



PCOM Green House

Case Study – Enterprise

Challenge

Equip PCOM with intelligent building solutions that power a robust and modern workforce, while delivering a consistent and user-friendly experience to employees and visitors.

Solution

Deploy Crestron's suite of intelligent technology solutions to seamlessly integrate PCOM's internal AV and IT infrastructure.



About PCOM Green House

PCOM is the go-to expert in smart technology integration, but not many know of its rich heritage entrenched in the domain of fibre optics. Today, the organisation combines its expertise in connectivity together with smart technologies to transform hundreds of residences into smart homes.

PCOM is highly sought after by major players in the industry to play a consulting role on Fibre to the Home (FTTH), intelligent buildings, smart home, and smart city projects.

Implementing expert solutions for experts

PCOM chose to station their headquarters within the Green House, located in Kota Damansara. PCOM's management & operation staff is spread across the 3-storey building which occupies a total of 16,000sq ft.

The PCOM Green House is recognized as the first state-of-the-art, fully integrated smart building in Malaysia. The facility houses a team who manages PCOM's operating centre for daily business activities, and also serves as a visitor showroom to display the full range of PCOM's expertise in one technologically-advanced structure.



"We're proud to call Crestron our partner in deploying these solutions across our infrastructure."

In addition, the R&D department sits within the building and acts as the testbed for new solutions and equipment, ensuring that these have been fine-tuned to perfection before they reach wider markets.

As an organisation that constantly pushes the envelope to come up with innovations that shape the way people live and play, PCOM envisioned a high-performing workforce enabled by smart technology, where employees were collaborative, inspired, and functioning at their best. The team holds a firm belief that a happy crew is key to achieving their business goals.

To achieve this, PCOM partnered with Crestron to realise their vision of cultivating spaces powered by robust connectivity infrastructures and integrated smart technologies. Crestron solutions were delivered across their Experience Center, the conference room, the meeting collaboration room, executive offices and the main open space office. Throughout the design process, Crestron stood out with its ability to provide solutions which met PCOM's high standards of agility and reliability.



Seamless, intuitive control

The existing controls within the PCOM Green House paved the way for greater energy savings when supplemented with Crestron's various sensors and scheduler systems, working together to intuitively prepare spaces for use when occupied, and to power down when empty.

This meant that the lobby area, lighting, air conditioners, and video wall, along with its accompanying music, would instinctively switch on as soon as the first PCOM employee walked into the building every morning. Likewise, the building powers down and readies its security precautions as night falls and the last person departs – leaving the team worry-free about any utilities remaining switched on throughout the night.

On each floor, staff are able to access the TSW-1050 10.1" Surface Mount Touch Screen to control the entire floor – from adjusting light ambience, to climate, audio/video source selections, volume controls, and access control.

Furthermore, the easy-to-use nature of the control system's user interface allows even the least technology savvy employee to grasp how to use the system within minutes.

Collaborative and effective meetings

Crestron Fusion was chosen to be deployed within Ilum, PCOM's main conference room, allowing users accessibility and visibility to room schedules that were integrated with their email systems, and allowing them to manage ambience setups, lighting, audio, and video controls for their meetings and presentations.

The state-of-the-art system also stripped away issues around incompatible technology that took significant time out of staff meetings to understand and fix. Now, employees can walk into the room equipped with their choice of device, and have their presentations up and running at the touch of a button.

Collaborative and effective meetings

A simple voice command – ‘Alexa, turn on VC’ – collaborates with Amazon Echo technology to power up large interactive display screens, cameras, and microphones, preparing the room for video conference mode. Crestron RL brings Skype for Business into the meeting room, arming the space with two full HD displays – one being the video camera display, and the other functioning as an interactive whiteboard for meeting participants to share, create, and annotate on-the-go.

To book the conference room, staff can use the booking screen installed outside the room, or simply through email. The screen turns red to indicate when a room is occupied, and powers down as soon as the meeting concludes and the room is empty.

