

# Creating Smarter Buildings for the Future

# Commercial Real Estate (CRE) business models are changing.

Data availability is pushing firms to consider new services that can accommodate changes in consumer behaviour and a shifting demographic of office workers. These younger, more tech savvy tenants are not drawn in by the smarts of the building alone – but by what those smarts can do for them. It's seen best in the rise of co-working or the space-as-as-service business model. These models address an underserved segment of the market by providing a frictionless tenant experience.

As competition heats up with buildings getting smarter, building owners and operators are left struggling to find new solutions that can not only optimize operations even further, but also modernize how tenants experience the building.

Forward-thinking owners and operators are re-evaluating their technology investments to stay ahead of the competition and drive higher asset value.



### Some of the challenges facing CRE include:

- The limitations of existing systems such as the Building Management System (BMS) and siloed applications that address only parts of the building.
- Existing technologies are not aligned to a new way of working – remote work or activity based workspaces
- Enabling interoperability between these systems has stalled many smart building initiatives due to data diversity, complex relationships between subsystems, people, and process, and lack of automation.
- Lack of context and personalization so that building managers can get the right data, at the right time, in the right format.
- Little to no expertise in predictive analytics to move operations from reactive to proactive models.
- Inability to show ROI and business outcomes driven by digital initiatives

# ThoughtWire's **Smart Building Suite for OPM**



Our focus is on people, not only data.



#### @WorkApp

With the @WorkApp, employees can easily adjust environmental or comfort controls through a mobile app, providing them with greater control over their building experience including community engagement, building access controls, and wayfinding.

#### APP FEATURES

- Access the building using their mobile device
- Create their own comfort settings for lighting and HVAC
- Get building and community announcements
- Receive any critical information about building security procedures during lockdown events



#### **PrecisionHub**

Precision Hub gives managers visibility into a building's end-to-end operations. This essentially is a "digital twin" of your building – a comprehensive model that brings together all disparate data telling managers about the health of a building, the complex workflows within it, and how employees are utilizing the space.

#### APP FEATURES

- Remotely monitor and respond to alarms and events
- Automate workflows for manual and time consuming tasks such as tenant onboarding
- Take action on real-time building KPIs with advanced process control features like intelligent self-tuning of subsystems
- Reduce energy costs through automated load shed schedules and gamification among tenants



OF IMPROVING OPERATIONAL PERFORMANCE IN

COMMERCIAL BUILDINGS, WHERE PEOPLE, SYSTEMS AND

THINGS COLLABORATE GIVING RICH CONTEXT FOR MANAGING

THE BUILT ENVIRONMENT AND IMPROVED ENGAGEMENT AND

EXPERIENCE FOR TENANTS WITH GROWING EXPECTATIONS.

# ThoughtWire's Smart Buildings application suite for Operations Performance Management (OPM)

Deliver real-time orchestration of people, systems, and IoT technology to unlock operational efficiencies, improve energy efficiency, increase tenant satisfaction and retention; all driving an increase in asset value.

Our unique approach puts people first, placing the power of process change in the hands of building managers, facility managers and tenants. Simply stated, your buildings become smarter by equipping those who manage and occupy them with the right information at the right time to take action.

Property managers, operators and owners have the unprecedented opportunity to leverage the numerous, varied, and highly capable devices that flow information into their environments daily. Alone, these devices hold limited value for building management, however when all surrounding systems are connected they become the catalyst for outcomes that are meaningful to both people and profits.



The Digital Twin is a living, breathing, dynamic representation of the past, present and future state of your building operations.



Turn disparate real-time data into contextualized insights faster than traditional methods



World's fastest in-memory graph database enables Intelligent context processing for real time IoT, OT, and IT data



Exposed using our smart building API to connect portfolios of buildings to cities

## What's under the hood

All of our applications run on a set of common **Core Services** that allow us to do very complex things simply.

- An intelligent data overlay that brings together your systems, devices and workflows putting them into single pane view for users can take precise action – we call this your Digital Twin for Smart Buildings – it is the lifeblood of your application
- A framework that replaces your myriad of manual workflows with a dynamic workflow orchestration engine
- A real-time reasoning engine for workflow automation
- It's all powered by the world's fastest in-memory graph database that provides a highly performant and scalable solution for processing context-rich data generated by the built environment.

Leave the data sourcing to our Connector Factory. It's a proven connectivity layer that orchestrates pre-built connectors to simplify and streamline integration and communication with a wide variety of protocols including:

- BACnet
- Modbus
- Telnet
- JDBC/ODBC
- RESTful
- SOAP
- File-based connectors such as CSV, XML, JSON

#### THE TECHNOLOGY

