

# We Make Smart Simple



**KelTech IoE**  
THE NET ZERO NETWORK

# Smart Solutions for Smart Buildings

KelTech IoE provide smart and secure solutions for the property technology market. A global organisation, with an unparalleled experience, we partner with clients to support the development and delivery of innovative solutions to meet their property technology vision.

ABOUT KELTECH IOE

## Why Choose Us?



### Unparalleled Experience

Delivering smart building technology solutions for over 20 years



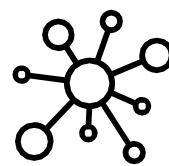
### Innovative Solutions

In-depth knowledge and creative use of emerging technologies



### Trusted Partner

Taking ownership of technology design, implementation and management



### Efficient Delivery

The best-in-market and fully integrated solutions with a global partner ecosystem

## Our Values

**Integrity** is at the heart of what we do – being honest, open and committed to what's best for our customers and our company.

**Creativity** in our everyday work - as we deliver new technology solutions in a sector that is constantly evolving, standing still is not an option, we strive to innovate.

**Excellence** to be the best we can be - supporting the customer to fulfil their vision with the best solution and beyond their expectations.

EXPERIENCE

## The Way We Work

Our engagement model focuses on partnership, working with you and your team from start to finish as your Integrated Solutions Provider.



### Realise Efficiencies

Realise efficiencies in people and operations by assessing and identifying more cost effective solutions and processes



### Reduce Risk

Reduce operational and financial risk by using a trusted partner with a proven track record of executing in this area



### Upskill Teams

Improve engagement and accountability within your core team and deepen expertise across all teams about smart building technologies



### Quantify Success

Set a clear roadmap with KPIs and milestones to allow you to understand the path to success and make it measurable

# Solutions for Smart Buildings

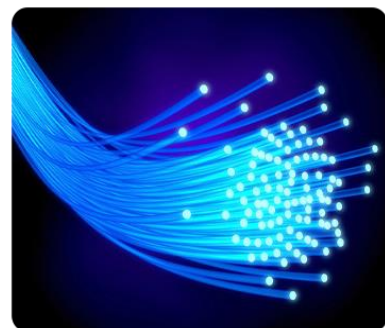


- Advanced Analytics  
Optimise building performance
- Connected Components  
Smart internet-connected devices
- Converged Networks  
High speed network infrastructure

## OUR SOLUTIONS

# Making Smart Simple

All smart buildings have three interconnected levels in common. They capture data, they communicate the data, they optimise based on the data.



### LEVEL ONE Converged Networks

High speed networks lay the ground work for the performance, monitoring and communication needs of all interconnected systems and devices in a smart buildings and smart spaces. The single network concept replaces the traditional 'siloed' multi-network approach of previous construction and infrastructure projects. Using converged networks reduces install and operational costs by up to 65%; enables high speed, feature rich buildings and spaces; and future proofs them for new technologies.



### LEVEL TWO Connected Components

We are living in a connected world with an ever increasing number of connected devices. Advances in technology and the Internet of Things (IoT) are transforming buildings - enabling better communication between devices, individuals and the building. For example, facility managers can access a range of devices, such as CCTV, lighting, HVAC, security and access control, all in one place. Similarly, previously siloed devices can interact and control each other.



### LEVEL THREE Advanced Analytics

Centralised control systems gather data from a multitude of devices throughout a building to learn about the usage and needs of the occupants and to make better decisions to improve building energy consumption and occupant wellness. For example, interconnected HVAC systems can be monitored and adjusted using advanced analytics to improve air quality and energy efficiency on a micro-scale, leading to enhanced 'green' ratings for buildings and healthier occupants.

## Converged Networks



### Fibre optic

Enable high speed, feature rich building and infrastructure technology services while minimising install and maintenance costs using a fibre optic converged network.



### LTE/5G

Overcome legacy and fixed line limitations, broaden reach and connectivity of smart buildings using LTE and 5G technology implementations.



### Wireless and low power

Provide connectivity capability for a wide range of devices, sensors and appliances using a variety of wireless and low power technologies (e.g. LPWAN, Wi-Fi, LoRa, Sigfox, Bluetooth, Zigbee).



### Digital electricity

Implement a safer, faster and lower cost electricity solution, as part of an enhanced converged network implementation.

