

## Smart Building Council (SBC) Webinar/Meeting will commence 12:05pm ET

Thursday, November 20, 2025 | 12 NOON – 1:30 PM (ET)

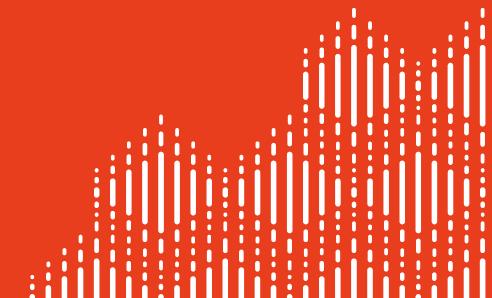
SBC Chair: Bob Allan (NAVCO Inc.)

Vice-Chair: Harsha Chandrashekar (Honeywell International Inc.)

Vice-Chair: Robert Lane (Robert H. Lane and Associates Inc.)

Vice-Chair: Chris Larry (exp US Services Inc.)

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### Agenda Marta Klopotowska (ASHB)

- 1. Call to Order, Welcome, Introductions, About SBC
- 2. Administrative
- 3. Research Update
- 4. Keynote: **The Evolution of NextGen Smart Buildings**Brian Haines, Senior Director of Strategy for OpenBlue at Johnson Controls
- 5. ASHB Podcast
- 6. ASHB Whitepapers & Research Library
- 7. ASHB Journal
- 8. New Business
- 9. Announcements
- 10. Adjournment



## 1. Call to Order, Welcome, Introductions, About the SBC Bob Allan (NAVCO, Inc.)



SBC Chair Bob Allan Senior Vice President of Sales, East Region NAVCO, Inc.





SBC Vice-Chair Harsha Chandrashekar Product Approvals & Regulatory Leader Honeywell International

### Honeywell



SBC Vice-Chair Robert Lane President & Managing Partner, Robert H. Lane and Associates Inc.





SBC Vice-Chair Chris Larry Director of Energy Engineering Exp US Services Inc.



The ASHB Smart Building Council works to strengthen the large building automation industry through innovative technology-driven research projects. The Council was established in 2001 by ASHB to specifically review opportunities, take strategic action, and monitor initiatives that relate to integrated systems and automation in the large building sector. The Council's projects promote the next generation of smart building technologies and incorporate a holistic approach that optimizes building performance and savings. <a href="https://www.ashb.com/sbc">www.ashb.com/sbc</a>



## 2. Administrative Bob Allan (NAVCO, Inc.)



Approval of SBC Minutes August 6, 2025

www.ashb.com/sbc



### 3. Research Update Robert Lane (Robert H. Lane & Associates Inc.)



2025 SBC Landmark Research Smart Building Trends & Technology Adoption

#### **Funders**





































Contact admin@ashb.com to obtain research findings and to join as a funder.



