

O in Action

#IoTinActionMS



Harness the cascade of digital data that a modern building generates

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Deloitte.

1 New Street Square, London

Transforming workplace strategy through data and insights

Stefan Schmidt

Intelligent Buildings Consultant





Deloitte.

The Client Journey

The Edge, Amsterdam



Workplace Evolution

Older Building Stock

No significant digitisation within the buildings. Manual processes, data collection and reporting. Basic automations, and little consideration to user experience or management insights.

Newer Building Stock

Interoperable digitisation within buildings starting to come into play. Lessons learnt over the value proposition.

So, at 1NSS...

What data did they want? And for what purpose?

Deloitte.

Challenges ahead...

mber of Deloitte Touche Johmatsu

45% of offices and 30% of desks were unused at any one time.

30% more people in 3% less space.

5,500 people sharing 3,500 working positions.

Deloitte.

1 New Street Square

An Intelligent Building

- Deloitte's flagship London building.
- More flexible work spaces for staff
- Improved facilities for clients
- Made "intelligent" through the adoption of Internet of Things (IoT) technologies.



Outcome Focused Objectives



Cost Reduction



Improved Sustainability





Visitor Experience





Employee Experience





Outcomes Underpinned by Digitisation.

1,000+ IoT occupancy detection sensors.

3,000+ IoT air quality sensing measurements.

300+ Fixed digital user interfaces.

30+ Primary System Integrations. 250,000 data metrics generating every 60 seconds.

1 Scalable Software Stack





Delivering the Intelligent Building platform

Digitising the built environment

About ICONICS



Intelligent Building Reference Clients



An **Intelligent Building** is defined as a set of dynamically connected smart systems that are made interoperable through accumulating, sharing, analysing, and acting upon the collective smart building data.

When designed properly and effectively, the intelligent building platform will result in a more efficient, secure, and productive asset that has the capacity to continuously improve over its lifetime.

Maximise Lease Up

Minimise Operational Cost

Journeying from Smart to Intelligent Buildings



1. Building Automation and Control



Disparate Visualisation,
People, IoT and Energy
systems



3. IT/OT integration, Control and Feedback



4. AI and cloud-scale analytics

Single "socket" connectivity with Intelligence



Intelligent Building Software Stack (IBSS)

ingest, normalise, enrich and facilitate

Data Digital Twin – Powered by Azure



ICONICS smart building software collects sensor data from disparate building management systems and IoT sensors, centralises the data to give building owners visibility into building health, and applies big data analytics to deliver incredible energy savings.



Integration aligned to the value proposition



Building Intelligence Delivered - SPoG





Building Intelligence Delivered – Client Interface

Clent spaces Internal space Workspaces Genund Roor







Outcome Focused



Comfort, Health & Wellness

- Air Quality
- Optimised Environment
- Personalisation of Space based on environmental preferences

User

(UX)

Experience

- Promotion of Wellbeing Facilities

Best-in-class Building Performance

- Maximise uptime & minimise disruption - Optimised Flow of People

Community-first & Frictionless Collaboration

- Space Booking - Wayfinding and Search facilities - Cross-platform Notifications - Visitor Management

Ease-of-Interaction with Physical Space

- Digital Signage - Kiosks - Unified Web/App User Interface (UI) - Smart User Apps - User-driven Digital Feedback Loops



Employee Productivity - Increased output based on improved Wellness - Frictionless collaboration - Ease of Interaction - Reduced downtime and increased comfort

Business Productivity

- Talent Attraction - Staff Retention / Job Satisfaction - Space planning based on productivity



Operational Excellence Empowering Operational Teams through: - IT, OT & IoT Data Integration & Workflows

- Data-driven Insight & Actions
- Digital Twin Technology
- Predictive Maintenance / Fault Detection & Diagnostics
- Energy Reporting & Analysis
- Optimised first-fix resolution & resource with AR
- BIM & Data Integration
- Real-time occupant feedback
- Digitized task feedback (cleaning, hard & soft FM)
- Unified Data Visualisation & Reporting
- Agile Inventory Workflows (JIT)



Insights

Space Utilisation & People Flow

Energy & Sustainability Performance Metrics

Data Quality, Normalisation & Cleansing

Digital Feedback Loops

Digitisation of the Built Environment





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