## Connected Components



### Audio-Visual

Use sophisticated audio-visual solutions to enhance building occupier experience, with dynamic digital signage, hologram video instruction, mood music and lighting.



### Wellbeing

Ensure wellbeing of individuals within buildings with a range of solutions, such as occupancy monitoring, clean air filters, temperature monitoring and technology based hygiene solutions.



### Security & access control

Provide high end protection and peace of mind with a range of 24/7 security and access control solutions such as motion sensors, IP cameras, intercoms, automatic number plate recognition (APNR).



### Safety

Use smart sensors and interconnected safety management systems to monitor, anticipate and trigger appropriate responses to all safety incidences or faults in relation to smoke, fire, water, air, energy and building access.



### Lighting

Use low cost, low power LED intelligent lighting solutions to gain significant savings in retrofitting, maintenance and overall energy consumption throughout the building.



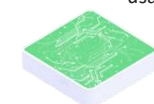
### High speed multimedia

Provide seamless integration of all multimedia sources and channels through fibre optic cabling, high speed WiFi and other communications standards, connecting all fixed and mobile devices seamlessly to video, voice and data content.



### HVAC control

Optimise energy consumption with automated energy management systems (EMS), learning from building occupancy usage and user profiles to ensure temperature needs are met in a tailored way, specific to areas or zones in a building. Remote mobile access to HVAC control enables more efficient energy use, adaptable to a variable usage schedule, only being used when needed.



## Advanced Analytics



### Enhanced BMS

Overcome the complexity of capturing, interpreting and adjusting the smart building environment using a building management system (BMS). Analyse building usage with smart sensors to improve space allocations and people movement, optimise lighting and HVAC systems, and enhance occupier wellness.



### Space utilisation

Use a combination of motion sensors, heat mapping, video and audio analysis to capture building usage and people movement data and adjust building configurations, signage and space allocations to optimise usage.



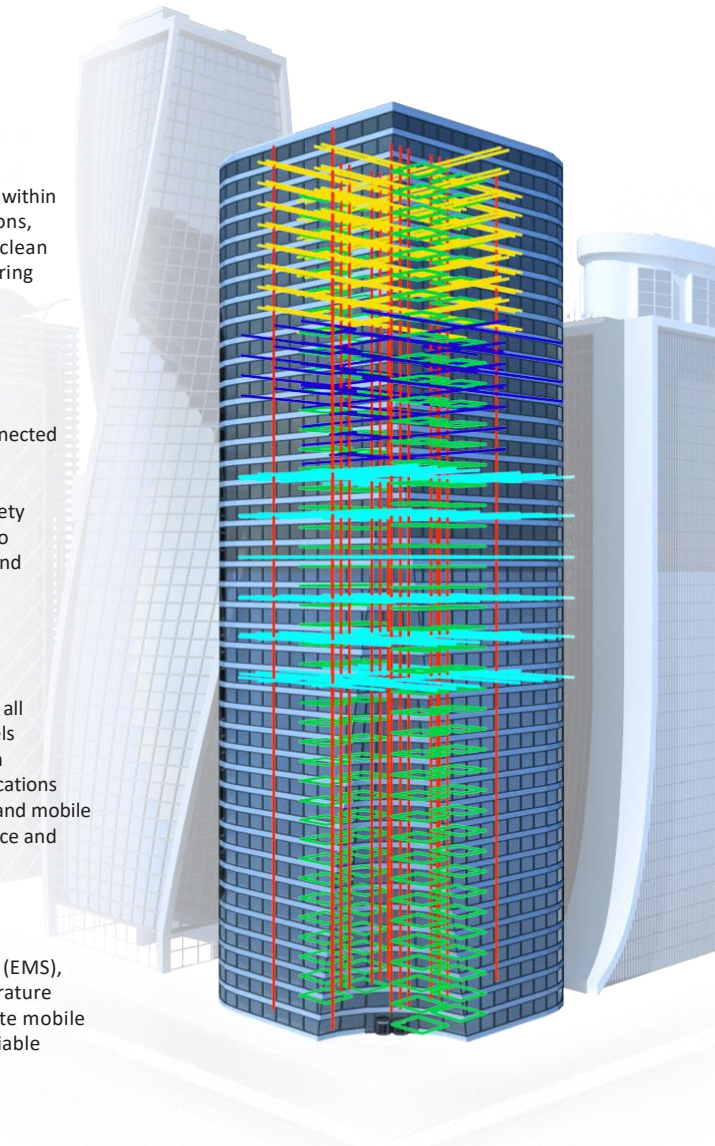
### Video analytics

Boost CCTV video analytics capability with powerful search and action based capabilities, such as object filtering, heat mapping and motion monitoring to boost security, people and incidence analysis as well as building usage analysis.