## 3. Research Update Greg Walker (ASHB)

### Annual BACS Market Sizing North America

























## 3. Research Update Greg Walker (ASHB)



### Annual BACS Market Sizing Europe

































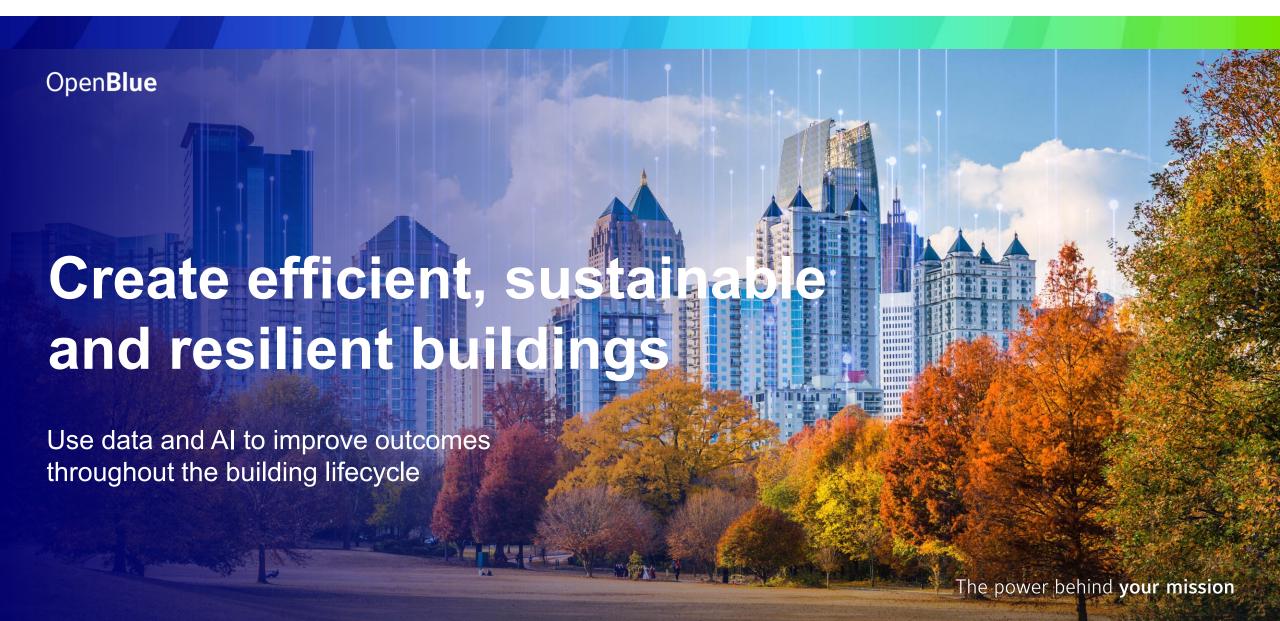


### 4. Keynote Bob Allan (NAVCO, Inc.)









#### Open**Blue**

# Optimize the performance of your building

OpenBlue is a smart building ecosystem that combines a cyber-secured open data platform with Al-powered applications to deliver real-time visibility across the entire building life cycle.

It creates smart, healthy and sustainable buildings by reducing your energy spend, maximizing your equipment uptime, optimizing the use of your space and improving occupant experience.



### The evolution of smart buildings

Smart buildings are a new class of building that is connected, sustainable, healthy and secure

#### **LEGACY BUILDINGS**



 Standalone systems

#### **CONNECTED BUILDINGS**



- Single dashboard
- Optimized for energy
- Two or more systems manually integrated

#### **SMART BUILDINGS**



- Intelligent and coordinated workflow
- Artificial Intelligence (AI) emerging
- Most building systems integrated with discovery
- Cloud integrations

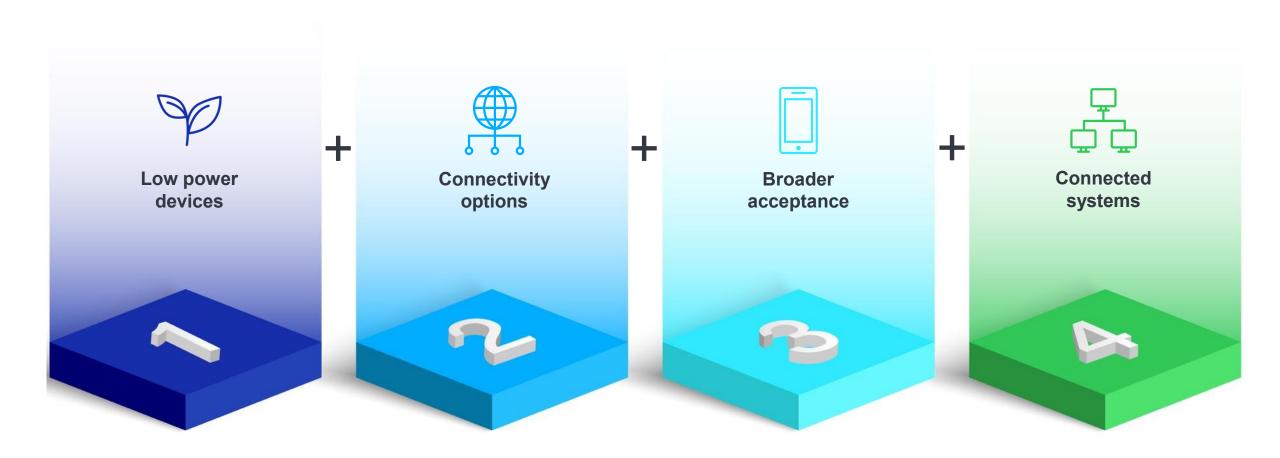
   (e.g. utility, weather)

