Situation Analysis

The airport experience we always wanted.

Launched in 1999, Softonnet has been a leading company in virtualization and cloud technology in East Asia. Today, the company is focusing on building edge solutions that combine video analytics and safety with artificial intelligence (AI) technology for smarter and safer air travel.

Artificial intelligence in airports.

AI is transforming passengers’ experiences in airports. Algorithms are processing huge amounts of video data captured at various locations in and around terminals, such as passenger drop-off locations and baggage checkpoints. AI-enabled software can automatically identify everything from illegal packing to banned travel items in luggage. What’s more, designers are using the insights from algorithms for data-driven terminal plans that can enhance the airport experience for travelers.

Delivering Ai Eye as an integrated edge appliance.

Softonnet is powering these technological transformations through its Ai Eye solution, which is in place at a Korean airport. When the company started its journey in developing Ai Eye, it knew it needed the support of a leading technology provider of edge solutions with experience working with original equipment manufacturers (OEMs). Sung Ryong Kim, sales director at Softonnet, explains, “We wanted to deliver Ai Eye as an integrated appliance to simplify deployment.” Moreover, Softonnet wanted the planning and design support to optimize the performance of its video analytics software and sought a partner that would help deliver its solution worldwide.

“We are using video analytics to make airports smarter, improving terminal passenger flows and vehicles around the terminals utilizing Dell Technologies OEM Solutions.”

Sung Ryong Kim  
Sales Director, Softonnet
Design Partnership

The power of collaboration.

By choosing Dell Technologies OEM Solutions, Softonnet was able to build Ai Eye as a fully integrated edge-based appliance platform. Based on testing at the OEM Solutions laboratory, Softonnet chose to run its analytical software on Dell EMC PowerEdge R740 servers, which — aside from their five-year warranties — can each hold up to six NVIDIA Tesla T4 Tensor Core graphics processing units (GPUs).

Deploying Ai Eye 6 months ahead of schedule.

Softonnet began successfully deploying its Ai Eye solution in airports and other locations where video analytics are important, such as public offices, manufacturing plants and ports. Support from the OEM Solutions included:

- Platform testing and validation, which saved approximately 6 months of development time and ensured a faster time to market.
- Additional GPU capacity in Dell EMC PowerEdge R740 servers increased the number of video analytics streams by approximately 233% compared with a standard server.
- Regional and global support for regional and global sales.

Outcome

Improving passenger flow speeds by 20%.

Airports using Ai Eye solutions are more efficient, improving passenger journeys. For example, Ai Eye X-Ray, which is an auto-detection system that identifies prohibited items, screens luggage three times faster than a security guard and has increased the speed of passenger flows through security areas by 20%.

Maintaining the flow of vehicles.

Passenger drop-off points around the airport are now easier to control with Ai Eye, which provides real-time monitoring of 100 parking lots per CCTV camera. It alerts airport staff to potential problems that could delay passengers. The solution can identify if the obstructing vehicles are taxis, for example, so staff can contact the taxi company quickly and suggest solutions for improvement.

Demonstrating benefits across industries.

Today, local government offices are also using Ai Eye to better manage parking lots, and port authorities use it to control how ships dock. Furthermore, leading Korean manufacturers of semiconductors and other technologies are using Ai Eye X-Ray for product defect detection as part of their Smart Factory Initiative.

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Dell EMC PowerEdge R740 with NVIDIA T4 GPU

AI Eye X-Ray Engine

Monitoring System

DEll PowerEdge R740

AiEye X-Ray Engine

DEll Technologies

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