PETRONAS
Case Study – Enterprise

Challenge

PETRONAS operates in over 50 countries around the world across a fully integrated value chain that spans from exploration to marketing, logistics to technological infrastructure. Efficient communication and collaboration throughout the organisation is critical to ensuring smooth-running of its operations.

To facilitate this, PETRONAS created the PETRONAS Digital Collaboration Centre, a visualisation and collaboration facility housed within their headquarters at Petronas Twin Towers. Spread across 22,000 sqft, the centre accommodates a team of 6 and functions primarily as a space where employees can centralise their communications and collaborate across different disciplines.

PETRONAS

PETRONAS, short for Petroliam Nasional Berhad, is well-known around the world for its twin towers – a shining pair of skyscrapers defining the Malaysian skyline. Founded in 1974, the corporation is Malaysia’s fully integrated oil and gas multinational company entrusted with the custody on Malaysia’s national oil and gas resources.

With over 40 years of experience in the field, the organisation has forged a brand synonymous with high standards of quality, innovative technology, and industry excellence. PETRONAS has consistently been ranked as one of the top corporations in the Fortune Global 500 list.
Driving Collaboration and Innovation with Integrated Technology

To encourage increased utilisation of this resource, PETRONAS decided to work with Mitcom, a specialist in multimedia communications system. A systems integrator partner of Crestron, Mitcom introduced Crestron’s solutions into PETRONAS Digital Collaboration Centre to enhance the user experience by addressing and reducing technical issues encountered by employees, and improving the overall reliability and efficiency of the systems.

Solution

Crestron deployed its suite of intelligent solutions which integrated multiple operational functions under a single processor, and also introduced extenders and scalers into PETRONAS infrastructure to enhance the efficiency and reliability of their system. The enhanced structure helped provide users with a seamless experience through the integration of the organisation’s existing and separate hardware and technologies.

Technology is at the heart of the PETRONAS Digital Collaboration Centre. Developed with the objective of cultivating a collaborative environment among multidisciplinary technical teams, the centre helps staff navigate complex challenges and make real-time decisions for the company’s Exploration & Production (E&P) operations.

In its early days of operation, the centre faced the challenge of managing different technologies and systems within their AV and automation infrastructure. Users encountered recurring interface issues, especially during high facility usage, which ultimately led to frequent restarts of the entire system. The downtime of the facility meant that meetings could not take place on-the-fly as they should, resulting in a significant productivity downturn.
Ensuring Smooth Interactions

For an organisation that constantly pursues innovation, strategic research and development activities, ensuring smooth interactions between teams is of paramount importance. PETRONAS recognised that an initiative to renew and enhance the facility was required to serve and complement its users’ needs better.

The Data Facility Management team – who operates the centre, manages the upkeeping of its tools and equipment, and monitors staff’s usage of them – was tasked with the responsibility of leading the upgrade. Crestron was a natural choice as the team had a good experience with the setup at the time – utilising the Crestron CP2E, a compact Ethernet control system designed for small to medium sized residential and commercial control applications, and Crestron Fusion, a monitoring and scheduling software.

The existing CP2E was upgraded to the latest model in the line – the CP3. A compact, rack-mountable 3-Series control processor, the CP3 possesses immense power and numerous integrated control ports. This allows the management team to manage and integrate all the disparate technologies throughout their facility for an easier, greener, more productive, and overall more enjoyable experience.

PETRONAS also made the switch from their existing display matrix to Crestron DigitalMedia, a fully-engineered, field-proven, end-to-end solution for managing and distributing digital AV and control signals. Smaller rooms were equipped with Crestron DigitalMedia Presentation Systems to enable smooth automation and matrix switching.
Within three to four weeks, all seven rooms within the facility were outfitted with Crestron’s solutions. The CP3 processor was deployed with the 10" touchscreen, and DigitalMedia 8x8 and 32x32 were used for the medium and large rooms respectively.

“As we continue to uncover innovative solutions and push the needle for a more sustainable future in the industry, we needed an efficient technology infrastructure that allows our workforce to collaborate even more closely,” said Amar Roslani from PDCC support team. “Not only does Crestron offer advanced automation solutions, their products are also fuss-free, easy to use, and extremely accessible to all levels of our staff.”

Since the installation, the results are nothing short of impressive. The team has yet to experience technical issues pertaining to display controls and automation.

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The facility has also seen a significant decrease in downtime, which allows the room to be utilised more actively. The numbers are impressive, with room utilisation rate averaging 95%.

Users of the PETRONAS Digital Collaboration Centre now enjoys a much better and easier interface to automate most of their equipment, ranging from AV, lighting, video conferencing, mechanical lifter to electric privacy glass.

“From the survey carried out with our staff, we’ve received fantastic feedback about the user-friendly and reliable interface across all seven rooms at the centre. Our operation team has also found the facility easier to service and maintain – we’re now even able to manage the operation of the entire centre (7 rooms in total) with a very lean team,” said Amar Roslani from PDCC support team “We’re thrilled to partner with Mitcom and Crestron once again to keep our facility firing on all cylinders.”

For additional information on Crestron, visit our website: www.crestron.com