#### **AUTONOMOUS BUILDINGS**



- Autonomous workflow
- Artificial Intelligence (AI) advanced
- Continuously learns and adapts, and automatically responds to needs of occupants and the environment
- All systems on site and cloud

### The emergence of smart building technology



### The Al revolution

Artificial intelligence is the intelligence of machines or software, as opposed to the intelligence of humans or animals.



### **Market trends in agentic Al**

#### The fact

Agentic AI has become pervasive in our private and professional lives



33%

Gartner predicts that by 2028, 33% of enterprise software will include agentic AI, up from less than 1% in 2024

#### The reason

Al systems can act autonomously, adapt in real-time and solve complex multi-step problems based on context and objectives



15%

It is estimated that 15% of day-today decisions in smart buildings will be made autonomously by Al agents by 2028

#### A vision

"Agentic AI is expected to replace traditional SaaS logic, centralizing decision-making in AI agents rather than backend systems." – Satya Nadella, CEO of Microsoft



85%

**85% of enterprises** are expected to implement Al agents by the end of 2025

### **Al-based planning inputs**



#### Use case 1

Demographics and weather data vs. utilization



#### Use case 2

Dynamic re-stacking to maximum floor utilization and minimize projected energy use



#### Use case 3

Indoor environmental factors and how they affect space selection choices



#### Use case 4

Actual energy use versus actual utilization



### Read the live activity of your building

OpenBlue Bridge

Use the data to meet sustainability goals, optimize safety and security, and enhance occupant health and productivity.



**Bi-directional building data:** Ingestion via OT/IT universal gateways via OpenBlue Bridge



Building automation systems

Metasys<sup>®</sup> | Verasys | EasylO | Facility Explorer | Other BMS



**Equipment** 

Chillers | AHUs | Terminal units | Elevators | Generators | + many more



Energy

Online | Offline | Virtual | Utilities



**Sensors** 

IAQ | Occupancy | Lighting | Acoustic | Motion | Other



**IT systems** 

ERP | Audio visual | Active directory | Office suite | Others Cloud data: Integrate with 30+ cloud APIs for data sources via OpenBlue Cloud



CMMS

(computerized maintenance management system)



**Utility integrations** 



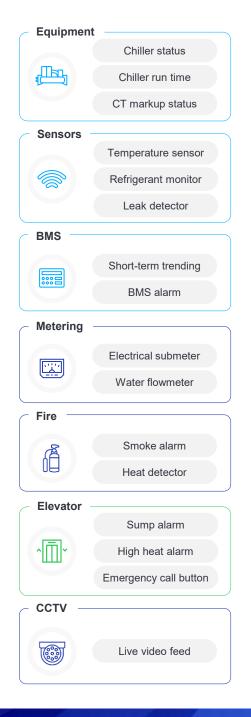
IoT device API



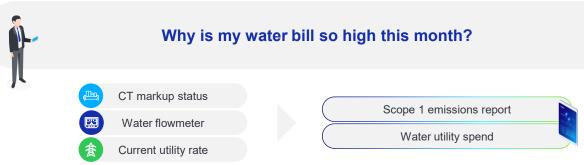
Data lakes and warehouses; cloud IT systems

