

case study



Australia | Education

Wireless solution delivers richer on-campus experience



'Deakin has huge ambitions. Thanks to this connectivity we have improved our students' experience and are beginning to push the boundaries of what's possible.'

William Confalonieri Chief Digital Officer Deakin University



Challenge

Deakin University needed a campus-wide wireless network that could match the explosion in mobile device usage and provide the coverage and performance expected by students and staff.



Solution

Dimension Data planned, designed and built a new campus-wide wireless infrastructure for Deakin. More than 500 new wireless access points were installed, and over 100 existing access points were upgraded.



Result

- Better connectivity means Deakin can deliver on its ambitions and maintain its position as a world-leading university.
- Improved user experience and increase in staff and student satisfaction.
- 30,000 devices can be connected to the network simultaneously.
- Wireless coverage improved to 82% across the university and 91% in all student areas.
- Decrease in calls to the IT service desk.
- Recipient of Deakin's Vice Chancellor's Award for Outstanding Achievement in 2014



Deakin unplugged

Deakin is a young, inspiring, innovative university with great ambitions. It is in the top 3% of the world's universities in each of the three major international rankings and continues to be a sector leader for graduate satisfaction, first in Victoria for the fifth consecutive year in the Australian Graduate Survey (2010-14). Deakin has more than 52,000 students, and over 5000 staff, distributed across four campuses.

Mobile device usage across the university had grown rapidly in recent years, with each user on campus owning on average three devices – laptop, mobile phone and tablet. This growth was putting pressure on Deakin's existing wireless network, resulting in poor performance and insufficient coverage to meet everyone's needs. Student and staff satisfaction with the wireless network was at an all-time low and the IT department was receiving regular negative feedback about the failure of service and lack of coverage and speed.

"The wireless network was something that all students and staff wanted to use, yet we only had about 28% coverage across the campuses," said Craig Warren, Director ICT Infrastructure Services, eSolutions, Deakin University.

According to William Confalonieri, Chief Digital Officer, Deakin University, "The experience was mediocre or less."

"People were complaining about lack of coverage, services not working and lack of speed. It was essentially an IT service you couldn't rely on. As soon as you walked around, it stopped working. With our 'Deakin Unplugged' initiative, our aim was for students to go anywhere and be able to rely on the service," continued Craig Warren.



Huge ambitions, big plans and wireless to match

On the back of a 10-year partnership with Dimension Data and the company's in-depth technical expertise and experience delivering successful wireless projects, Deakin chose to work with Dimension Data for a solution to meet its wireless challenges.

"The Deakin Unplugged initiative aimed to make real all the dreams we have in the pipeline in terms of connectivity. When you have huge ambitions and big plans you need a partner, you cannot do it alone. Dimension Data has played that role perfectly," said William Confalonieri.

"We needed to address the poor coverage and performance of the existing solution. To do that, we performed a wireless survey, which consists of an onsite walk around to understand any of the physical limitations of the environment, as well as a predictive analysis using our site survey tools," said Gregg Sultana, National Manager, Networking.

Working together, Deakin and Dimension Data installed more than 500 new wireless access points, and upgraded over 100 existing points, to provide coverage in all main areas and address "black-spots" across the university's campuses. The access points are then managed by a wireless LAN controller.

"The Cisco Prime Wireless Management Solution we deployed enables Deakin University's IT staff to proactively manage the solution that has been installed," said Gregg Sultana.



30,000 devices connected, 91% coverage

The new wireless infrastructure has delivered to Deakin's expectations, with a vastly improved user experience and a resultant increase in staff and student satisfaction. It also means that the IT department has an excellent message to take to the university and wider community.

"The wireless coverage is now up to 82% right across the university, and in all student areas it's running at 91%, and we're able to stream video. We are not getting any complaints at the service desk any longer," said Craig Warren.

"We can now have more than 30,000 devices connected simultaneously and the student experience has been great," said William Confalonieri.

"Everything's a lot faster. I can now come into Uni, access my resources, and do the study I need to do," explained Robert, a Bachelor of IT student.

The success of the wireless project isn't just about improvement to the service, it allows the university to deliver on its ambitions and plans and to maintain its standing in the international university ranking.

"Now, it's not only about the basic services. Now, we are in a very strong position and we can push the boundaries. Thanks to this connectivity, we are working with immersive reality, with the internet of things, and with artificial intelligence," said William Confalonieri. "This starts to make everything possible".

The project was also awarded Deakin's Vice Chancellor's Award for Outstanding Achievement; it was one of only two eSolutions projects to receive this award in 2014.

Services overview

- Dimension Data designed, installed, project managed, tested and supported Deakin's new wireless infrastructure.
- Technology: Cisco switches, controllers and access points; Cisco Prime Wireless Management Solution.



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