Occupancy analytics and energy savings spur Standard Chartered Bank to implement the Redwood® Building Intelligence Platform

The world’s leading international bank, Standard Chartered (SCB) saw an opportunity to achieve significant energy savings, improve the workplace experience and capture advanced occupancy data by implementing CommScope’s high-density Redwood sensor solution.

After a successful deployment at two locations, the bank is now seeking to use Redwood for applications beyond lighting control.

“Redwood exceeded our expectations. We know that The Forum uses around 60% less energy with 6% fewer fixtures than if we’d used a conventional lighting system. In Singapore, we anticipate savings of almost $100,000 USD during our first year of occupation alone. Perhaps the most important thing is we live up to our ‘Here for good’ promise, making significant progress towards our 2019 energy targets.”

Justin Halewood, Head, Environment, CRES, Standard Chartered Bank
Achieving greater efficiencies in Singapore and Hong Kong

Headquartered in London, but doing most of its business in Asia, Africa and the Middle East, Standard Chartered Bank (SCB) employs some 87,000 people and operates over 2,000 properties in more than 70 countries. In seeking to prove the Bank’s ‘Here for good’ brand promise, the Group’s Corporate Real Estate Services Team set out to identify a lighting control system that was both user-friendly and energy efficient.

After a thorough market review, project teams for the new office buildings at Changi Business Park II in Singapore and The Forum in Hong Kong identified the Redwood Building Intelligence Platform from CommScope as the best option. With both installations now complete, the buildings are the first major commercial offices to implement the Redwood solution in the Asia Pacific region.

Redwood employs a high-density network of sensors to both power and control LED lights. By collecting data on heat, light and motion, sensors can provide a valuable insight to the occupancy of the building, as well providing intelligence to other building systems. For example, SCB uses the sensors to turn audio visual technologies on and off in certain conference rooms at The Forum. The bank also plans to use the sensor data to monitor space utilization, helping to inform real estate strategies.

From purchase to deployment—making it happen

The business case for Redwood at The Forum and Changi Business Park II was supported by energy savings—projected as 63 percent in Hong Kong. SCB selected certified PartnerPRO® Network provider Xin Networks to design, install and maintain both solutions.

To achieve buy-in from all parties and prove the concept (particularly in relation to the quality of light emitted by the LEDs), Xin built a mock-up at an existing SCB office. The installation was very well received by SCB staff who commented on the crisp yet comfortable light produced. Moreover, Redwood sensors were shown to create genuinely fine-grain control of the fixtures, something that the existing control system installed by the bank had failed to achieve. Once confidence in the solution has been generated, CommScope and Xin worked closely with the general contractors (Davis Lighting in Singapore, Hover Lighting in Hong Kong) and the LED fixture company to ensure a budget-friendly, on-time installation.

Once installed, facilities management teams at each facility were provided detailed training to ensure the Redwood software was fully utilized. At The Forum, this resulted in the system being established and power maintained at only 75 percent of potential light output. In addition, the intensive training provided during commissioning keeps upgrade and maintenance costs in-house, helping the company avoid expensive third-party consultancy support.
Expanding on a bright future

On a daily basis, the Redwood solution aggregates a vast amount of data on motion, temperature and light levels. For example, each motion sensor installed in the Hong Kong Forum alone captures 500–1000 points of data per day. That amounts to approximately 1.4 million data points per week—information SCB plans to capture and transform into actionable intelligence that will help:

- Support space utilization studies and optimize the use of space
- Add intelligence to other building sub-systems (including conference room booking, HVAC control and security)—without adding any hardware or significant costs

In keeping with SCB’s ambition to lead the way, 12 major Asian-Pacific companies have already toured the on-site Redwood solution with a view toward deploying it in their own buildings.

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