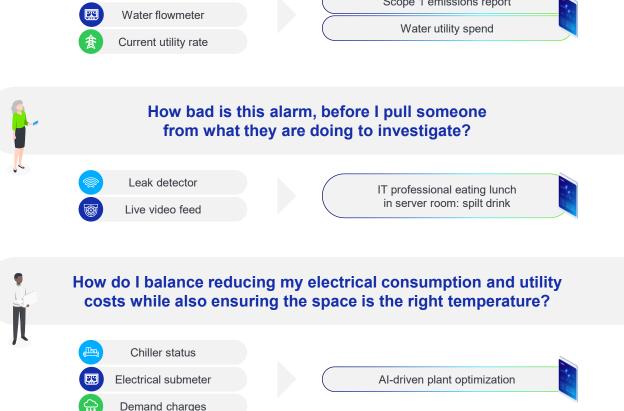


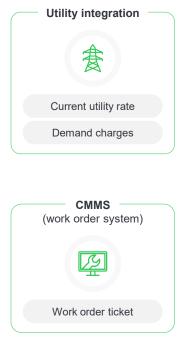
Weather, business data and other integrations



#### **Typical questions & use cases**











### Creating efficient, sustainable & resilient buildings across your real estate portfolio Leverage building data and integrated Al to achieve impactful outcomes throughout the building lifecycle

### Workplace Planning & Management

- √ Streamline real estate management
- ✓ Improve maintenance workflow
- ✓ Optimize space performance

up to **21%** reduction in Real Estate costs

Extendable Data Platform

### Energy Efficiency & Sustainability

- ✓ Optimize utility costs
- √ Reduce carbon emissions
- √ Improve reporting & compliance

up to 30% energy savings



### **Equipment Performance & Operations Efficiency**

- ✓ Maximize equipment uptime
- √ Reduce maintenance costs
- ✓ Extend equipment life

up to **67%** reduction in maintenance cost

Cybersecurity & Privacy by Design

### Workplace Experience & Productivity

- ✓ Increase employee productivity
- ✓ Improve occupant & visitor experience
- ✓ Increase asset value

up to **20%** improvement in space utilization



### One of Asia's largest diversified Real Estate Groups



Delivering energy and cost savings as well as advanced technologies for effective building portfolio management



#### **Challenge**

The Real Estate Group was looking for an enterprise analytics solution to achieve cost savings and enable a centralized command center.

#### Goals:

- Deliver energy efficiency in 46 buildings in Singapore and 30 buildings in India.
   The portfolio included a mix of commercial offices, retail and technology parks.
- Smart Facility Management vision driven by the Singapore Legislation for Building and Construction Authority to deliver facility management productivity.
- Decrease maintenance cost by centrally managing BMS vendors
- Improve coordination between various BMS suppliers, themselves and users
- Provide a single view to operate and maintain buildings
- Deliver data-driven maintenance to drive improved productivity in their facility management

#### Solution

- Johnson Controls OpenBlue technologies delivering command and control center for effective management of global building portfolio
- Audited existing BMS and delivered improvement recommendations.
   Close collaboration with the customer to write fault detection monetization rules which drove measurable ROI impact.
- Installed technologies to absorb load fluctuation
- Established a metric for operators' performance monitoring in case of fault detection
- Enhanced the fault detection and diagnostic rules with Johnson Controls deep domain knowledge. This has enabled the customer to pinpoint the root cause of the problem which assists in driving facility management staff productivity.
- Datastreams pulled in OpenBlue from Security Video Management systems, Cleaning system and Lift system on top of HVAC systems from different BMS vendors
- Built a system to generate alerts by video analytics - vendors and users receiving alerts in real time

#### Results

- Cost savings through energy efficiencies and integration of 12 BMS platforms
- Embedded automated and customized reports used by the Leadership team to drive outcomes focused on sustainability goals, maintenance spend and drive facility management staff productivity.
- 15.07% energy savings in Singapore against a baseline, leading to \$470K of energy cost avoidance in the first 4 months
- Automated integration of equipment and CCTV data into one platform
- Over a 5-year duration, >\$5M of savings projected across energy and operational benefits



### Global trends affecting sustainability and energy priorities



### **Decarbonization**

Demand for net zero solutions to reduce carbon footprint

Progress toward decarbonization

Pressure to improve energy use, water and waste management



### Rising energy costs

Price volatility continues, affecting your cost of doing business

Need to maximize assets and energy efficiency to manage costs



### Regulatory pressures

 Building owners worldwide must reduce their carbon footprint

 Technology is driving privacy and cybersecurity regulations

Staying compliant will satisfy stakeholders and drive progress

### Your challenges are opportunities in disguise

## Tracking and reporting data manually takes time

Energy and carbon data collection and reporting is time-consuming. Evolving regulatory standards make the task more demanding.

