

# New energy management experience at Howard Hotel



**Howard**  
PLAZA HOTEL Hsinchu  
福華大飯店  
新竹

## Customer Objective

- Manual energy management is time-consuming and impacts guest experience
- Traditional energy control is expensive and inaccurate

## Cisco Solution

- Cisco Smart Energy Solutions
- Cisco Customer Experience (across customer lifecycle)

## Business Outcome

- End-to-end solution from Cisco Customer Experience and e-Formula Technologies Inc. enabled employees to automate environmental systems, reducing the latency and error rate of manual processes while reducing labor costs
- During the peak power consumption period of Howard Hotel in summer, the average monthly energy consumption of air conditioning has been reduced by 40%; overall energy consumption has been reduced by 20%, and the energy consumption of air conditioning will be reduced by even 45%~50% in the future, which will help cut down OPEX
- Even if the environment or number of guests changes dramatically, artificial intelligence automatically adjusts air conditioning temperature to its optimal state in real time, to ensure a superior experience



## Delivering a superior guest experience—efficiently

Global climate change is not only impacting the planet, but also people's lives. For the hospitality industry, unpredictable weather patterns and fast-changing temperatures can make guests uncomfortable, and drive excessive energy consumption. For more than three decades, the Howard Hotel group has relentlessly focused on offering the highest-quality guest experience, by keeping visitors comfortable at all times, while efficiently managing energy use.

Founded in 1984, the five-star hotel chain operates four commercial hotels in Taipei, Hsinchu, Taichung, and Kaohsiung, as well as three resort properties. In the past, hotel staff manually operated air conditioning, lighting, air exhaust, water supply and drainage, and other devices. Staff were assigned to monitor and adjust environmental systems on a regular basis, based on changes in the climate and the number of hotel visitors. If a hotel room's temperature changed rapidly, it often took time for a guest to adjust the room's thermostat to a more suitable level.

Efficiency is another top priority for the Howard Hotel. During peak usage periods in summer, air conditioning constitutes up to 60 percent of total energy consumption. When drainage, ventilation, and lighting systems are considered, the number can soar to 70 percent. The average monthly costs of electricity during this four-month peak period are approximately NT \$1 million—a major part of the hotel's OPEX.

## Bringing in Cisco Smart Energy Solutions

The Howard Hotel organization needed a solution that could provide precise control over energy consumption devices, to improve the customer experience as well as reduce OPEX.

To enable the hotel to meet these challenges, Cisco Customer Experience and its partner e-Formula Technologies Inc. introduced a smart energy solution at Howard Hotel Hsinchu Branch, the core of which is Smart Energy Management System. This solution combines IoT and artificial intelligence to collect real-time data such as temperature, fan speed, humidity, and other metrics from devices like air conditioning, pumps, exhaust fans, and other systems. After sensors on the devices acquire the data, it is sent to the EMS cloud “brain” for processing by the hotel’s e-FOM backbone system. The solution lets hotel managers easily view energy consumption details for all the monitored devices in a mobile app or browser, for full insight into the facility’s energy consumption.. In operates smoothly with programmable logic controllers (PLCs) and direct digital controls (DDCs) in devices to enable remote operation and real-time regulation and control for devices with abnormal data. It also enables related devices to be controlled together in complex ways, to maximize energy-saving benefits.

Cisco Customer Experience and e-Formula Technologies Inc.’s team inspected the Howard Hotel Hsinchu branch to collect data on the actual efficiency and power consumption of freezers, air-conditioning and other devices in the hotel. After gaining insight into the facility’s energy consumption, a professional assessment report was issued, and the energy system transformation plan and objectives were formulated. “Our assessment report to our customers estimates that the hotel can achieve 38% cost savings on air conditioning ,” said David Chen, General Manager of Energy BU, e-Formula Technologies Inc.

## A lifecycle approach to delivering extraordinary customer experiences

Together Cisco Customer Experience and e-Formula Technologies Inc. took time to understand the hotel’s needs, developed a detailed proposal, and led the installation, deployment, and onboarding of the solution. Offering a lifecycle approach, Cisco and its partner continue to work closely with Howard Hotel to continuously optimize the system after adoption. The end-to-end solution not only accelerates the time-to-value of the hotel’s investment, but also enables them to realize immediate, measurable benefits.

The solution rapidly improved operational efficiency at the Hsinchu branch. Thanks to the upgraded energy management system, as well as the end-to-end services offered by Cisco Customer Experience and e-Formula Technologies Inc., hotel staff were able to quickly begin using the new solution. The administrative interface displays ambient temperature, humidity, and other device metrics, updating numerical values and corresponding colors as the cloud system intelligently regulates it remotely.

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**Liao Hsiu Mei**  
Managing Director of  
Howard Hotel Group

In addition, automated regulation has resulted in a significant reduction in human involvement, reducing the latency and error rate of manual operations while also saving unnecessary labor costs.

Monthly electricity charges at the Hsinchu branch of Howard Hotel also declined substantially. The average energy consumption per month is down by 40%, and overall power consumption is reduced by 20% during the summer peak energy consumption season, saving NT \$200,000 for each peak energy consumption period. “The Smart Energy System is self-learning and self-optimizing based on the on-premise conditions, so the best performance is achieved roughly 6-12 months after it starts to operate according to our experience,” said Chen. “It achieves energy savings of 40% today, which can become 45% or even 50% in the future to achieve the best energy efficiency.”

For the Howard Hotel, the most important beneficiaries of its energy management upgrade are its guests. With 24x7 automated system control, even if the environment or number of guests changes dramatically, artificial intelligence automatically adjusts air conditioning temperature to its optimal state, to ensure a consistently superior experience.

Liao Hsiu Mei believes that the comfortable temperature and improved air quality will ensure every guest feels thoroughly happy, both physically and mentally.

### Toward continuous innovation

Liao Hsiu Mei believes that the hotel’s Cisco solution has dramatically enhanced its competitiveness. “Competition is fierce in the hospitality industry,” said Mei. “The Cisco solution enables us to update our hotel hardware, reduce OPEX, and offer our customers a refreshing experience, so we can compete more effectively. All of us must focus on global climate change, and our hotel enables us to put this focus into action. Through innovative smart building applications and other solutions, Cisco will help us move toward a more innovative place.”

The Howard Hotel Group will continue to upgrade energy management in its other branches, and is also exploring Cisco solutions to enhance its network, information security, and other key priorities.

### For more information

To find out more about Cisco Customer Experience and how we can accelerate your success, check out our ebook, [Accelerate Your Journey to Intent-Based Networking With Cisco Customer Experience](#).

Please call 4006 680 680

**“Our guests want to enjoy a good night’s sleep, and our Cisco solution provides a comprehensive improvement in our air-conditioning system. Customers feel the most comfortable in our hotel’s environment at any time, and they can control room temperature themselves to suit their preferences.”**

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