.

There are other clear benefits around building safety and security. Real-time alerts can flag if a space is occupied when it shouldn't be, or help you locate people in an emergency situation.

Improving the employee or visitor experience is another advantage. Facility managers can use our sensor data to ensure that spaces are neither overcrowded nor underutilised, to ensure desk or room availability, or even to highlight cleaning and maintenance demands. Better space planning increases comfort and satisfaction or the individuals who use your buildings.

And, longer term, we can help you understand how to optimise your estate and enhance future building design.

Implementing and scaling your IoT solution

At North, we understand the technology so that you don't have to. We have worked with organisations both large and small to successfully deploy, embed and scale smart technologies. For us, it's about the outcomes and aligning technology with your strategic goals.

Our approach starts by understanding your business priorities, whether it's improving operational efficiency, enhancing user experiences, reducing environmental impact or something more specific.

We then design scalable IoT ecosystems that can grow alongside your needs – secure, interoperable and built for performance at scale.

From pilot to full-scaled deployment, our solutions integrate into existing systems and we can work with you to adapt processes to help leverage the data and turn this into actionable insight.



Cloud data analytics and automation

Data storage, generating insight and automation across multiple use cases



Universal device management

Ensuring seamless device onboarding, configuration, monitoring and maintenance



Universal connectivity management

Managing consistent secure communications across multiple protocols

North's four-stage service



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