### Lack of resources hinder savings

Identifying the correct course of action to save money and justify retrofits or repairs without the right skills and expertise is practically impossible.

## Prioritizing maintenance budgets to guide work

Knowing where your facilities team should invest time and resources depends on available budget and operational priorities.

### Balancing energy and comfort for compliance

Maintaining a comfortable environment for occupants in line with commercial lease agreements must be top of mind when managing energy use.



Aging buildings that need a lot of servicing



Aging and shrinking service workforce



Stricter privacy regulations demand increased security



Increased trend in digitalization and open platforms



### Global trends affecting facility management





### **Productivity obstacles**

Finding skilled talent to fill gaps left by an aging, shrinking workforce

Inefficiencies and budget pressures from manual data management

Need to streamline workflow with easy-to-use systems

### Rising costs

Price volatility continues, affecting your cost of doing business

Need to maximize assets and energy efficiency to manage costs



### Regulatory pressures

Building owners worldwide must reduce their carbon footprint

Technology is driving privacy and cybersecurity regulations

Staying compliant will satisfy stakeholders and drive progress

### Your challenges are opportunities in disguise

Unplanned downtime and delayed time to resolution affect operations

Lack of skilled maintenance resources and data-driven guidance to optimize equipment.

New decarbonization targets mean reducing equipment energy costs

Older equipment generates more alarms and needs additional servicing.

## Dated building and equipment inventory models

Without reliable data, it's harder to execute lifecycle planning with the integration of legacy systems also becoming a challenge.

## Reporting and compliance requirements

Meeting legislative and operational requirements including WiredScore, LEED Operations, BREEAM and NABERS.



Aging buildings that need a lot of servicing



Aging service workforce and shrinking workforce



Increased trend in digitalization and open platforms bringing cybersecurity concerns



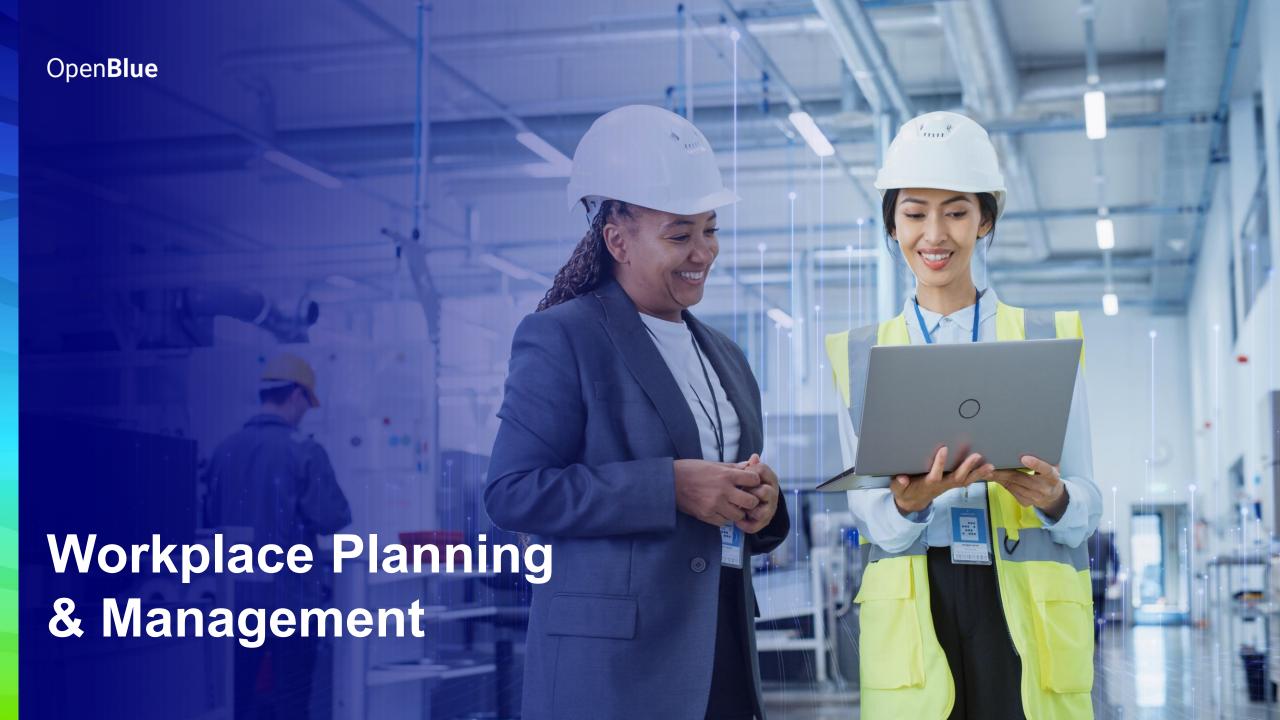
Increase in cost of materials and wage rates for both soft and hard facility management (FM) services



