

Korea's University of Ulsan Charts its Virtualisation Roadmap, with Help from Dimension Data

University of Ulsan

industry:

Education

country:

South Korea

business challenge:

Growing sophistication of IT users puts pressure top university to be more competitive in the provision of services to internal and external stakeholders; creates infrastructure complexity and growing costs

solution:

- Microsoft Core Infrastructure Optimisation assessment
- Virtualisation solution that incorporated 'green IT' capabilities
- Dimension Data Dynamic Desktop deployment

services:

- Infrastructure optimisation assessment
- Desktop deployment services
- Virtualisation technologies and deployment services

results:

- Improved visibility into infrastructure and future spend on upgrading that infrastructure; results in improved decision making
- Cost control due to reduction in major deployments and regression testing for applications compatibility
- Reduction service interruptions from security breaches

Executive Summary

The University of Ulsan in Korea was in need of an **overhaul of its campus-wide IT infrastructure**. Dimension Data deployed the **Microsoft Core Infrastructure Optimisation tool to assess the overall health** of the University's infrastructure, and to identify areas for improvements.

Dimension Data then outlined a detailed network optimisation and virtualisation roadmap that was aligned with the University's business goals. The roadmap recommended the implementation of Dimension Data's Dynamic Desktop Deployment solution to simplify and automate the task of upgrading and managing the University's estimated 6,000 computer desktops and over 100 servers. The comprehensive roadmap also factored in scalability that would keep pace with the University's expansion plans.

Client Overview

The University of Ulsan was founded in 1970 by Hyundai Business Group, one of Korea's largest business conglomerates. Starting out initially as an engineering school, the University has since grown into a prestigious academic institution with 12 colleges and seven graduate schools. Some 10,500 students are currently enrolled with the University, which is regarded as one of the top private universities located outside of Seoul, the country's capital city.

Business Challenge

The University of Ulsan has always served as a technology role model for other Korean universities. Back in 2004, the University has built up an administration and information portal system using a Microsoft.Net development platform, operating over 6,000 desktops and 100 servers in a Windows environment.

Fast forward to 2009.

With an ever-growing population of tech-savvy and sophisticated IT users, the University recognised that its IT infrastructure would soon become inadequate. There has also been an increase for on-demand connectivity within the campus, partly due to the increasing adoption rate and usage of mobile applications among the academia. Additionally, both intra-cooperation among the University's departments and inter-cooperation between the University and external agencies have increased.

'Green IT' has also become a key consideration given the growing awareness about global warming.

"Our IT environment was becoming complex," said Jong-Min Park, System Manager for the University's Computer Science Institute, the department that was spearheading the infrastructure overhaul. "We had disparate hardware, applications and operating systems all spread out over a large distance with no central management. We needed to integrate the different systems into one centrally managed framework, which would help reduce technology and staff costs while simplifying operations," shared Park.

Relationship History

The University approached Dimension Data to conduct a comprehensive IT audit and provide recommendation for a next generation IT architecture. The objective is to develop a roadmap for a standardised framework that would support its long-term growth.

Solution Delivered

The Dimension Data Professional Services team deployed the Microsoft Core Infrastructure Optimisation assessment tool for this project. The tool provided Dimension Data with the framework to structure the recommendation in four areas – desktop and server management, networking and security, identity and access, and data protection and recovery.

These were presented within the framework of a virtualisation solution that incorporated 'Green IT' capabilities. To improve desktop management process, Dimension Data recommended Dynamic Desktop Deployment (DDD) solution, designed to simplify and automate the task of upgrading and managing an organisation's fleet of computers.

How We Delivered

"We conducted the Microsoft Core Infrastructure Assessment to fully understand the university's activities in terms of people and processes, and to determine the areas that require upgrades,"

said **Eric Choi, General Manager for Dimension Data Korea.**

Dimension Data provided a comprehensive and holistic view across the University's data centre, desktop and remote networks. The team was also able to address the underlying system structural issues rather than just patching individual problem areas, guiding the University towards a common, unified and integrated environment.

The result was a comprehensive network optimisation plan as well as a virtualisation roadmap for the University of Ulsan. The plan highlighted mission critical issues and outlined an upgrade schedule, prioritising tasks in order of importance.

The proposal also included areas of improvements for the University of Ulsan, keeping end-user demands in mind, and by tapping on the team's expertise and study of best practices for universities. The gap analysis report benchmarked the University's network performance against global standards through the Microsoft Connected Education Framework. The entire analysis and proposal process was completed in less than three weeks.

Value Derived

Using the Microsoft Core Infrastructure Optimisation assessment, Dimension Data was able to help the university gain a better understanding of their network overhaul project. Park and his team would be able to make an informed decision on the areas that need investment and improvement, based on the results through an objective evaluation.

This approach prioritised the necessary infrastructure improvements based on a systematic and structure sequence. If the University of Ulsan adopts the recommendations, it would make significant strides by focusing in early on the changes with greatest impact, or those that deliver the highest return on investment and lay the foundation for later, more advanced capabilities.

Other benefits of this consulting project include:

- Cost control due to reduction in major deployments and regression testing for applications compatibility
- Improvement in system uniformity that would avoid conflicts and accelerate problem resolution
- Reduction service interruptions from security breaches
- Maintaining a robust disaster recovery process, and thus avoiding service interruption
- Dynamic assignment of resources to demanding workloads in near real-time

With virtualisation, the University would be able to realise some of its 'Green IT' goals. The solution addresses server sprawl and under-utilisation as the virtualisation software makes a single physical server act like multiple logical servers. The result would be a reduction of the University's carbon footprint and improved server performance.

The recommended DDD solution would ensure smooth deployment and ongoing management of desktop PC infrastructure using the Microsoft Windows operating system and networking environment. Upon implementation, the DDD solution would increase the productivity of the University's IT administrator as the built-in automation infrastructure delivers a Standard Operating Environment to clients faster, translating to a deployment of up to 1,000 desktops per day, and at a lower fixed cost per desktop.

The IT administrator can also benefit in terms of:

- Ease of management of the entire lifecycle of the IT infrastructure from a single console
- Integration of the management of both physical and virtual systems, from the hardware to the workload
- A platform where the IT staff could dynamically create and optimise workloads for virtualisation

This consulting project reinforced Dimension Data's market leader position with its proven ability to assess, design and recommend advanced solutions that address the long-term business needs of the University.

"Our strategic recommendation have addressed their current concerns and at the same time, defined the university's future IT strategy," concluded Choi.