### Residential automation

Provide easy control as well as mobile and hands free access to all home IoT devices and services through a centrally managed server which learns and adjusts to suit occupier needs and individual habits.



WHAT WE OFFER

# Smart Solutions by KelTech

KelTech IoE has gained unparalleled experience developing a range of solutions for a variety of smart buildings. Technology solutions include high-speed fibre optic cabling, smart internet-connected devices as well as advanced analytics and management software.

**SPACES**

**Improve Environment**

- Fibre Optic
- Digital Electricity
- Traffic Solutions

**OFFICES**

**Optimise Workspaces**

- Energy Efficiency
- Secure Office
- Space Utilisation
- Wellbeing

**HOMES**

**Enhance Wellbeing**

- High Speed Multimedia
- Access Control
- Energy Efficiency

**RETAIL**

**Increase Sales**

- Security
- Big Data
- Safety

**AIRPORTS**

**Ensure Safety**

- Occupancy Monitoring
- Wellbeing
- Thermal Imaging

**HOTELS**

**Enhance Comfort**

- In Room Comfort
- Energy Efficiency
- Wellbeing

**STADIUMS**

**Enhance Experience**

- People Management
- High Speed Wi-Fi
- Audio-Visual

**HOSPITALS**

**Protect Patients**

- Room Control
- Realtime Location Systems (RTLs)
- Space Utilisation

**SCHOOLS**

**Improve Learning**

- Energy Efficiency
- High Speed Internet
- Audio-Visual

OUR 3-STEP

# Services Methodology

KelTech IoE services support clients to navigate the complex and rapidly developing property technology market. Based on decades of experience implementing a wide range of technology solutions, KelTech IoE services help to make the transition from vision to implementation.

At KelTech IoE, our team of experienced consultants partner with clients on a 3-step methodology to scope out their building technology requirements, to ensure the best solutions and the best implementation plan is put in place.



**01. Assess**

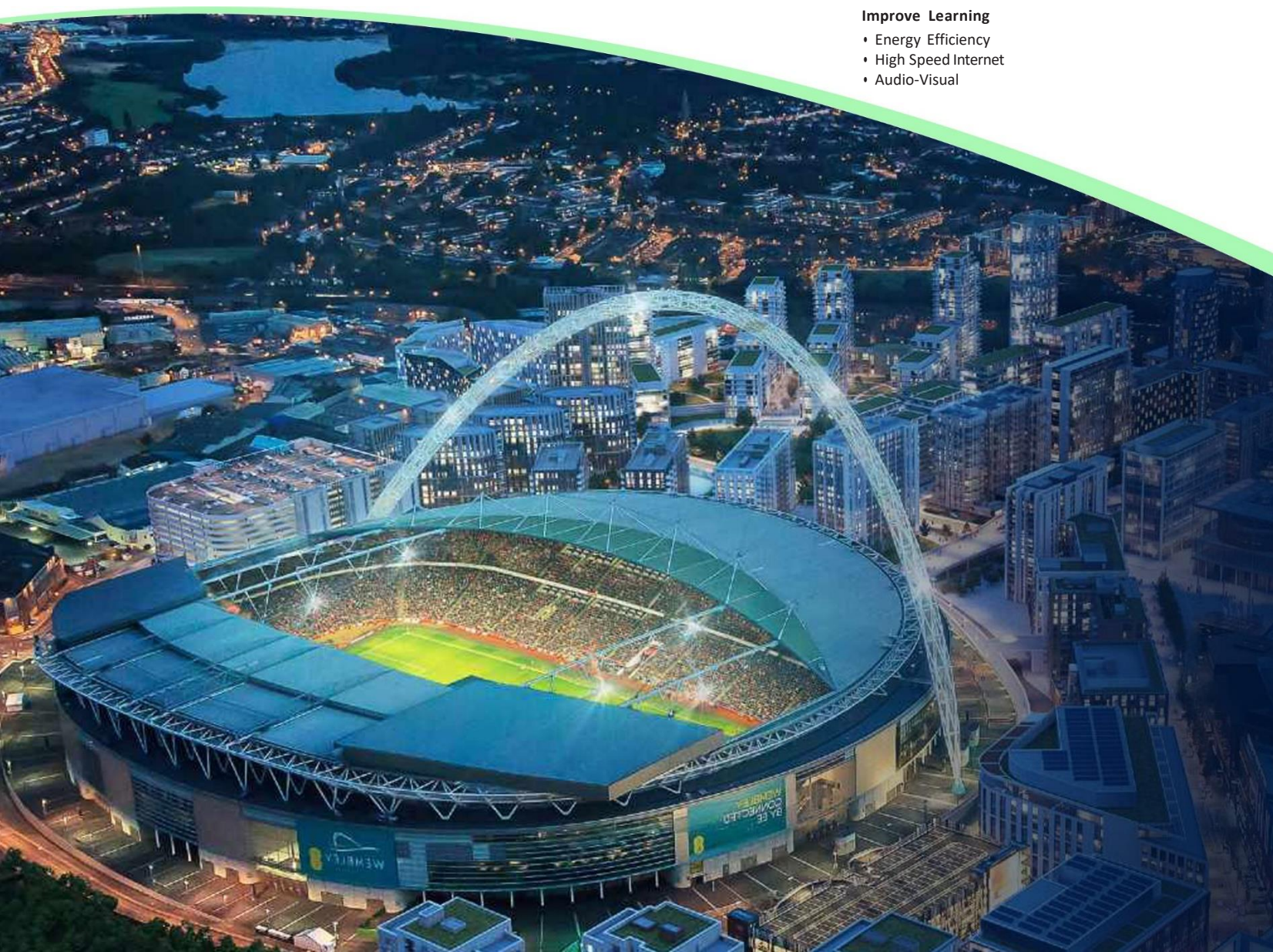
Understand the vision and challenges, identify the KPIs, assess the solution, develop technology brief and governance