Tracking and reporting data manually takes time



Skewed occupancy postpandemic impacting CAPEX and OPEX planning



### Global trends affecting real estate management



## Agile space planning

Hybrid work vs returning to the office is reshaping space needs

Data-driven decisions are now essential



## Al-powered maintenance

AI/ML enable smarter, predictive upkeep

Boosts efficiency and reduces downtime



## Smarter utilization with IoT

IoT sensors reveal real-time space usage

Helps identify and repurpose underused areas

### Your challenges are opportunities in disguise

### Disconnected systems and data silos

Fragmented tools and siloed data make planning and optimization difficult.

### Inefficient, outdated processes

Reliance on spreadsheets and static floor plans slows decision-making and agility.

### Reactive strategies limit performance

Reactive planning and maintenance reduce flexibility and shorten equipment lifecycles.



Inaccurate and siloed lease and space data

Revaluating real estate

strategy to align footprint

with hybrid work models



Inadequate space usage hinders cost optimization and predictive facilities management



Balancing the push for healthier indoor environments with energy maintenance cost constraints



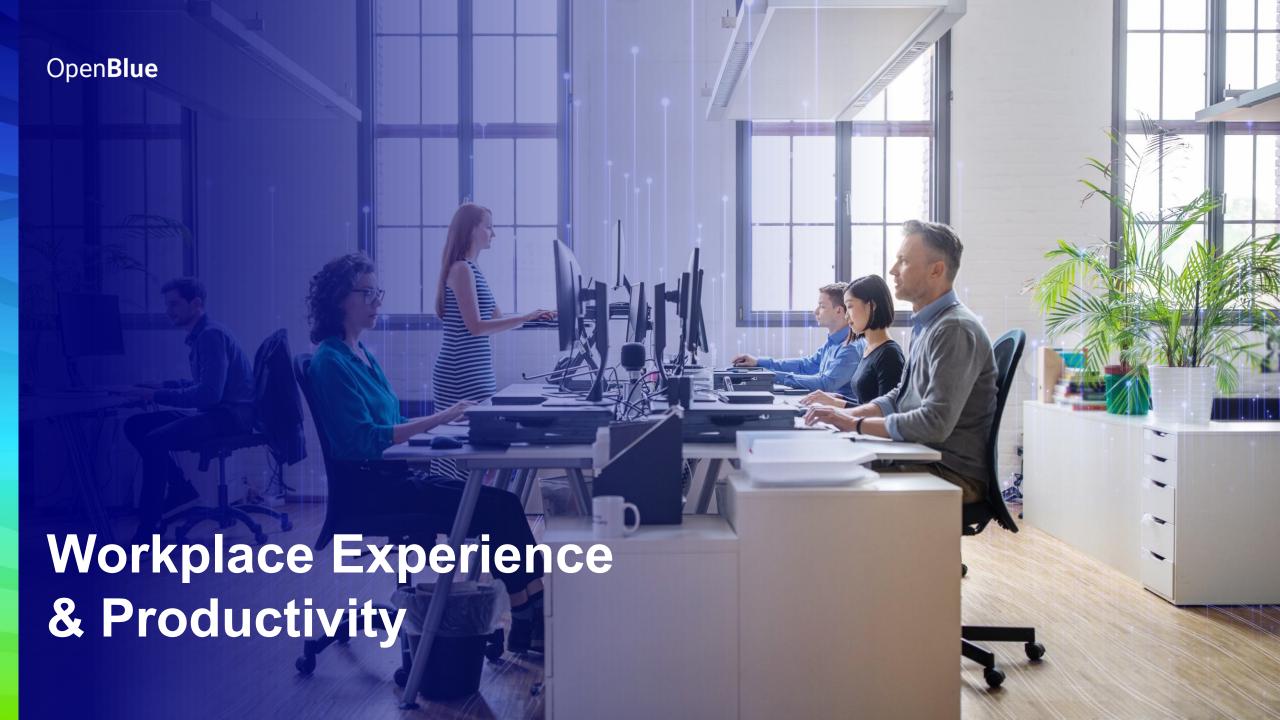
Juggling fragmented legacy systems while integrating next-gen workplace and building technologies



Unable to predict occupancy and utilization as hybrid work continues to evolve



28



### Global trends affecting workplace experiences



## Elevated employee expectations

Hybrid work has reshaped what employees expect from their workplace

Amenities and experience now play a key role in retention and satisfaction



## Demand for seamless digital experiences

Tech-savvy employees expect intuitive, consumer-grade workplace tools

