# case study

## Kuala Lumpur International Airport

Computer technology ensures KL International Airport will be second to none. To the millions of visitors that pass through Kuala Lumpur International Airport (KLIA) every year, the atmosphere is relaxed, efficient, and welcoming. But behind this welcoming scene is the most highly integrated and sophisticated airport in the world today. Across the airport site – one sixth of the size of Singapore – all the airport's electrical, mechanical and information systems are connected as part of the Honeywell Total Airport Management System (TAMS).

Honeywell

# Fully Integrated Business Processes

KLIA meets the increasing demands of air travelers with a 'futuristic' technology solution providing a level of integration that makes KLIA the first airport in the world to fully integrate all systems used in the business process of running an airport. Honeywell's Airport solution forms the backbone.

## CENTRAL CONTROL

Honeywell provides the systems addressing security; baggage handling; lifts; escalators; lighting; and environmental comfort and safety, and has addressed the complex task of integration. All systems are united – including the co-generation plant, emergency generator, lifts, travellators and escalators, ventilation, air conditioning and fire systems, lighting, the paging system, passenger terminal transit system – and their operation is fully integrated with the Total Airport Management System (TAMS).

In short, the KLIA solution provides a gateway for business decisions to be translated into physical operations. The central airport building management operator, from a single computer terminal, is able to monitor and control every physical activity that takes place within the airport and intervene, if necessary, in real time.

## CONTINUOUS OPERATIONS – MISSION CRITICAL

As the continuous operation of the system is critical to the running of the airport, the solution uses built-in system redundancy, which means that if one server fails, a stand-by server will immediately take over. The hot active standby architecture ensures that the failure of any server will not impact the operation of the system. A backup server will automatically continue operation from the point of primary server failure. Even if there were a failure in the TAMS network, the three main buildings would stand alone and operate as usual. Passengers would not even notice that anything was amiss.

## ENERGY CONSERVATION

The Honeywell airport solution will not only contribute towards fast and efficient services for passengers at KLIA, but also ensure an energy efficient indoor environment. For example, based on flight information received from the TAMS, the Honeywell solution automatically sets a gate lounge to one of three different modes: Passenger mode: sets lighting and air conditioning at the optimum temperature and lighting levels for passenger arrival; Staff mode: registers staff, such as cleaners, through the security/photo id system, and sets appropriate lighting and temperature levels, and Unoccupied mode: switches off the air conditioning and lighting in order to save energy when the gate lounge is not in use.

"We chose Honeywell because of their experience with large scale, complex Airport projects"

## A SKILLS TRANSFER TO MALAYSIA

KLIA also brings new technology, knowledge and skills to Malaysians. Honeywell has committed to provide for the transfer of technology and project skills to Malaysia and Malaysians. In the long term this will help to build up local competence in core technologies, enabling Malaysia to be self-sufficient in implementing complex technology projects and developing new products and services.

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