**02. Co-create**

Create technology plan, refine and prioritise plan for cost saving and revenue optimisation

**03. Execute**

Execute the technology plan, analyse, review and monitor implementation and post-installation



CASE STUDY

# Wembley Park

**Benefits of a resilient converged fibre optic network**

- Reduce cabling costs and space requirements
- Increase energy efficiency and resource management
- Enable high-speed, feature rich buildings for residents and facility managers
- Increase overall building value

Quintain developers partnered with KelTech IoE team to deliver a range of smart building technology solutions in a mixed use residential, commercial and retail units space at Wembley Park, London.

Wembley Park, home to the famous Wembley football stadium, has been undergoing a massive change in the last number of years and is set to become the largest build to rent (BtR) development site in the UK.

The KelTech IoE team installed a resilient converged fibre optic network throughout the complex, which laid the ground work for a feature rich park.

**KEY FACTS**

- 85 acre site
- 1 million square metres mixed use residential, commercial and retail units
- Europe's largest smart build to rent (BtR) complex with 7,000 BtR apartments
- Anticipated 24 million footfall per annum

**Public Network for all public realm spaces**

- Estate Management System (EMS)
- Public Wi-Fi
- Street lighting control
- Footfall counters
- Public audio
- Digital signage

**Residential Network for each residential apartment**

- Broadband/Wi-Fi
- Satellite TV
- Video entry system
- Meter readings
- Central lighting controller
- Remote mobile access

**Facility Manager Network for monitoring and controlling building services**

- Building Management System (BMS)
- Access control
- CCTV
- Communal WiFi
- Lighting control

**Commercial / Retail Network for all commercial and retail**

- Heating system
- Wi-Fi
- CCTV
- Audio and digital signage

CONTACT US

# Our Offices



To find out how KelTech IoE can provide the right technology solution for your smart building requirements.

- ✉ info@keltechtIoE.com
- ☎ +353 1 699 4597
- 📍 Innovation House, DCU Alpha, Old Finglas Rd., Glasnevin, Dublin 11

# Partner with us

At KelTech IoE, we are committed to our clients and our global partnership eco-system, ensuring the right product for the right solution is designed and implemented every time.

Get in touch with us today to find out more about the advantages of becoming a KelTech IoE Partner.



**KelTech IoT**  
WE MAKE SMART SIMPLE

We provide smart and secure solutions for the property technology market