Poor digital UX can hinder productivity and engagement



## Wellness is a workplace standard

Air quality and wellness are now baseline expectations post-pandemic

Healthy environments directly impact employee performance and morale

### Your challenges are opportunities in disguise

### Uncertainty around space demand

Hybrid work makes it difficult to predict occupancy and utilization patterns.

### Limited access to workplace info

Employees lack visibility into available spaces and co-worker locations.

### Balancing wellness with efficiency

Facility teams must meet wellness expectations while managing energy and maintenance costs.

### Visitor experience vs compliance

Teams are challenged to deliver secure, welcoming visitor experiences while navigating evolving data privacy regulations.



Improve overall facility/workplace utilization



Maintain and control energy consumption and operating costs despite unpredictable utilization patterns



Streamline multiple apps/ interfaces/processes for in-office services like catering and parking



Establish a workplace strategy to balance an employee's desire for flexibility with your utilization goals and the company culture



Improve and maintain occupant comfort and wellness



Maintain a high level of security and access control while creating a welcoming environment for visitors and employees

## Thank you

Visit www.johnsoncontrols.com/openblue





THANK YOU!

Questions?



## 5. Smarter Homes & Buildings Podcast Chris Larry (Exp US Services Inc.)



ashb.com/podcast

Join industry experts and leaders from around the globe as they discuss everything smart home and intelligent buildings.





ASHB is looking for guests and hosts for future pre-recorded episodes. Contact <a href="mailto:admin@ashb.com">admin@ashb.com</a> for more information.

