

# Envisioning the Future of Healthcare, Asking Delta Controls Experts

Delta Controls, a leader in building automation systems, excels in the healthcare industry by providing innovative solutions that enhance patient care, experience and safety as well as operational efficiency, and energy management. This study consolidates insights from key Delta Controls product managers, highlighting the importance of Delta Controls solutions in healthcare settings and the strategic focus moving forward.

### Individual Perspectives

#### Zach Stevens - Software Product Manager for enteliWEB:

Zach emphasized the versatility and broad application of enteliWEB in healthcare environments. enteliWEB serves as the front-end visualization tool for facility managers, offering comprehensive control from central plants to nurse call stations. Its ability to create a unified graphical interface and centralized server repository ensures consistency and efficiency across healthcare facilities. Zach states, "enteliWEB's strength lies in its ability to centralize control and provide a cohesive interface that integrates all building automation components, ensuring seamless operations in healthcare facilities." The platform supports real-time monitoring and management of HVAC systems, lighting, access control, and other critical infrastructure components, making it indispensable for maintaining optimal conditions in healthcare environments. The ability to monitor analytics manages building trends and trains staff to create an atmosphere aligning with health care dynamics and key performance.

### enteliWEB's capabilities for the healthcare market include:

Alarm Management: Real-time alerts and notifications for critical system parameters to ensure immediate response and resolution of issues.

**Data Analytics and Reporting:** Comprehensive data collection and analysis tools that help facility managers make informed decisions and optimize system performance.

**Integration with Third-Party Systems:** Seamless integration with various third-party systems and devices, enabling a unified approach to building management.

**Mobile Access:** Mobile-friendly interface allows facility managers to monitor and control building systems remotely, ensuring flexibility and continuous oversight.

#### Tyler Lemery, Enterprise Manager, Room Control & Leif Brynjolfson, Product Manager, Sensors & Thermostats

Leif and Tyler highlighted the critical role of precise environmental control in healthcare.

They discussed the deployment of Delta Controls' O3 sensors, which provide accurate and responsive temperature and humidity control. Leif noted, "the O3 sensors are crucial in maintaining the precise environmental conditions required for operating rooms, thereby enhancing patient safety and surgical outcomes." These sensors integrate multiple sensing elements, including temperature, humidity, light, and motion, to provide a comprehensive view of the indoor environment. The advanced sensing capabilities of the O3 ensure that healthcare facilities can maintain stringent environmental standards, reducing the risk of infections and improving patient outcomes.

### Additionally, the O3 sensors support various applications such as:

**Air Quality Monitoring:** With onboard humidity and ability to integrate external CO2 sensing, the O3 sensors help manage indoor air quality, ensuring that ventilation systems operate efficiently and maintain healthy air standards.

**Sensor Occupancy Detection:** Detecting motion and occupancy allows for dynamic adjustment of HVAC and lighting systems, reducing energy consumption and enhancing comfort.

**Lighting Sensor Control Integration:** Enabling the adjustment of artificial lighting based on the availability of natural light, further optimizing energy use and creating a more pleasant environment for patients and staff.



### Andy Beaveridge, Product Manager, Room Controllers & Red5

Andy focused on the integration and interoperability of room controllers in healthcare settings. He emphasized the importance of maintaining consistent environmental conditions and the role of advanced control systems in achieving this. Andy mentioned, "Our room controllers are integral to ensuring that critical environments like operating rooms maintain the necessary pressure and temperature controls without failure." He also highlighted the customization capabilities of Delta Controls' products, such as the ability to use various actuators and sensors to meet specific needs. At Brooke Army Medical Center (BAMC), the DAC controllers are used extensively for their custom VAV applications, which require precise control over air pressure and temperature to ensure compliance with healthcare standards.

The Red 5 VAV controllers are designed specifically for healthcare and mission-critical environments.

## Red5 VAV controllers offer advanced features such as:

**High-Resolution Control:** Improved accuracy and responsiveness in controlling air flow and environmental conditions.

**Enhanced Security:** Built-in cybersecurity features to protect against unauthorized access and ensure compliance with industry standards.

**Scalability:** Ability to support complex systems and expand as facility needs grow.

**Ease of Integration:** Seamless integration with existing building management systems and third-party devices.



### Scott Sharp, Product Manager for Lighting and Access Products:

The integration of lighting and access control systems are crucial for operational performance and security in healthcare facilities. Scott discussed using DALI (Digital Addressable Lighting Interface) and its benefits in creating flexible lighting scenarios, improving energy performance and enhancing patient and staff experience through automated control systems. DALI integration allows for customizable lighting solutions that can adapt to various needs within a healthcare facility, enhancing both efficiency and patient comfort during their stay.

He also emphasized the importance of robust access control solutions in ensuring patient safety. Delta Controls' access control systems are designed to integrate seamlessly with other security measures, such as infant tagging systems which prevent the unauthorized removal of infants from the hospital premises, reducing abduction risk. He noted, "Our access control solutions are critical in healthcare settings where security and patient safety are paramount. The ability to interface with systems like infant tagging ensures comprehensive protection for our most vulnerable patients."

