

OUR CLIENT

Background

Insitu is a creator, developer, and operator of hospitality projects with principal offices in Singapore and Tokyo. Central to its values and commitment to craftsmanship and sustainability, Insitu invests and applies cutting edge technology into their development projects to ensure their properties share sensibility and sensitivity to the environment, biodiversity and cultures.

The three boutique villas in Bali, owned by Insitu Asia (Origin Ubud, Origin Seminyak and Aria Ubud) feature modern landscaping and facilities that integrate with the existing flora and local scenes which encapsulate their firm environmental vision.

The Challenge

Highlighting a common dilemma amongst those operating within the hotel industry, Insitu Asia faced the challenge of providing exceptional guest experiences while managing high energy expenditures that inevitably generate significant carbon footprint from its operations. Hence, to better align to their contemporary and sustainable operational ethos, Insitu Asia sought out a smart solution that could substantially reduce its electricity costs and its overall capital expenditures from the cooling system to minimise the hotel's environmental impact while in operation.

Ultimately, Insitu Asia's primary objective is to conserve energy wherever possible by optimising their A/C systems and its overall lifespan with advanced maintenance and management strategies. Therefore, the hotel group sourced for a cutting-edge, data-driven energy management solution that could maximise their energy efficiency and optimise their overall HVAC system performance.

Our Solution

Insitu Asia installed SensorFlow's solution across a total of 24 villas across its three Bali properties: Origin Seminyak, Origin Ubud and Aria Ubud. With SensorFlow's smart hotel solution, Origin Seminyak was able to immediately automate their HVAC systems based on live guestroom's occupancy status as well as optimise their operational management, without compromising on guest satisfaction.

INSITU ASIA

HVAC SYSTEM OPTIMISATION

33%

IN THE PIPELINE

ENHANCED GUEST EXPERIENCE

PROJECT TIMELINE:

SINCE MARCH 2020

PROPERTY TYPE

BEACH & VACATION VILLAS

TYPE OF HVAC:

SPLIT-UNIT SYSTEM



SensorFlow provides regular and detailed analysis and insights on humidity and system performance to support Insitu Asia's HVAC and room management strategies. By gathering real-time data on individual rooms' A/Cs, ambient temperatures as well as humidity and dew point levels, SensorFlow can identify rooms with high humidity risk and underperforming A/C units for timely maintenance, thus enabling the hotel engineers at Insitu Asia to perform more effective and data-driven predictive maintenance strategies.

Beyond improving their operational efficiency and productivity, SensorFlow also offers an additional benefit of enhancing their guests' satisfaction by collecting and providing actionable insights on occupancy trends and their guests' interactions with room environments and HVAC systems. The added benefit is very much in line with the brand's commitment to providing excellent guest services at the highest operational standards.

“One of hospitality's greatest challenges is balancing energy efficiency with optimal guest experience. SensorFlow helps our boutique villas to achieve that ideal balance with its advanced solution for smart hotel energy management and room maintenance. We witnessed significant improvements in our operational efficiency

with SensorFlow's remote-working technology, especially throughout the COVID-19 crisis, and have stayed true to our brand as a sustainability-focused hospitality group throughout the whole process.” - Sugeng Sugiono, General Manager of The Origin Collection and Aria Ubud

The Results

Based on the 1060 automation hours achieved in May 2020 alone, despite the low occupancy period amid the COVID-19 outbreak, Origin Seminyak's eight villas can confidently project an exponential growth in energy savings when occupancy rates start to recover.

Leveraging SensorFlow's analysis of A/C setpoint and room occupancy trends, Origin Seminyak could maximise their savings with minimal manual intervention by remotely adjusting their automation settings via SensorFlow's cloud-based dashboard. The savings maximisation plans include extending automation hours by an additional hour, reducing occupancy detection timeout by 5 minutes and increasing their entire property's A/C minimum setpoint by 2 degrees Celsius.

Despite Origin Ubud's and Aria Ubud's temporary closures during the COVID-19 period, Insitu Asia could ensure optimal villa conditions to prepare for the

two properties' reopening. Through a combination of remote room monitoring and regular monthly reports, Insitu Asia conducted data-driven humidity management and predictive maintenance strategies, which allowed them to avoid costly repairs and potential room damage that could have resulted from excessively high room humidity levels over an extended period of closure.

Origin Seminyak also received remote maintenance support through the assistance of SensorFlow's Customer Success Manager in identifying and alerting underperforming A/C units across all Origin Seminyak's rooms. As a result, the operational staff could perform timely maintenance for those specific A/C units and the property managed to optimise their HVAC system performance efficiency by 33%. The operational team can now move away from regular, property-wide maintenance, towards smarter and more efficient maintenance strategies whereby they can selectively attend to rooms only when needed.

Insitu Asia strongly believes in the value of the extensive data insights and analysis that SensorFlow collects over time. The hotel brand is looking forward to significantly enhancing guest experiences and advancing their operational standards while keeping true to their sustainability-focused brand.