#### **Recent Recordings:**

- Building Cybersecurity, Cybersecurity 101 Tools and Methods
- The Science of Light: How Circadian Lighting Enhances Sleep, Mood & Performance
- The Road to Decarbonization: Strategies for Critical Environments



## 6. ASHB Whitepapers Ken Wacks (Ken Wacks Associates)





Published SBC White Papers can be downloaded at:

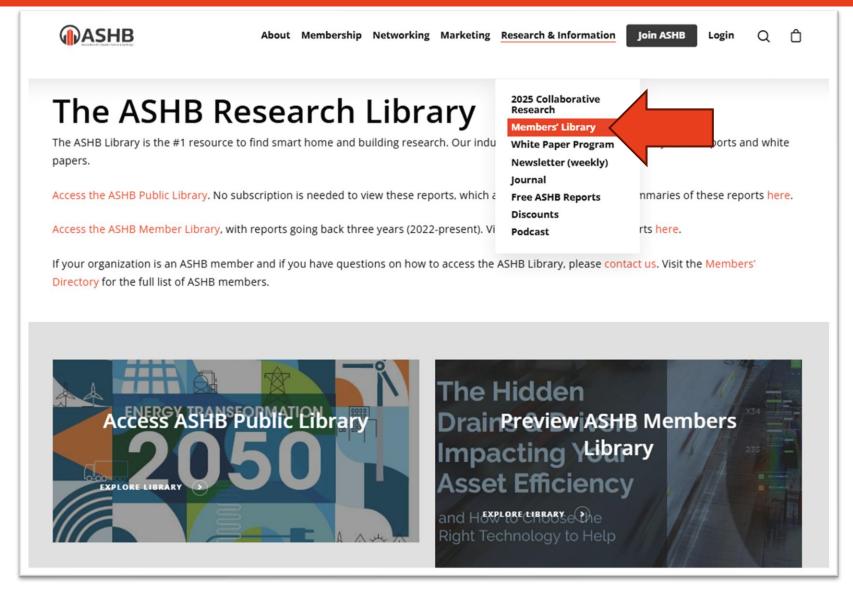
<u>ashb.com/whitepapers</u>
Send proposals to <u>admin@ashb.com</u>

#### **Recently Published**



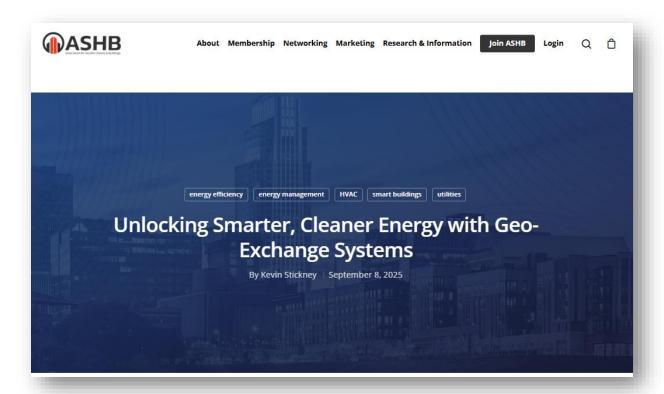


## 6. ASHB Research Library Ken Wacks (Ken Wacks Associates)





### 7. ASHB Journal Ken Wacks (Ken Wacks Associates)



The ASHB Journal aims to educate and inform the ASHB membership and industry at large on emerging research, issues, challenges, and opportunities in the smart home and building sectors.

New articles are posted to the ASHB website, included in the weekly NewsBrief, and circulated on Twitter and LinkedIn.

Send proposals to admin@ashb.com

#### **Recent posts:**

- Ken Wacks' Perspectives: A virtual tour of CES 2025
- Unlocking Smarter, Cleaner Energy with Geo-Exchange Systems
- Ken Wacks' Perspectives on CES 2025: Focus on Al and Robotics



## 8. New Business Bob Allan (NAVCO, Inc.)

### New SBC Business?





## 9. Announcements Chris Larry (Exp US Services Inc.)



The Buildings Show December 3-5 | Toronto, ON

Light + Intelligent Building January 12-14 | Dubai, UAE

BICSI Winter Conference & Expo January 18-22 | Orlando, FL

AHR February 2-4 | Las Vegas, NV

Distributech International February 2-5 | San Diego, CA



## 10. Adjournment Bob Allan (NAVCO, Inc.)

### **Next SBC Meeting: February 2026**

### **Association for Smarter Homes & Buildings (ASHB)**

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