## Additionally, Delta Controls' access control solutions support:

Visitor Management: Ensuring only authorized visitors can enter sensitive areas, thereby maintaining a secure environment.

**Staff Monitoring:** Tracking staff movement to ensure they are present in the required areas, enhancing operational efficiency and security.

**Emergency Response:** Integrating with emergency systems to provide immediate lockdown capabilities in case of security threats, ensuring rapid response and patient safety

#### Robert Hemmerdinger, Chief Sales & Marketing Officer

Rob is focused on a more strategic overview, emphasizing both the importance of patient satisfaction and the need to educate stakeholders and end-users, such as CFOs and CEOs, about the value of the solutions. He stressed the importance of a dedicated approach to vertical markets and the potential of Delta Controls' integrated solutions to transform healthcare environments. Rob stated, "Educating key decision-makers about the tangible benefits of our solutions is crucial. Our integrated approach can significantly enhance operational efficiency and patient care in healthcare facilities." He highlighted the success Delta in the health care industry enabling facilities to monitor and reduce their environmental footprint while maintaining high standards of care.

### Delta Controls Focus and Strategic Path Forward

 Integration and Interoperability: All participants underscored the importance of integrated systems that offer seamless interoperability between various building automation components. This integration is vital for creating cohesive and efficient healthcare environments. Zach emphasized, "Enteliweb's ability to centralize control is a game-changer for healthcare facilities, providing a single point of control for various systems." The ability to integrate HVAC, lighting, security, and other systems into a single platform reduces complexity and improves overall management efficiency.

- 2. Patient-Centric Solutions: Improving patient comfort and outcomes is a central focus. Delta Controls' products, such as the O3 sensors and Enteliweb, provide precise control over environmental conditions, directly impacting patient care quality. Leif highlighted, "The precision of our O3 sensors ensures that operating rooms maintain optimal conditions, which is critical for patient safety and surgical success." By maintaining stringent environmental controls, Delta Controls helps healthcare facilities reduce the risk of infections and improve patient recovery times.
- 3. Energy Efficiency and Sustainability: Improving patient comfort and outcomes is a central focus. Delta Controls' products, such as the O3 sensors and Enteliweb, provide precise control over environmental conditions, directly impacting patient care quality. Leif highlighted, "The precision of our O3 sensors ensures that operating rooms maintain optimal conditions, which is critical for patient safety and surgical success." By maintaining stringent environmental controls, Delta Controls helps healthcare facilities reduce the risk of infections and improve patient recovery times.



4. Advanced Security Measures: Ensuring the safety of patients, staff, and sensitive medical information is paramount. Delta Controls' integrated access control systems provide robust security solutions tailored to the unique needs of healthcare facilities. As Scott stated, "Security is a top priority in healthcare, and our integrated access control systems are designed to meet the stringent requirements of these environments." These systems ensure that only authorized personnel can access restricted areas, enhancing overall security and compliance with healthcare regulations. The ability to interface with other security measures, such as infant tagging systems, enhances the overall security framework and provides comprehensive protection for patients.

5. Strategic Focus on Education: There is a strong emphasis on educating both partners and end-users about the benefits of Delta Controls' solutions. By demonstrating value at the executive level, Delta Controls aims to drive adoption and implementation of their advanced building automation systems. Our goal is to ensure that decision-makers understand the full value of our solutions, leading to better adoption and more successful implementations. This educational approach includes training programs, webinars, and detailed documentation to help stakeholders fully understand and utilize Delta Controls' products.

#### Outcomes

Delta Controls' products and solutions are well-positioned to address the complex needs of the healthcare industry. Through integrated systems, patient-centric designs, and a commitment to sustainability and security, Delta Controls continues to innovate and lead in building automation for healthcare facilities. The strategic focus on partner and end user education and dedicated industry vertical product solutions will further enhance their impact and drive future growth in the healthcare sector.

- Delta Controls Strategic Initiatives and Future Directions: Enhanced Product Development: Continuously improving its product offerings, such as the Red 5 VAV controllers, designed with healthcare and critical environments in mind.
- Focus on Compliance: Ensuring all products meet stringent healthcare regulations, including cybersecurity standards like BACnet Secure Connect and ASHRAE 36 guidelines.



- Partnerships and Collaboration: Strengthening partnerships with healthcare facilities to tailor solutions that meet their unique needs, as demonstrated in the collaboration with BAMC.
- Sustainability Goals: Promoting energy-efficient solutions through tools like the Earthright Energy Dashboard to help healthcare facilities achieve their ustainability targets.

### About Delta Controls

At the forefront of building automation systems, Delta Controls provides global solutions through its network of Partners in 80+ countries. Focusing on innovation and sustainability has made the company industry leaders for over 40 years. Delta Controls manufactures all products in Metro Vancouver, Canada, offering dependable, user-friendly control solutions for buildings in the commercial, healthcare, hospitality, education, and leisure markets. As part of Delta Electronics, Delta Controls is committed to leading building automation into a sustainable future. deltacontrols.com