Seeing is believing

PCOM creates immersive user experiences to drive home the advantages of their solutions to their customers, and the ROCK Experience Centre – a studio apartment unit equipped with a living room, sports bar and bedroom which resides within the Green House – brings this experience to life by displaying what living with a smart home system truly feels like.

This show unit integrates modern home appliances ranging from lighting control, to shades and climate control, high-definition audio-video distribution, as well as security and surveillance controls and everything in between.

Visitors are invited to take a tour around the showroom to experience and understand how Crestron and PCOM solutions can transform their conventional homes into smart ones.

Stepping into the unit, visitors are pleasantly surprised to find that the lights switch on automatically when motion is detected by the GLS-ODT-C-1000 Dual-Technology Ceiling Mount Occupancy Sensor. The right password fed into the CLK-YL-YRL220-CR-619 Crestron Yale Wireless Lever Lock unveils a welcoming scene as it disarms the security system installed, powers on the lights, raises the motorised curtain, and activates soft music powered by the centralised audio system.

Visitors are then treated to the convenience that comes with smart home integration as they control the show unit’s household appliances, lighting, and entertainment devices from a single interface, putting control literally at their fingertips. They are then taken through different home scenes which have been tailored specifically for each room of the show unit, through the use of cameo keypads and Crestron smart device apps. Finally, they are guided through the process of utilising voice commands to bring up their preferred TV channels, control speaker volumes, or even unlock their doors.



Making well-informed, data driven decisions

Making well-informed, data driven decisions

An added benefit with Crestron's solutions is that it also provides organisations with the ability to monitor and track data.

By making available data on product usage from every piece of equipment connected to the system through Crestron Fusion RV and EM, maintenance teams are able to track and monitor energy consumptions from the likes of the building's main devices, as well as the maintenance cycles of secondary equipment – all through the use of an equipment maintenance scheduler. This offers PCOM's building manager the capability to analyse and understand data around energy consumption levels for each room or floor, and to make informed decisions on the best way to tackle spikes in electricity consumption.

The Result

The pre and post-retrofitting works that have been implemented in PCOM's headquarters have brought about significant improvements to overall staff productivity and energy efficiency.

"We're also thrilled that our customers and partners have been impressed by the technology powering our organization," said Guven Togan, Chief Of Staff, PCOM. "We're proud to call Crestron our partner in deploying these solutions across our infrastructure. Their efforts have enriched our image as a company that believes in adopting novel and innovative technologies to continually enhance people's lives, be it at home or at the office."

**For additional information on Crestron,
visit crestron.com**



Equipment List

Centralised Control System

- AV3, DIN-AP2 & MC3 – Automation Control Processor

DIN-Series Lighting System

- DIN-8SW8-I, DIN-1DIM4 and DIN-4DIMFLV4 – Lighting On/Off and Dimmer Module
- DIN-HUB, DIN-BLOCK, DIN-IO8 and DIN-PWS50 – Lighting System Accessories

Centralised AV Switching System

- DM-MD16X16 – 16X16 DigitalMedia Matrix Switcher
- DMPS-300-C – DigitalMedia Presentation System 300
- DM-TX-200-C-2G, DM-TX-201-C and DM-RMC-SCALER-C – DigitalMedia 8G+ Transmitter & Receiver

Centralised Sound System

- SWAMPI-24X8 & SWAMPIE-8 – Sonnex Multiroom Audio System
- CEN-TRACK-AUDIONET – TunerRack Modular Multi-Tuner w/Internet Radio Tuner Card
- C2NI-AMP-4X100 – 4 Room Audio System
EXCITE IC5-W-T – Excite 5.25" 2-Way In-Ceiling Speakers

Centralised Management System

- Fusion RV & Fusion EM – Roomview and Energy Management Software
GLS-EM Series Energy Management System

Control Interface and Video Conference System

- TSW-550-B-S, TSW-1050-B-S and C2NI-CB-B-T – 5", 10" Touch Panel and Cameo Keypad
- Crestron RL – Group Collaboration System for Skype for Business